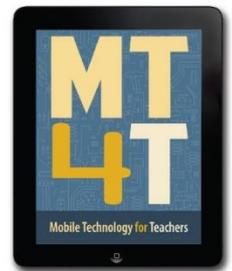




iOS/iPad OS



MOBILE TECHNOLOGY FOR TEACHERS

Uses and Functionalities of an Apple Mobile Device

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100 pages

Uses and Functionalities of an Apple Mobile Device

Mobile Technology for Teachers (MT4T)

*A Teacher Resource Kit Using Mobile Technology
for 21st Century Learning in Southeast Asia*





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For more resources on Mobile Technology for Teachers,
please visit our website at <https://www.seameo-innotech.org/mt4t>
or download the  SEAMEO INNOTECH Reader from your Apple,
Android, or Windows device's application store.

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Foreword

A wide range of mobile devices is available in the market today—laptops, e-book readers, smartphones, and tablets—but the most popular are smartphones and tablets. These are multifunctional devices that offer not only mobility but also the ability to create and consume digital content. The number and range of mobile devices have exponentially increased, making them ubiquitous.

Southeast Asian countries have seen incredible growth in mobile penetration over the last few years. Over 100 million became online users in the region’s six largest markets—Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam.¹ According to a study in 2019 conducted in part by Google, people in Southeast Asia spend the most time in the world accessing the Internet through mobile devices. The number of mobile connections in Southeast Asia exceeds the region’s population by 35%. Philippines and Myanmar ranked 2nd and 6th, respectively, among the top 10 countries that had the highest year-on-year percentage change in mobile connectivity.² Thai people use mobile Internet for more than five hours a day, compared with more than four hours in Indonesia, the Philippines, and Malaysia, and three hours as the global average. This has given rise to a massive mobile device market.³

This e-book will focus on mobile devices—either smartphones or tablets—that run on the Android operating system. In this e-book, we used a **Samsung Galaxy Tab A tablet running on Android 8.1.0**. Note that the icons and buttons of default apps may vary somewhat across devices and platforms. For better understanding, refer to app and feature names.

1. Roxana Elliot, “Mobile Penetration in South Asia and Southeast Asia,” Geo Poll, June 8, 2020, <https://www.geopoll.com/blog/mobile-penetration-asia-south-asia-southeast-asia/>.

2. “Digital 2020: Global Digital Overview,” We Are Social Inc., January 2020, <https://wearesocial.com/digital-2020>.

3. Ha Nguyen, “Google Reports Highest Mobile Internet Use is in ASEAN Region,” Silicon Valley & Technology, VOA, October 9, 2019, <https://www.voanews.com/silicon-valley-technology/google-reports-highest-mobile-internet-use-asean-region>.

Introduction

Welcome to **Mobile Technology for Teachers (MT4T)**, a teacher resource kit that will allow teachers to use mobile technology to deliver twenty-first century learning in Southeast Asia. It contains information, resources, example, and best practices in using mobile technology for personal and professional growth. While MT4T recognizes the wide array of mobile technologies available today, it primarily focuses on the use of smartphones and tablets.

MT4T is designed to provide teachers with easy access to information on the use of mobile technology for their own personal and professional growth. It will enable teachers to navigate mobile devices beyond the typical Short Messaging Service (SMS) or text messaging, and the call function. It is intended to help teachers recognize the huge potential of mobile devices as tools for better teaching and learning.

MT4T will equip teachers with a basic understanding of and skills related to operating the three most popular mobile platforms—Android, Apple (with iOS and iPadOS) and Windows. (Note: some eBooks have no Windows version as the development of Windows' Operating System has been discontinued; the support for Windows 10 Mobile ended in 14 January 2020). Also contained in this resources kit are discussions on the use of built-in apps (including examples to expand their functionality) and social networking and blogging apps, which ultimately aim to foster collaboration among teachers in Southeast Asia and beyond.

The MT4T package is composed of a set of ten (10) e-books which include the following:

Mobile Technology for Teachers (MT4T): A Teacher Resource Kit for 21st Century Learning in Southeast Asia

An Introduction to Teachers' Personal and Professional Learning Networks for Teachers for 21st Century Learning

Uses and Functionalities of Mobile Devices for Teachers

e-Citizenship: An e-book for Teachers about Cyber Wellness and Digital Citizenship

Facebook for Teachers

Twitter for Teachers

Edmodo for Teachers

Blogging for Teachers

LinkedIn for Teachers

Annotated Resources for Teachers

Users of MT4T are supported by a website, which provides the e-books available in two file formats: ePub and PDF. Some of the e-books are available in both formats, while the others, like this e-book, ***Uses and Functionalities of an Apple Mobile Device***, is available only in PDF. Nonetheless, both e-book formats work well on most available e-reader apps. For optimum performance, it is suggested that you access the MT4T resources using the SEAMEO INNOTECH Reader, which is designed to work consistently across mobile platforms running Android, iOS, iPadOS, and Windows.

The SEAMEO INNOTECH Reader also provides users with additional features such as creating bookmarks, highlighting important phrases, and even creating drawings or doodles on the e-book pages. You can find out more about the other components of the MT4T Resource Kit from the e-Book, ***MT4T: Mobile Technology for Teachers***.

Unique to the Resource Kit are discussions on using mobile technology to promote higher-order thinking skills (HOTS) and values among both students and teachers. Links to teaching and learning resources that promote HOTS have been provided in each e-book. Issues related to 21st-century learning such as proper etiquette and digital citizenship are also discussed in several chapters of the e-books.

Uses and Functionalities of an Apple Mobile Device

This e-book, ***Uses and Functionalities of an Apple Mobile Device*** has been updated to include the latest uses and functionalities of Apple mobile devices like iPads and iPhones. The e-book will guide you to establish and expand your professional learning network, and as a tool to showcase your professional expertise, experience, and accomplishments.

The e-book also suggests many applications that will support work productivity and personal and professional development. Note further that while the screenshots embedded in this e-book were generated using a 2018 iPad (6th Generation) or simply iPad 6 running on iPadOS 13.3.1, its uses and functionalities do not have significant differences across Apple mobile devices.

Chapter 1: What Are Mobile Devices?

Mobile devices are also known as “handheld devices,” “handheld computers,” or “pint-sized computing devices.”⁴ These devices usually come with touch screens.⁵ Some people, however, opt to buy mini keyboards. Each mobile device comes pre-installed with an operating system (OS), also known as a “mobile platform,” in order to run various types of software, also known as “apps” or “mobile apps.” Most mobile devices also come equipped with Wi-Fi, Bluetooth, and Global Positioning System (GPS) capabilities that let you connect to the Internet and other Bluetooth-capable devices such as cars or headsets. A camera and some media players are also typically found in mobile devices.

To know more about the ***Uses and Functionalities of an Apple Mobile Device***, we used the iPadOS device in this e-book.



Image source: <https://www.firstpost.com/tech/reviews/apple-ipad-2018-review-its-not-perfect-but-then-again-what-other-choice-do-you-have-4468149.html>

-
4. Priya Viswanathan, “What is a Mobile Device?,” Lifewire, October 23, 2019, <http://mobiledevices.about.com/od/glossary/g/What-Is-A-Mobile-Device.htm>.
 5. Wikipedia, s.v. “Mobile Device,” last modified October 11, 2020, 16:19, https://en.wikipedia.org/wiki/Mobile_device.

Chapter 2: Basic Users

Basic users are those who have little or no knowledge of using mobile devices. In this level of user competence, this e-book will help you become familiar with the basic features of Apple mobile devices, obtain essential knowledge on Apple mobile apps, as well as set up your App Store account.

As a basic user, carefully follow the foregoing instructions to effectively use your Apple mobile device. Please note that, as explained in the section ***2.1.1 What Is an iPadOS?*** iPadOS is based on iOS13 (Apple's OS for smartphones), and therefore the instructions contained in this e-book about Apple tablets are largely applicable to Apple phones too.

2.1 What Are the Most Popular Mobile Operating System?

Long gone are the days when mobile phones were just devices to make phone calls and send text messages. Today's mobile phones are essentially handheld computers that let us send e-mails, play games, watch videos, and even make video calls. They are commonly called "smartphones." Much like personal computers (PCs) that have Operating Systems (OS) in order to run, smartphones come with their own OSs, also known as "mobile OSs" or "mobile platforms."⁶

A mobile OS is a computer program that lets your smartphone function. It basically tells your phone what to do. Turning on your smartphone activates its mobile OS. When you tap your calendar app, your smartphone's mobile OS activates it so you can use it. Mobile OSs act like interpreters between you and your smartphone. All you need to do is tap icons, which represent features in an app, and it will tell your smartphone what to do. Today's most popular mobile operating systems are Android and Apple mobile devices (e.g., iOS and iPadOS).

2.1.1 What Is an iPadOS?

iPadOS is Apple's proprietary mobile platform for iPad. In the beginning, iPad and iPhones were powered by the same OS called iOS, Apple only decided to launch in 30 September 2019 a separate OS for iPad; thus, creating iPadOS, which is largely based on iOS13, the operative system for iPhones⁴.

Unlike Android these operating systems only run on Apple mobile devices. Designed for use with multi-touch devices, the Apple operating system supports the inputs through direct manipulation. They respond to various user gestures such as pinching, tapping, and swiping.

6. "What are the different mobile operating systems?", Uswitch, last updated December 2, 2020, <https://www.uswitch.com/mobiles/guides/mobile-operating-systems/>

2.2 What Is a Mobile Application (App)?

A mobile app is a piece of software designed to run on a smartphone or a tablet.⁷ Mobile apps can come pre-installed on mobile devices or may be downloaded by users. They are usually available in app-distribution platforms, which are typically operated by mobile OS owners such as Google Play (Google for Android), and App Store (for Apple mobile **apps** on its iOS and iPadOS operating systems). Some apps can be downloaded free of charge while others require payment. The following are the most popular app stores run by OS owners:



Google Play. This is Google's flagship store where Android device users can download apps from. Apart from apps, it lets users download music files, magazines, books, movies, and television programs, as long as these are produced by Google.



App Store. This is Apple's app-distribution platform for all kinds of Apple devices. You can download apps from it directly to your iOS devices or your personal computers (PCs) then transfer them to your Apple mobile devices via iTunes.

App stores require users to create accounts before gaining download rights to apps available for free or certain fees. These accounts are also needed to update the operating system and any downloaded apps.

2.2.1 Apple ID

How to Create Apple ID

An **Apple ID** is an all-in-one account for Apple mobile device owners. It is used to log in to various services for many Apple products such as  **App Store** and iCloud storage and to give permission for Apple to update your operating system and other apps. All Apple mobile device owners can download apps from the  **App Store** for free or for a fee.

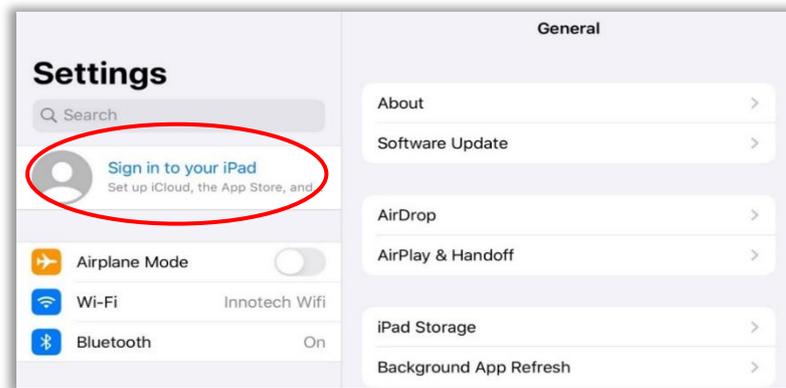
To create an **Apple ID** on an iPad, follow the step-by-step guide below. Note further that you can also create an **Apple ID** using iPhone, iPod Touch, and other devices such as computer. Read all about how to create an **Apple ID** [here](#).

Unlock the device using the **Home** button to access the **Home** screen. You should see the icon for **Settings** there. Tap on  to access the **Settings** page. Notice in the screenshot that the icon for **Settings** is shown twice. This is because **Settings**  can also be accessed from the menu found at the bottom of the screen.

7. Kathy Schrock, 2020, "Bloomin' apps", Kathy Schrock's Guide to Everything, Kathy Schrok, last modified January 8, 2020, <http://www.schrockguide.net/bloomin-apps.html>.



1. You should now see the Settings page. Tap on **Sign in to your iPad**, on the left. This will open the **Apple ID** window.



2. Tap on **Don't have an Apple ID or forgot it?** to create a new account.



3. You will be asked to choose between **Create Apple ID** and **Forgot Apple ID?** Tap on **Create Apple ID** to continue.



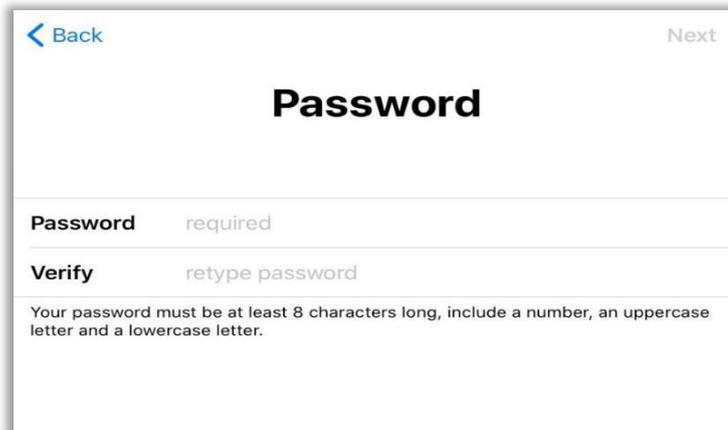
4. You will be prompted to type your identifications. Type your **First name**, **Last name**, and **Date of birth** into the respective fields.

A screenshot of a form titled "Name and date of birth". At the top left is a "Cancel" button and at the top right is a "Next" button. The form has three input fields: "First name" with the placeholder text "first name", "Last name" with the placeholder text "last name", and "Date of birth" with the value "3/9/20". Below the fields is a small note: "Your date of birth is used to determine which services to set up on this iPad."

5. Next, add your email address. Note the email address you will input will also serve as your Apple ID. You will also be asked if you want to receive Apple's email updates. Toggle the switch if you want to activate this option.

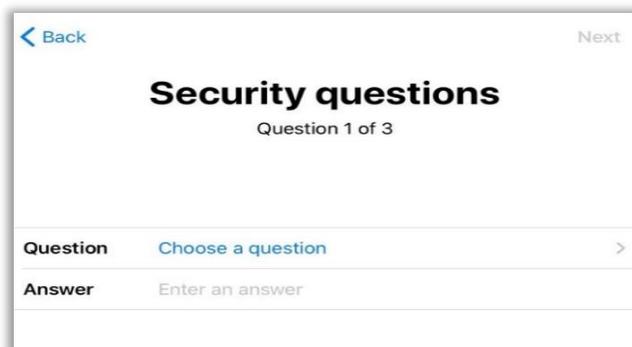
A screenshot of a form titled "Email address". At the top left is a "< Back" button and at the top right is a "Next" button. The form has one input field labeled "Email" with the value "hame@example.com". Below the field is the text "This will be your new Apple ID." and a link "Do not have an email address?". At the bottom, there is a section for "Apple News & Announcements" with a green toggle switch turned on. Below this is a small note: "Stay up to date with Apple news, software updates and the latest information about products and services from Apple."

6. Now, provide a password that you will use to access your Apple account. Type it twice to verify the password, and then on the right corner, tap **Next**.

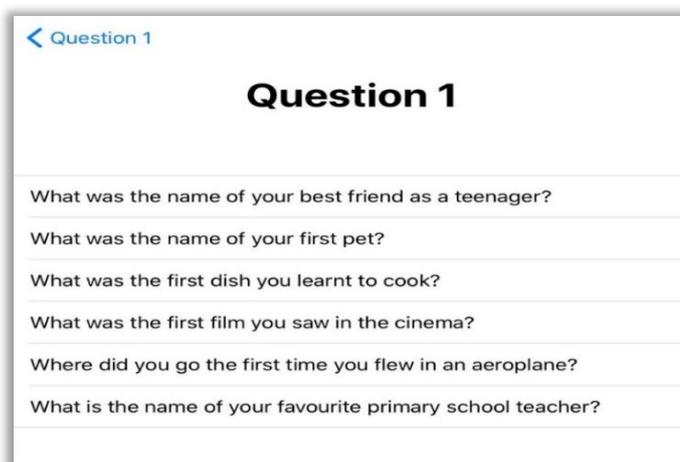


The screenshot shows the 'Password' screen. At the top left is a blue '< Back' button and at the top right is a 'Next' button. The title 'Password' is centered. Below the title are two input fields: 'Password' with the placeholder 'required' and 'Verify' with the placeholder 'retype password'. At the bottom, there is a note: 'Your password must be at least 8 characters long, include a number, an uppercase letter and a lowercase letter.'

7. Your **Apple ID** is like a key or passport into the Apple app and cloud storage universe. If you do not enter your password when prompted you will not be able to access certain features of your Apple mobile device.
8. In case you forget your password, you will be asked some **Security Questions** to retrieve it. Tap **Choose a question** to see the list of predefined security questions where you can choose from. Once you make your selection, indicate the answer in the space provided. Do this thrice. Tap **Next** once you are done.



The screenshot shows the 'Security questions' screen. At the top left is a blue '< Back' button and at the top right is a 'Next' button. The title 'Security questions' is centered, with 'Question 1 of 3' below it. There are two input fields: 'Question' with the placeholder 'Choose a question' and a right arrow, and 'Answer' with the placeholder 'Enter an answer'.



The screenshot shows the 'Question 1' screen. At the top left is a blue '< Question 1' button. The title 'Question 1' is centered. Below the title are six predefined security questions, each with a text input field below it:

- What was the name of your best friend as a teenager?
- What was the name of your first pet?
- What was the first dish you learnt to cook?
- What was the first film you saw in the cinema?
- Where did you go the first time you flew in an aeroplane?
- What is the name of your favourite primary school teacher?

[< Question 2](#)

Question 2

What is your dream job?

What is your favourite children's book?

What was the model of your first motorised vehicle?

What was your childhood nickname?

Who was your favourite film star or character in school?

Who was your favourite singer or band in school?

[< Question 2](#) Next

Security questions

Question 3 of 3

Question [Choose a question](#) >

Answer [Enter an answer](#)

9. You will be shown the **Terms and Conditions**. Read these and then on the bottom right of the page, tap **Agree** to continue.

[< Back](#) Terms and Conditions

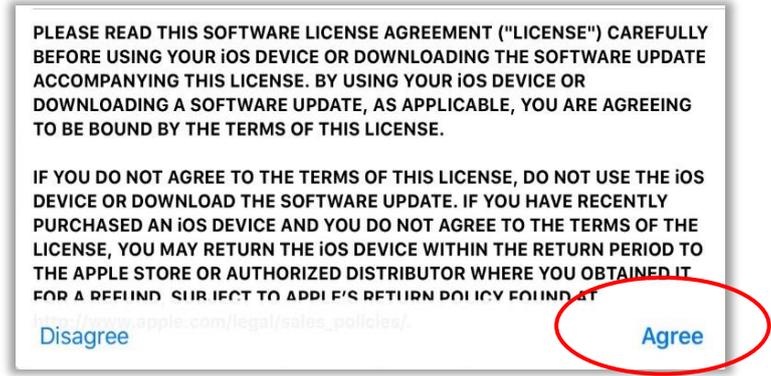
[Send by email](#)

Please read the following terms before using your iOS device. By using your iOS device, you are agreeing to be bound by the iOS Terms and Conditions. If you choose to use iCloud or Game Center, or both, you are agreeing to be bound by the respective iCloud and Game Center Terms and Conditions.

[A. iOS Terms and Conditions](#) >

[B. iCloud Terms and Conditions](#) >

[C. Game Center Terms and Conditions](#) >



10. After that, your device will automatically sign-in into iCloud. Once this is done your **Apple ID** information will be available in **Settings**.



2.3 What Is a Home Screen?

A mobile device's **Home** screen is the default screen you see when it is turned on. Each device's **Home** screen can differ, depending on the OS, brand, or manufacturer. Apple devices usually only have one button on its screen—**Home** or the **Touch ID** sensor. However, after iPhone X, Apple phones are characterized by a lack of home button, forcing users to use thumb gestures instead.⁸



*iPad Air **Home** Screen and **Home** button⁹*



*iPhone X **Home** screen without **Home** button¹⁰*

8. Nicolas Vega, 2019. *New York Post*. "The iPhones's Home Button is about to be history." Last accessed January 22, 2021 <https://nypost.com/2018/08/27/the-iphones-home-button-is-about-to-be-history/>.

9. Everyi.com, 2020. "iPad Q&A." Last accessed January 22, 2021, <https://everymac.com/systems/apple/ipad/ipad-faq/differences-between-ipad-9-7-inch-6th-gen-early-2018-models.html>.

10. Support Apple. "How to move apps and create folders on your iPhone, iPad, or iPod touch." Last accessed January 22, 2021, <https://support.apple.com/en-om/HT200290>.

Every time you press the **Home** button, you will see your device's **Home** screen, regardless of platform. You should see several icons that represent mobile apps installed in your device on the **Home** screen. The more apps installed in your device, the more pages there are on your **Home** screen. To access the next page, just swipe leftward. To see a previous page, swipe rightward. Meanwhile, to open and use an app, you need to tap its icon. Accessing various features of an app requires tapping icons on its user interface (UI).¹¹ Some apps come pre-installed on mobile devices. You no longer have to download them to take advantage of their features, especially if they were provided to make your device ready for use.

2.4 What Apps Come Pre-installed on an iPad Air?

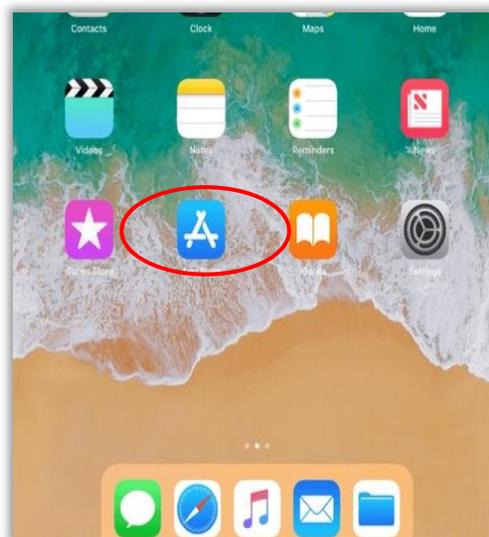
The following apps are available on an iPad 6 running iPadOS.

2.4.1 App Store

How to Use App Store

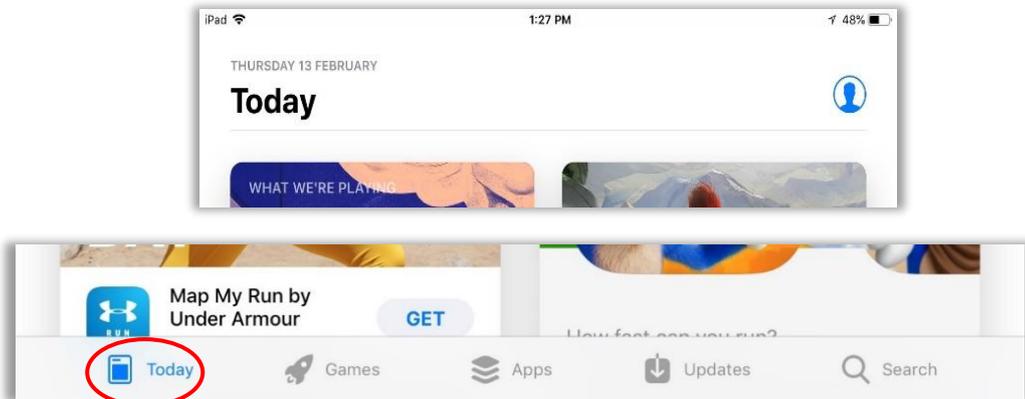
 **App Store.** This is equivalent to the  **Google Play** on Android and the  **Microsoft Store** on Windows where you can download apps. As discussed earlier, you need an Apple ID to access the App Store. To check your account, tap  **Settings** on your device's **Home screen**. Scroll down and tap  **iTunes & App Store**. This will show you details about your Apple ID. To use the  **App Store**, follow the step-by-step guide below.

1. Unlock the device using the **Home** button to access the **Home** screen. Look for , which is the icon for **App Store**.

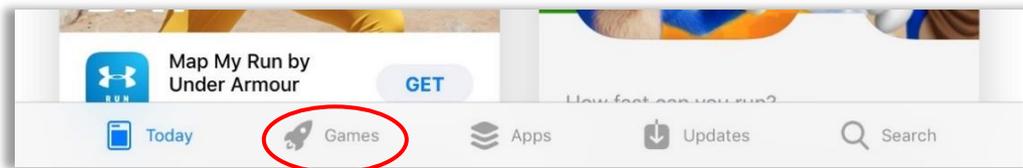


11. *Lexico, s.v. "user interface,"* accessed January 22, 2021, https://www.lexico.com/definition/user_interface. User interface, as defined by the Oxford Dictionary, is the means by which the user and a computer system interact, in particular the use of input devices and software.

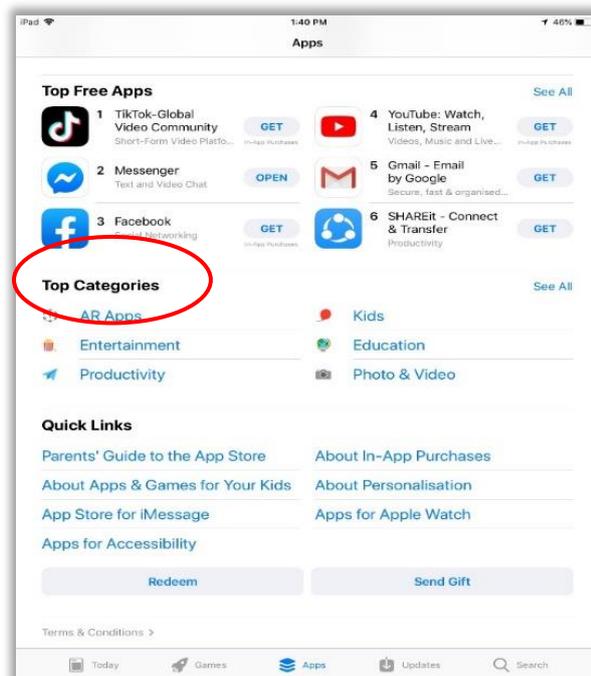
2. Tap  to open the **App Store**. You should see the **Today** page, which recommends apps and articles. Note that the five icons at the bottom of the page let you use certain available functions of the app.



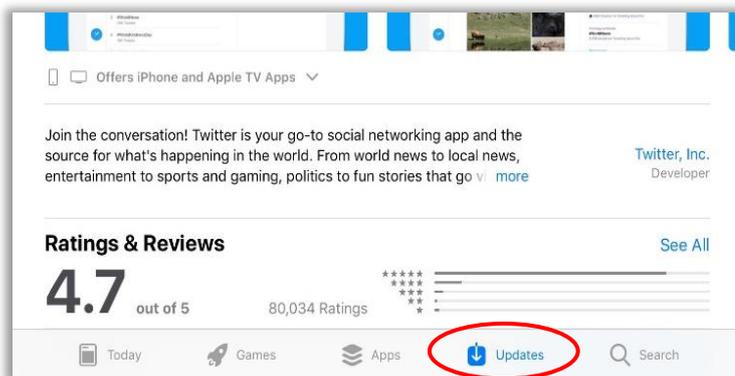
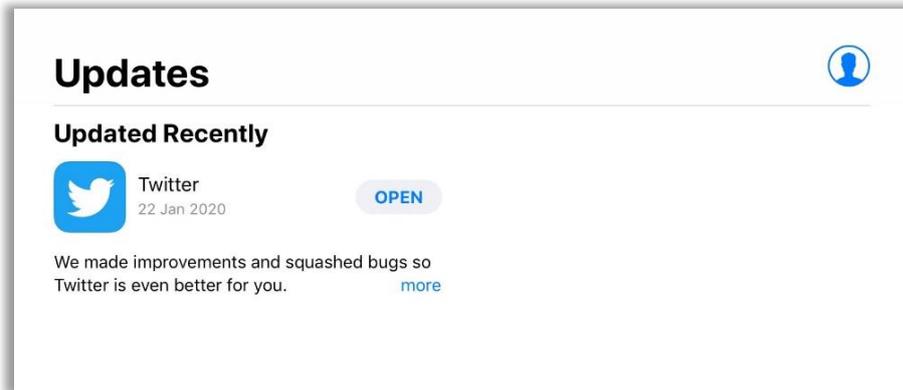
3. If you are interested to search for game-based activities to teach a specific lesson, you can check for available games, just tap the **Games** icon below.



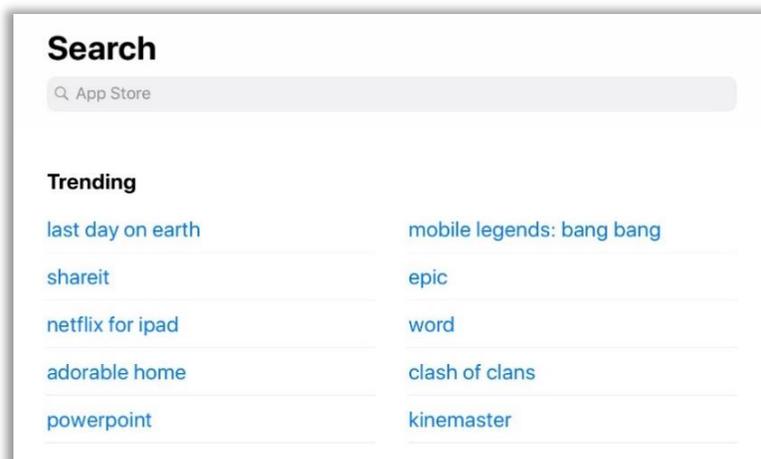
4. If you tap **Apps**, you will be shown a similar page, with recommended apps for your device. You can also tap **See All** to view all available apps. And if you scroll down to the bottom of the page, you will also see **Top Categories**, where you can tap for example, **Education** to see all educational apps available.



5.  **Updates**, you can quickly check which apps need to be updated. Updating is important to improve how apps function. App developers release updates to their apps to fix programming bugs, enhance app features and ensure the apps still work on new versions of the OS. Just tap the icon of a specific app that needs updating to access its page and then, tap **UPDATE** to download and install the updates.



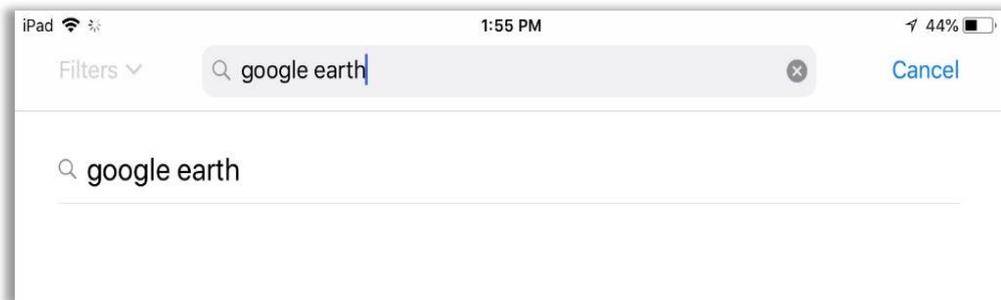
6. In **Search**, you can directly find an app in the  **App Store**. Tap the name of the app in the **Search** bar and press **Enter**. You will note that as you type, suggestions will appear, as well as trending searches.



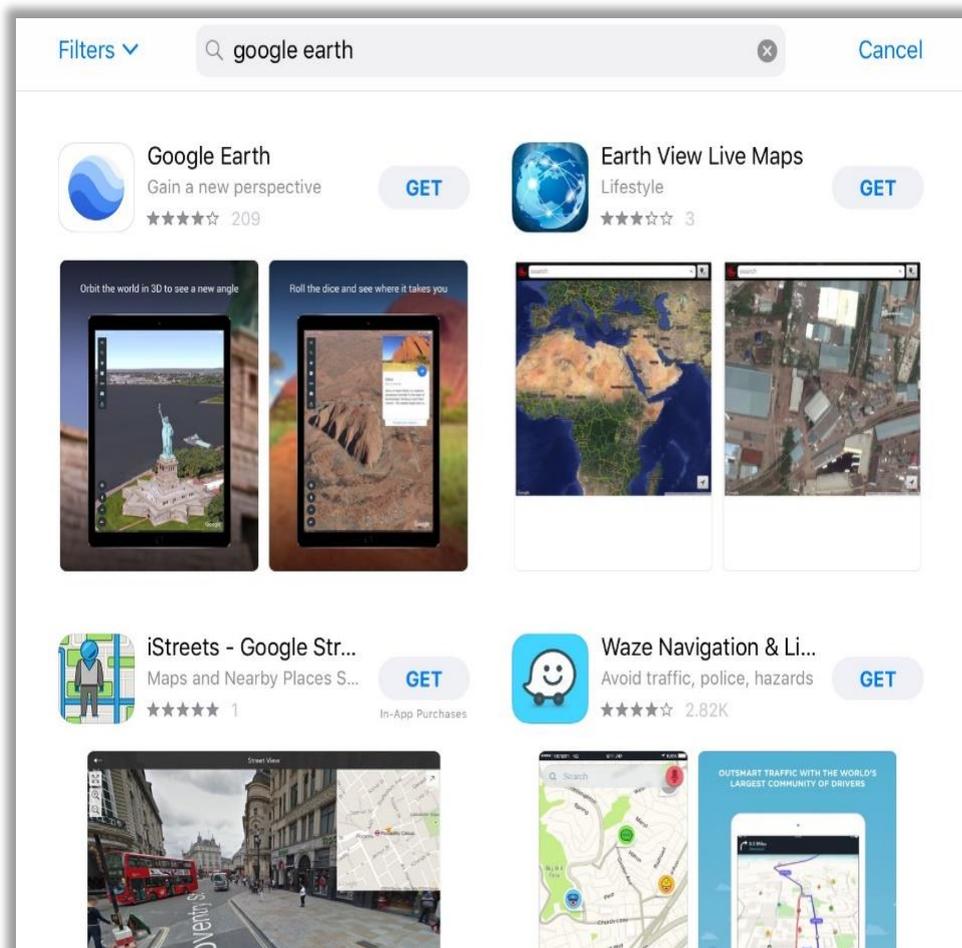
How to Download an App from the App Store

To download an application from the  **App Store**, follow the step-by-step guide below.

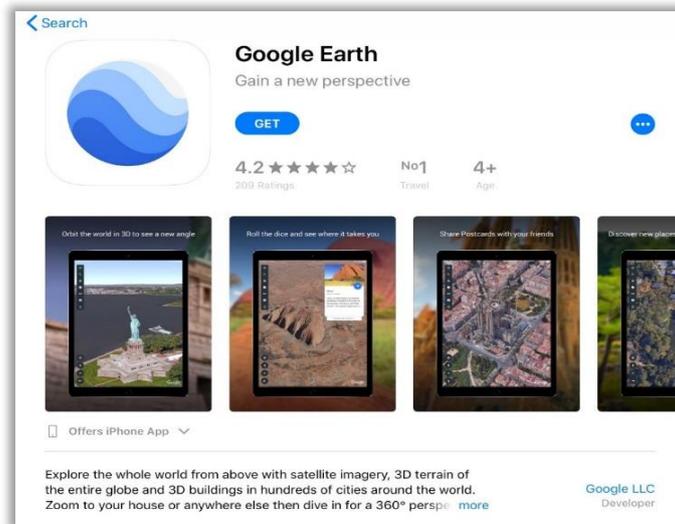
1. First, you can either search for it or select it from the recommended page. For instance, type "google earth" in the **Search** field. The Search field is not case sensitive, so there is no need of to capitalize the letters.



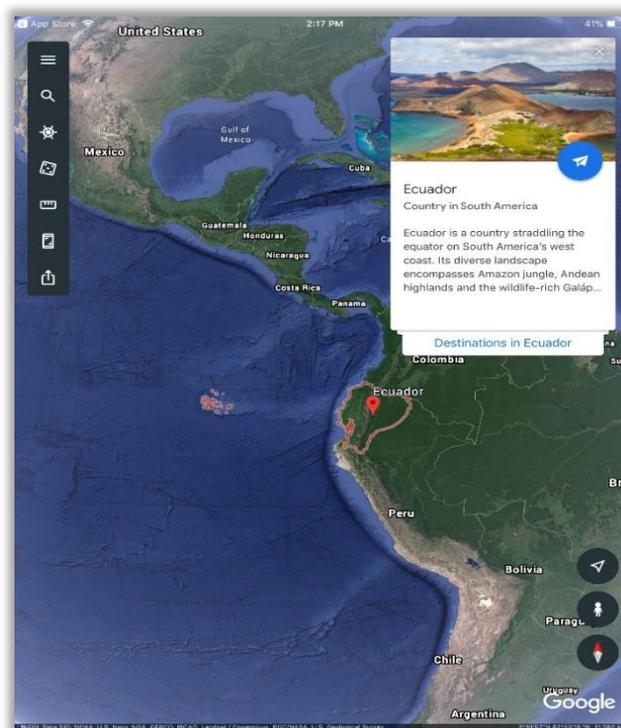
2. Tap "Google Earth" from the **Suggestion** list to see the app with that name, as well as apps with a similar function.



3. Tap on  **Google Earth** to access its download page.



4. Tap the **GET** button. This means the app can be downloaded free of charge. Paid apps come with a button that shows their respective prices.
5. Tap the **INSTALL** button. You may be prompted to sign in to **iTunes Store**. Type your password into the **Password** field, then tap **OK** or use **Touch ID**. This makes sure that only you can access your iTunes account. You will know the download is complete when you see the **OPEN** button beside Google Earth.
6. Tap the **OPEN** button to open  **Google Earth**. Congratulations! You just have learned how to download and install an app from the  **App Store**.



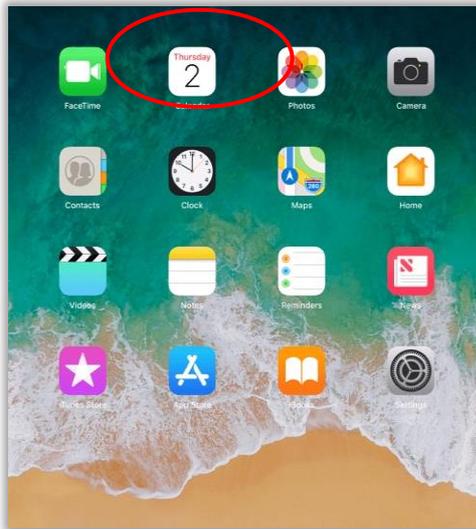
2.4.2 Calendar

How to Use Calendar

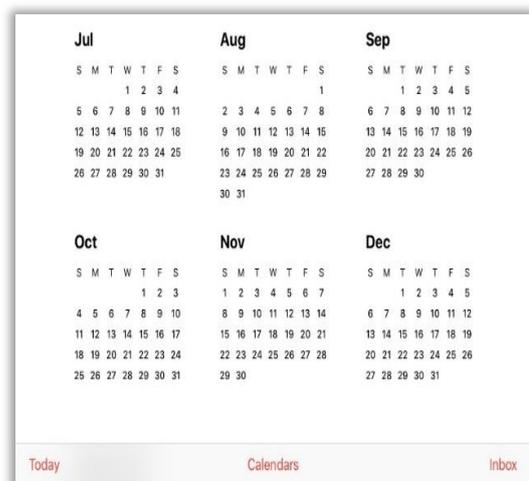
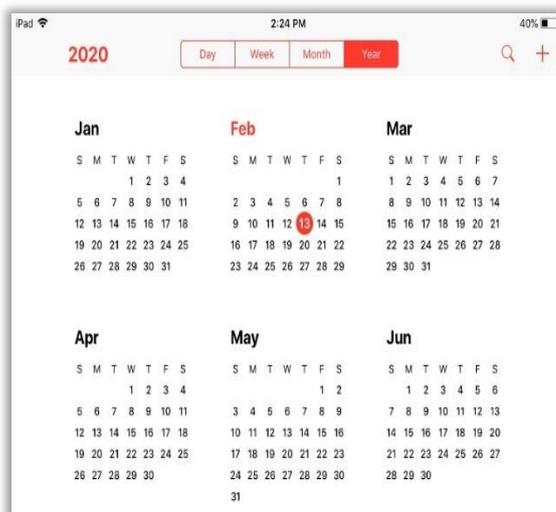
Tuesday
10

Calendar not only shows the months and days but also acts as an event planner. It can be likened to a notebook planner where you can record all of your activities to easily be reminded of them. To use it, follow the step-by-step guide below.

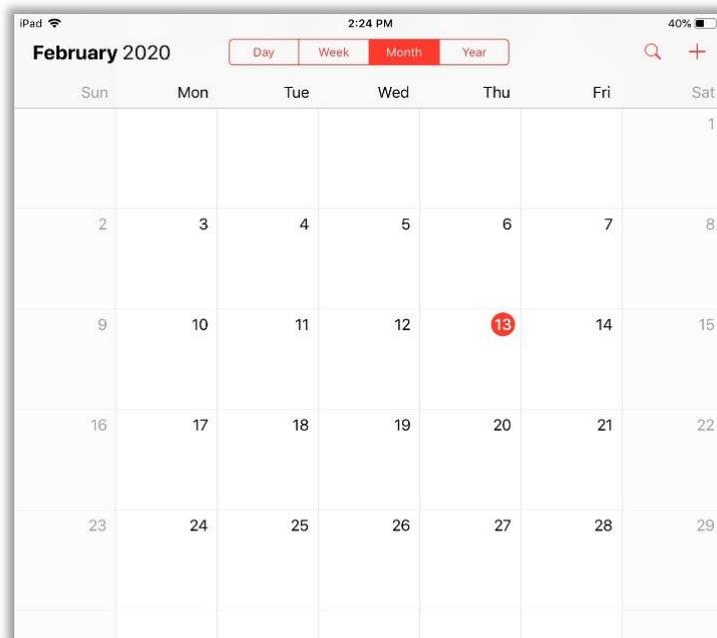
1. Unlock the device using the **Home** button to access the **Home** screen. You should see the  **Calendar** icon.



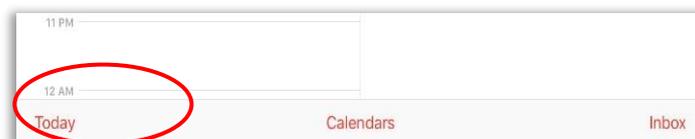
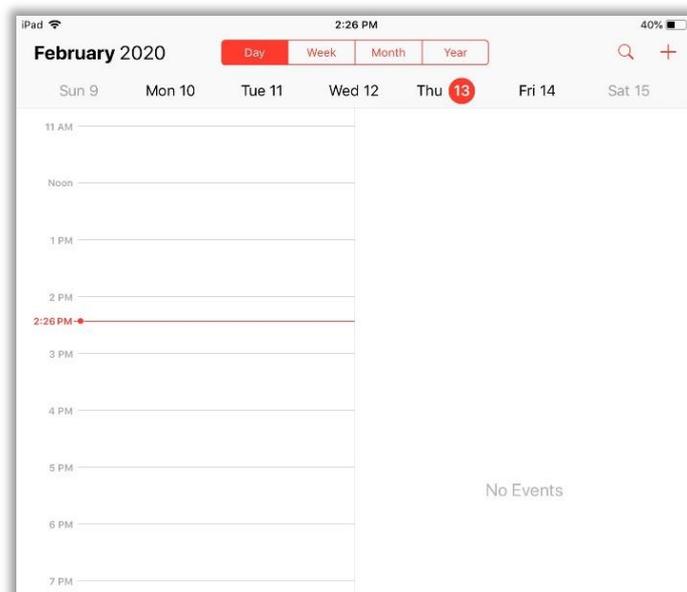
2. Tap the  calendar icon. You should see the current year. The current date is highlighted in red.



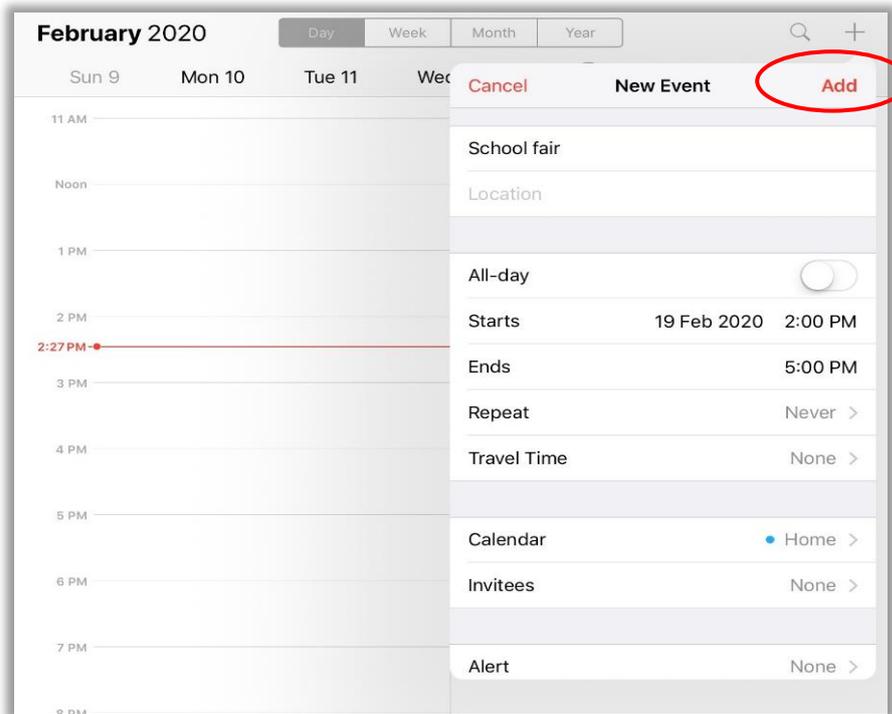
3. Tap the month you would like to view. This opens to a view of the whole month.



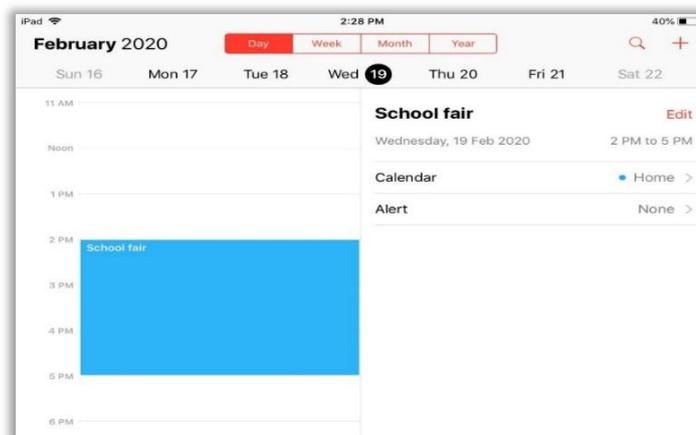
4. Tap **Today found** on the bottom of the screen or tap any other day in the calendar to see a detailed list of your activities for that day. Reminders and events are also shown in this view.



5. To add an event or a task, tap **+**. This will open the **New Event** page. An event is something planned that will happen such as an exam, a quiz, or a school fair. Fill in the required details then tap **Add**. You should see the newly created event on your calendar. The date it is set on will have a grey dot below. Note further that you can synchronize your Calendar across Apple devices. Read more details about the instructions in section [2.10 Syncing Apps Across Devices](#).



6. Congratulations! You have just successfully add an event to your Calendar. You can now select that date to see the details of the event in your calendar.

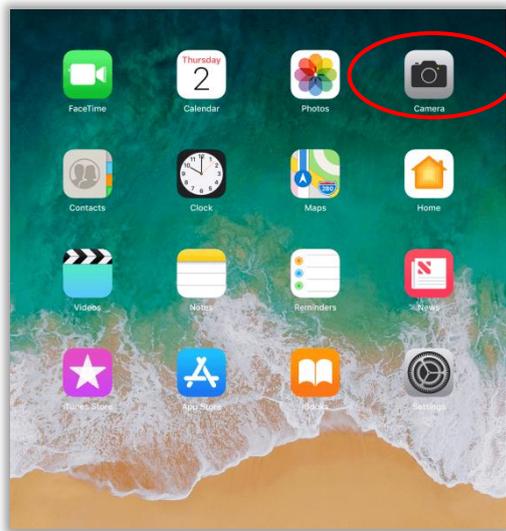


2.4.3 Camera

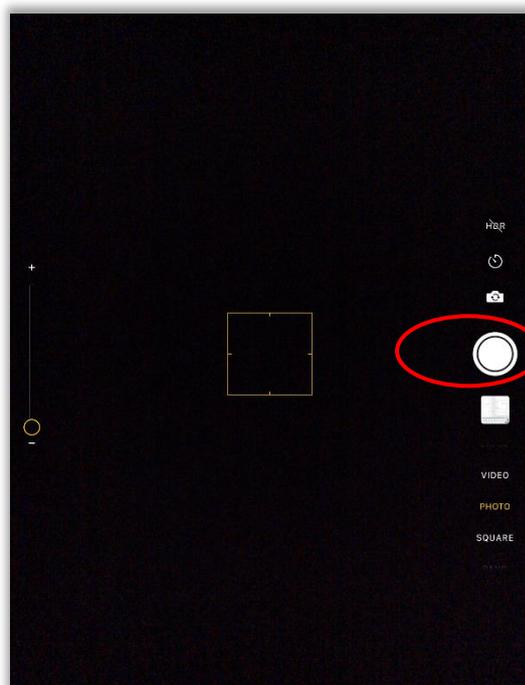
How to Use Camera

 **Camera** works like a typical digital camera. To use it, follow the step-by-step guide below.

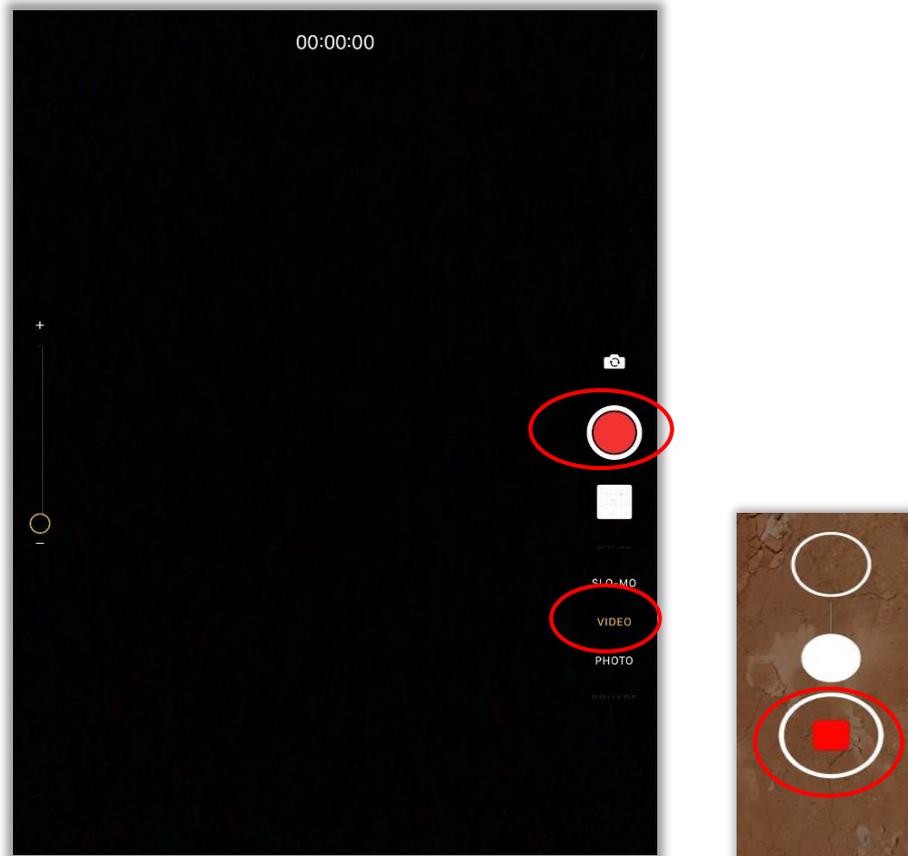
1. Unlock the device using the Home button to access the Home screen. Tap the  **Camera** icon to open the Camera of your Apple mobile device.



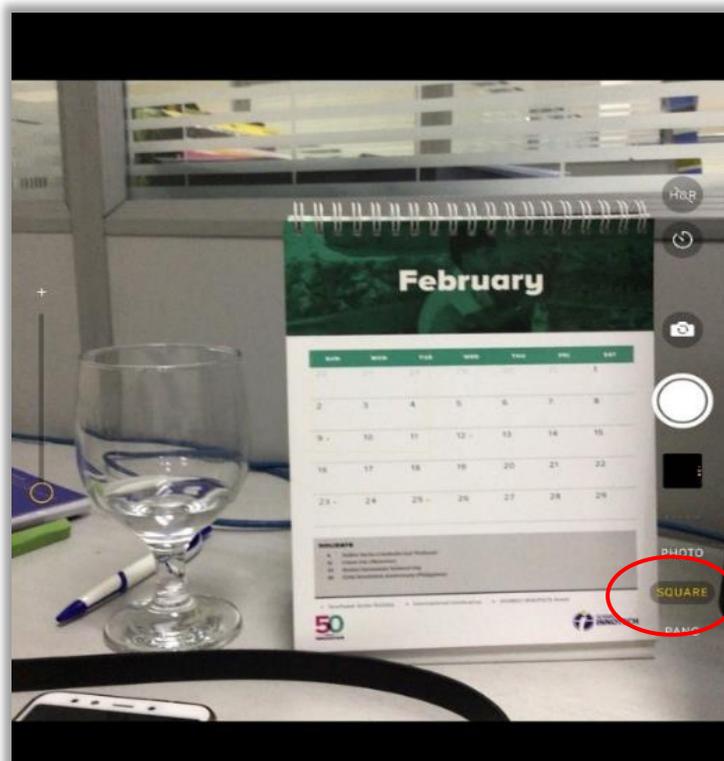
2. Tapping  takes a picture when **PHOTO** is highlighted.



3. To record a video, tap **VIDEO** then tap . Tap  to stop recording.



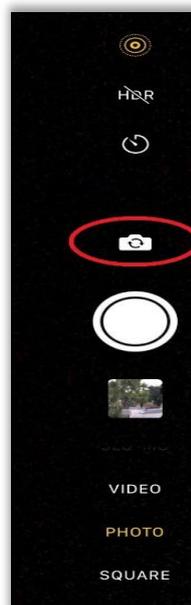
4. Tapping **SQUARE** takes a square photo.



5. Tapping **PANO** lets you take a panoramic photo. This feature allows you to capture images of your surroundings in a 180-degree view. Your device takes several pictures and stitches them together to form a 180-degree view of your surroundings. This is great if you want an expanded view or a wide shot of a landscape, for instance.



6. Like most mobile devices these days, an iPad is equipped with a front camera. This is most often used to take a selfie.¹² To switch from the back camera to the front one or vice versa, tap . To take a photo or a video using the front camera, just tap .



7. Congratulations! You now know how to use the  **Camera** app of your Apple mobile device.

12. *Lexico*, s.v. "selfie," <https://www.lexico.com/en/definition/selfie>. A selfie, as defines by the Oxford Dictionary, is a photograph that one has taken of oneself, typically one taken with a smartphone or webcam and shared via social media.

2.4.4 Contacts

How to Use Contacts

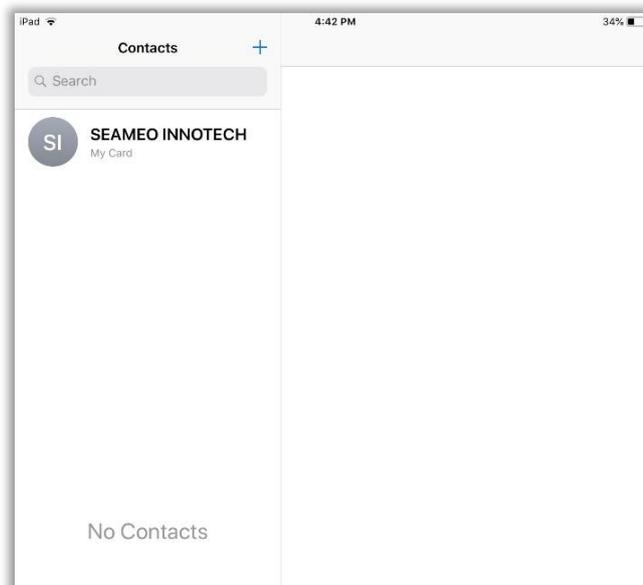


Contacts is where you store the names, phone numbers, and other contact details of people you know and communicate with via calls, text messages, or e-mails. To use it, follow the step-by-step guide below.

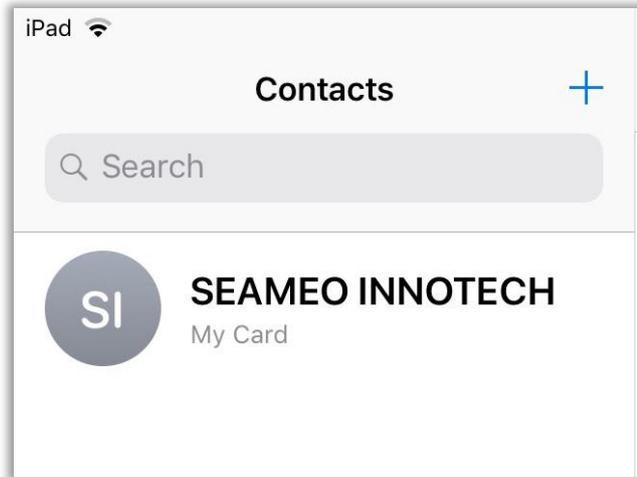
1. Unlock the device using the Home button to access the Home screen. You should see the  **Contacts** icon there.



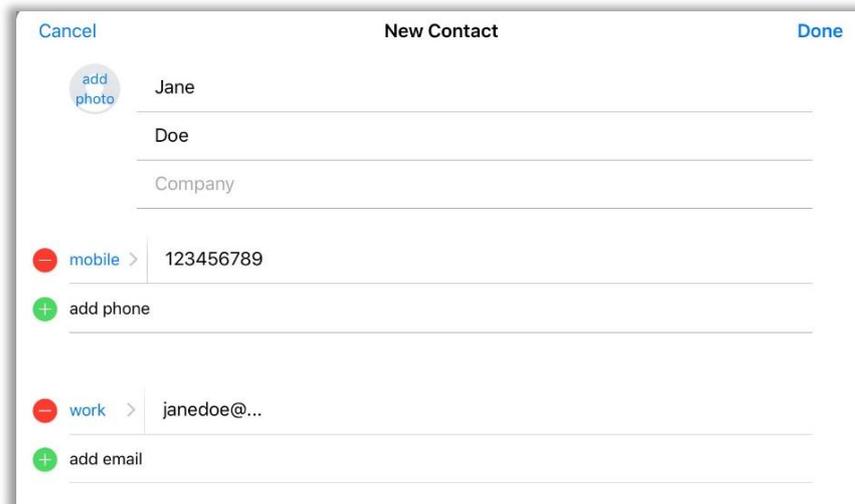
2. Tap the  **Contacts** icon to open the app. You should see a list of names, arranged in alphabetical order, whose contact details are stored in your Apple mobile device.



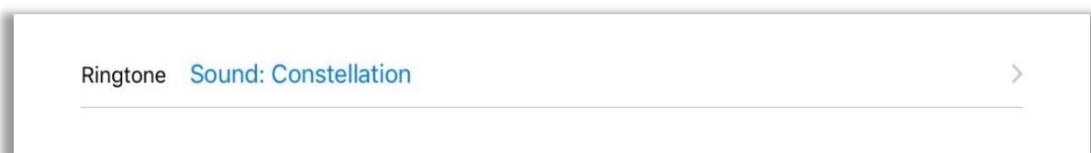
3. To add a new contact, tap the plus sign icon **+**. This will open the **New Contact** page.

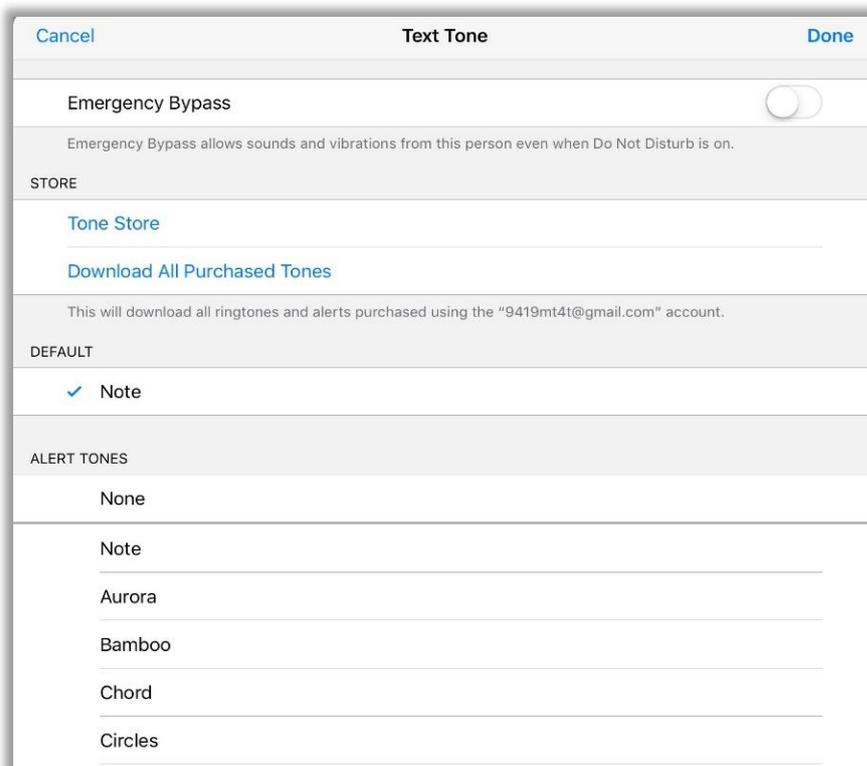
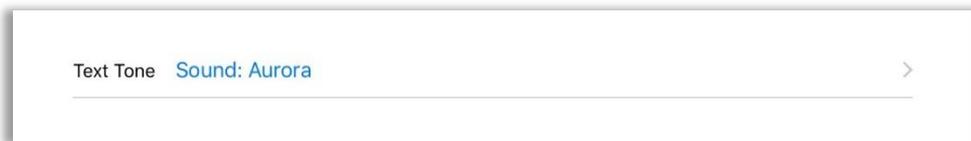
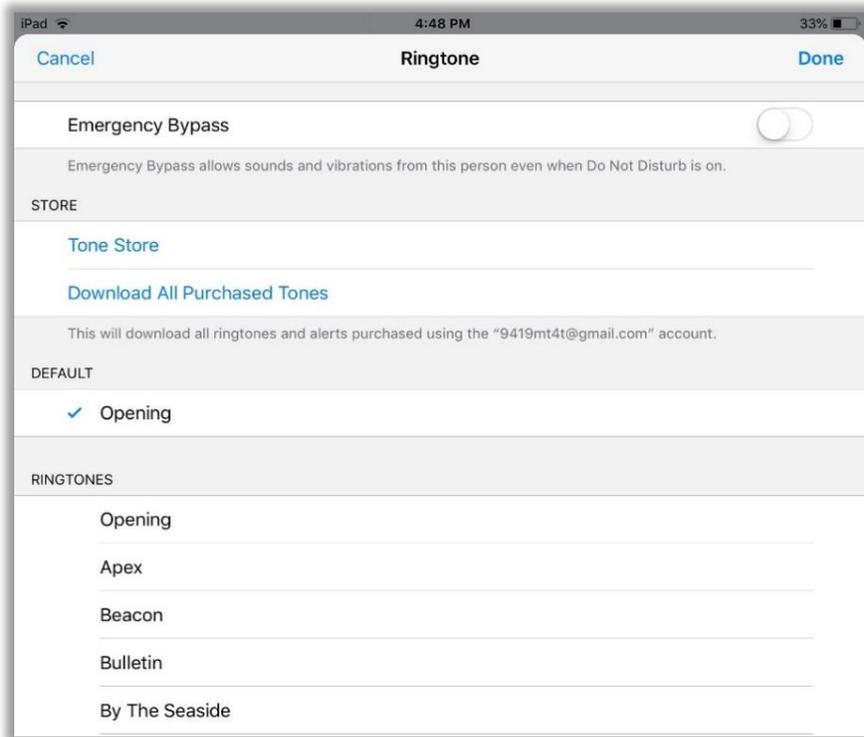


4. Type the required information into the fields provided. Usually filling in their **First name, Last Name, Phone** and **Email** details is enough. Then, tap **Done**. This will add the person to your list of contacts.

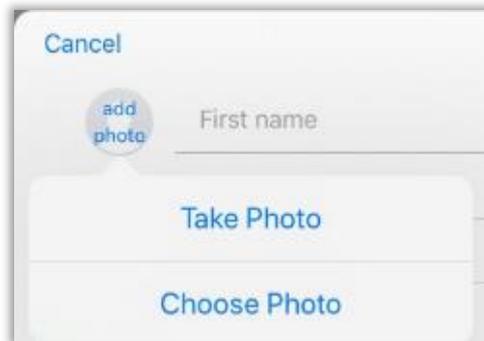


5. If you tap on **Ringtone**, a window will open with different ringtones, so you can personalize the contact's ringtone once they call you. In this way, you can identify who is calling you just by listening to the ringtone. If you tap on **Text Tone** the same will happen.

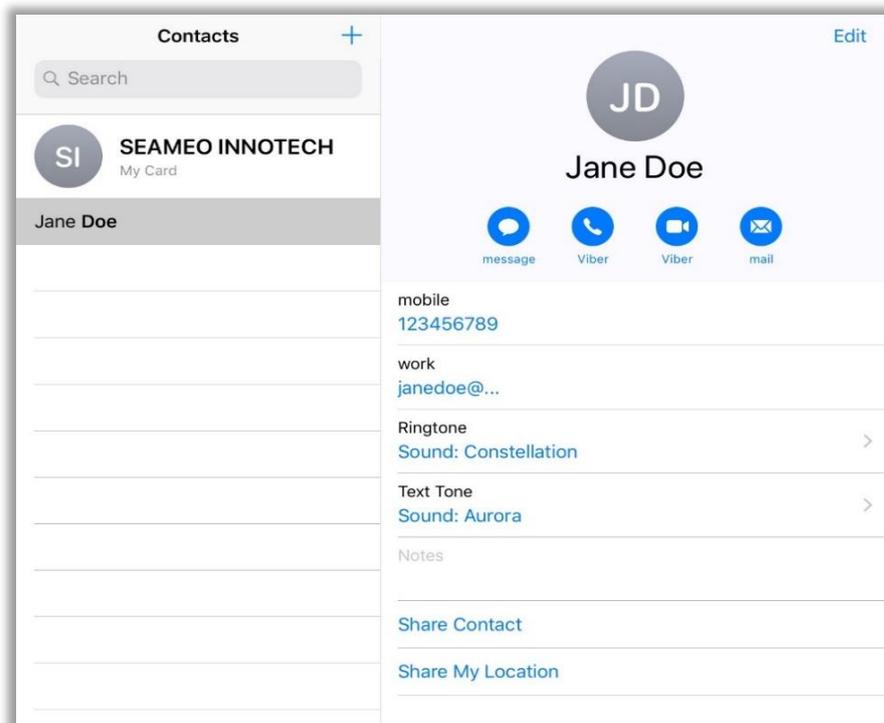
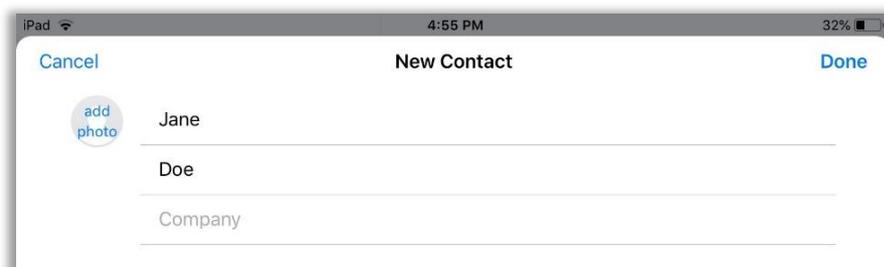




6. You can also tap **Add Photo**, to add a photo to the contact's name. This will show on the device's screen every time they call you, so you can identify who is calling. You can choose to take a new photo or select an existing one from your device's gallery.



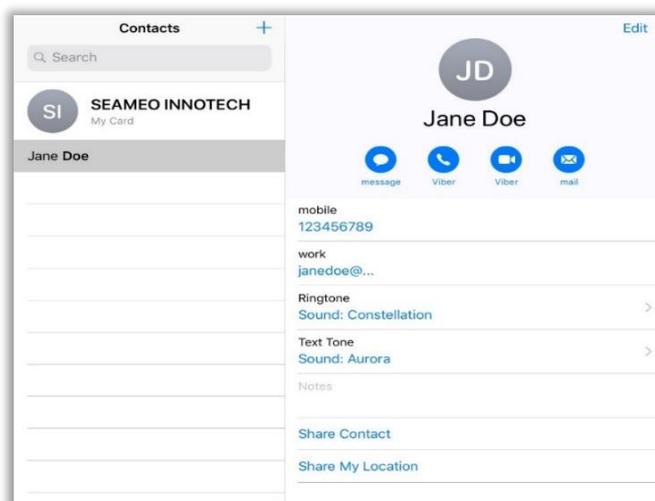
7. Once all details of the new contact person are entered, tap **Done** at the top right of the page. You should see the newly added contact in your existing list of Contacts.



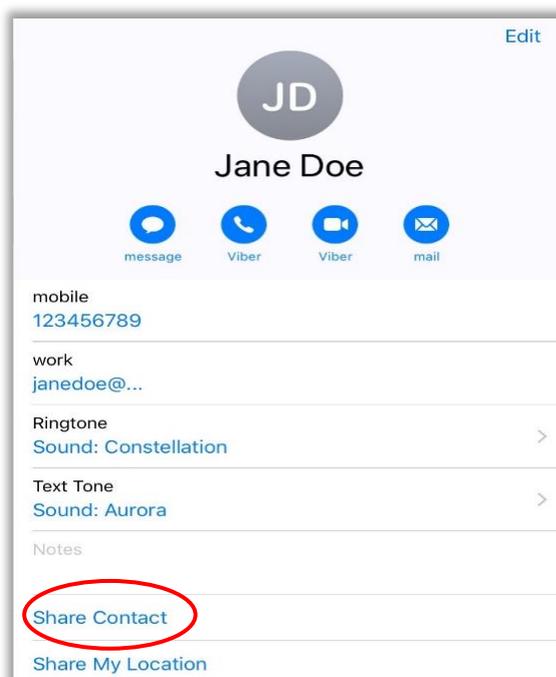
How to Share Contacts' Information

The contact details of everyone in your **Contacts** can be shared via several options. Before you do this, you have to consider the policies of data privacy and ask if the person in your list of **Contacts** consents to having their contact information shared. Always make sure you have permission from the person before sending out their personal information to other people. To share information about a person in your **Contacts**, follow the step-by-step guide below.

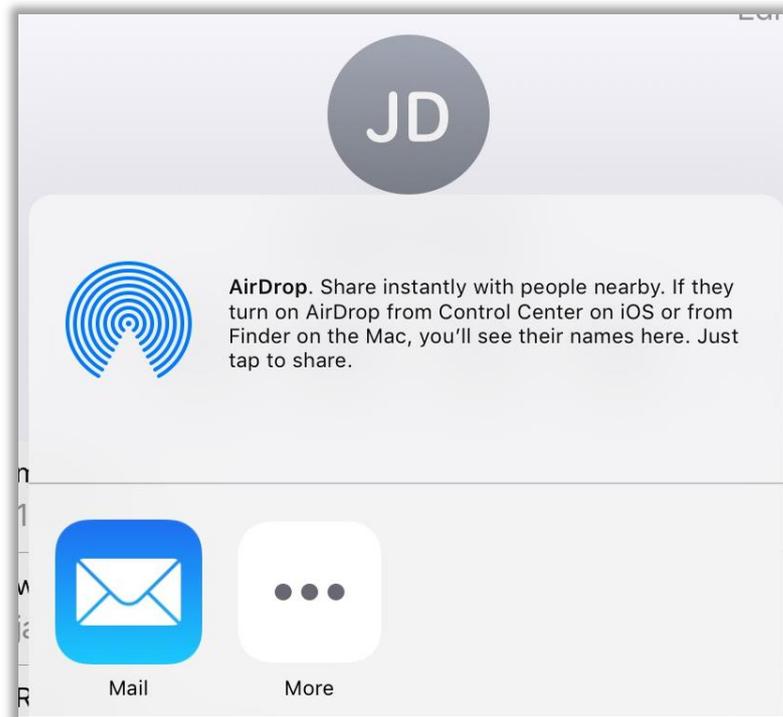
1. First, you have to tap **Contacts** in the home screen to access the contacts page.



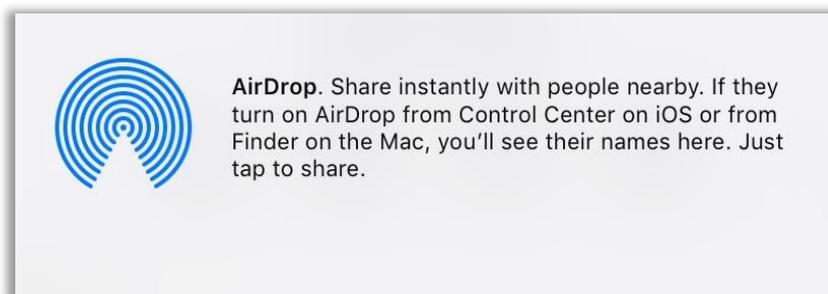
2. Tap the name of the contact whose details you wish to share. This will open your contact's page.



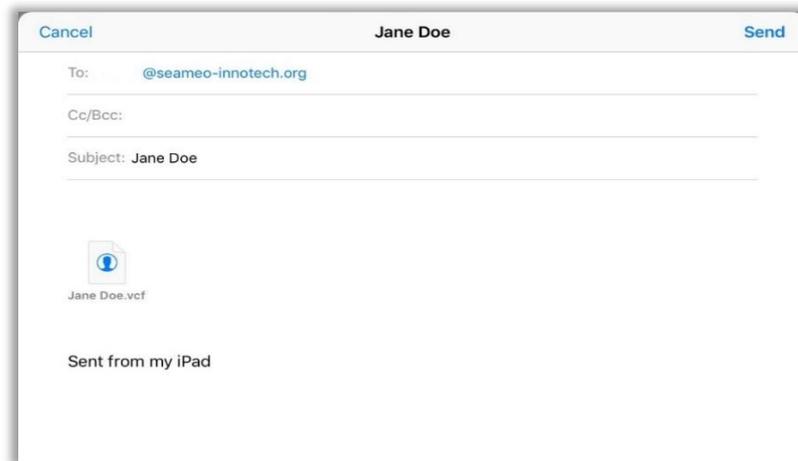
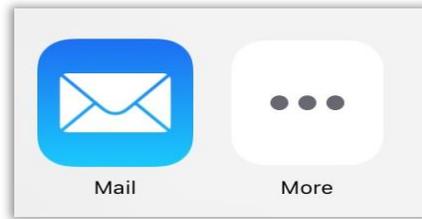
3. Tap **Share Contact**. A list of options will appear.



- **Airdrop** is Apple's default feature to share content with other Apple mobile devices. To activate, just go to  **Settings** and tap **General**. Some options will appear; select **AirDrop** and you will be able to choose who can send you files. When other users are active, their names will appear under the **AirDrop** logo, and you can tap on them to share the contact information.



- **Mail** lets you share the contact information via email. Tapping on it will directly open a new mail page with the contact attached to it. You just have to fill in the required fields—the email address of the person you are going to email and then, tap **Send**.
- Note that you may only use the **Mail** feature if you had set this up previously. You will find a step-by-step guide on how to set up **Mail** later in this same section.



- If you tap **More**, next to the **Mail** option, you will see new ways of sharing the contacts information, depending on which apps your device has installed. Tap on any of the options to send the contact information via said app.



4. Congratulations! You now know how to use the  **Contacts** feature of your Apple mobile device.

2.4.5 Face Time

How to Use Face Time

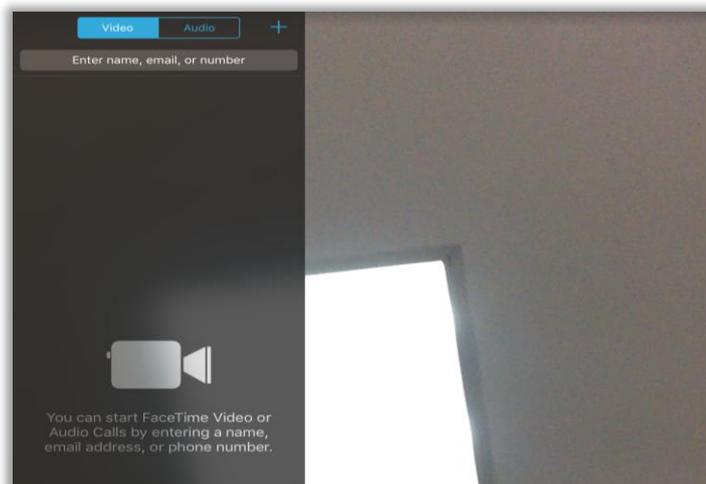
Online learning is a growing educational trend and using video calls lets you connect with learners and colleagues. That is probably why  **FaceTime** is increasingly becoming popular for teaching and learning. It lets you call, chat, and share your thoughts with your learners or colleagues who also own Apple mobile devices.

The good thing about  **FaceTime** is that it uses Wi-Fi or mobile Internet data to call, therefore decreasing its costs compared to making a voice call on a mobile phone. To use this feature, follow the step-by-step guide below.

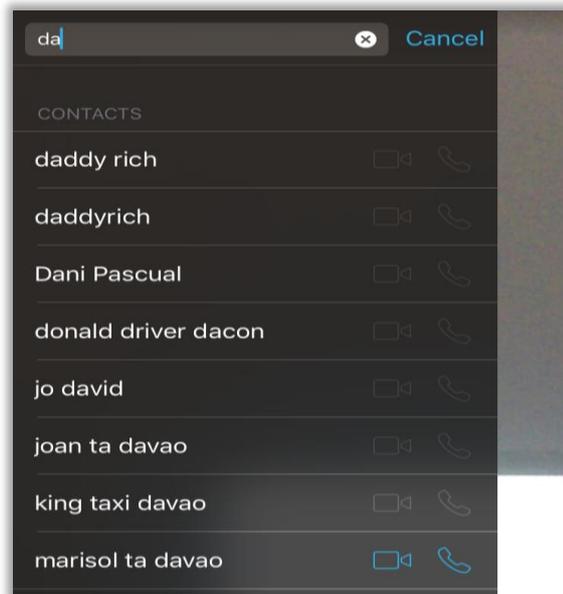
1. Unlock the device using the Home button to access the Home screen. You should see the  **FaceTime** icon.



2. Tap the **Face Time**  icon to open the app.



3. You need a person's phone number or email address to make a **FaceTime** call. To make a call, press  and type the email address or the phone number of your chosen contact. If the contact information is saved on your device, you can just type the name in the Search box. Note that as you type, suggestions will appear.



4. Tap  beside the name of your chosen contact to start a video chat, or tap  to start a voice call. This will dial the number stored under your contact's name. If you are making an international call, you should type the country code before the phone number to be able to call. Wait for your contact to accept your call. Talk like you would do face-to-face. Congratulations! You now know how to use  **FaceTime** using your Apple mobile device.

2.4.6 iTunes Store

How to Use iTunes Store

 **iTunes Store** is where iPhone and iPad users purchase and download music, buy or rent movies and TV shows,¹³ as well as listen to podcasts.¹⁴  **iTunes Store** can be used on any PC or mobile device. It comes built-in to Apple computers and Apple devices. It has five main features— **Music**,  **Movies**,  **Top Charts**,  **Genius**, and  **Purchased**.

 **Apple Music** offers a similar service. However, while  **iTunes Stores** is primarily a shop where you can buy music and movies,  **Apple Music** is a subscription-based streaming app, where you can listen to music without purchasing, and therefore, owning it.¹⁵

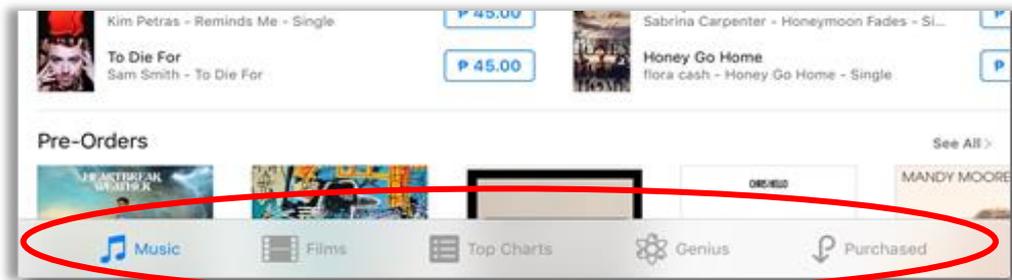
13. Spangler, Todd. (June 3, 2019). Variety.com, "Apple's iTunes Store, iTunes App for Windows Aren't Going Away." Last accessed January 22, 2021, <https://variety.com/2019/digital/news/apple-itunes-store-ios-windows-not-going-away-1203231814/>

14. A podcast is a digital medium made up of an episodic series of audio, video, documents in Portable Document Format (PDF), or ePub files (specifically used on e-books) that people subscribe to and download.

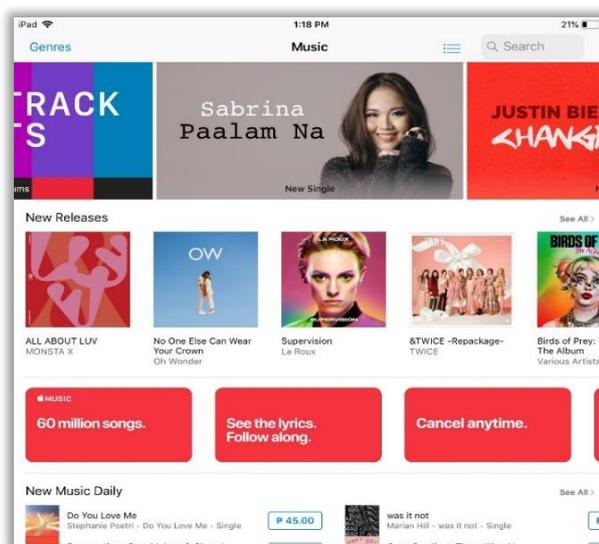
15. Quora. "What is the difference between iTunes and Apple Music?" Last accessed January 22, 2021, <https://support.jooki.rocks/hc/en-us/articles/360021505231-What-is-the-difference-between-iTunes-and-Apple-Music->

To access  **iTunes Stores**, follow the step-by-step guide below.

1. Unlock the device using the Home button to access the Home screen. You should see the icon of the  **iTunes Store** there. Once you access the app, you will see different options at the bottom of the page.

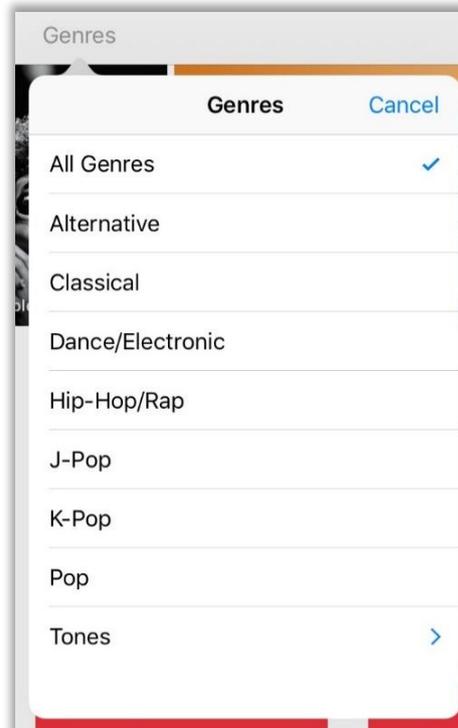


2. Tapping  **Music** shows all of the music available for purchase on the  **iTunes Store**. In **New Releases**, **Pre-Orders** and **Recent Releases**, the music is classified into albums¹⁶; while the **New Music Daily** shows the popular songs.



16. *Wikipedia*. "Album," <https://en.wikipedia.org/wiki/Album>. An album is a collection of audio recordings issued as a collection on compact disc (CD), vinyl, audio tape, or another medium.

3. Tapping **Genres**, on the top left corner, shows the different categories of music available for downloading. You can select a specific genre of music to easily sort through the millions of online music that you can find in the  **iTunes Store**.



How to Purchase Music from the iTunes Store

To purchase music from the  **iTunes Store**, follow the step-by-step guide below:

1. Tap a music album's cover picture. This will open the album's page. You can buy the whole album if you like the entire selection of songs included in it, or you can just choose specific songs.



2. To purchase, just tap the price button next to the album's name or the songs you like. You will be asked to introduce your **Apple ID** password to be able to buy it. After that, the song will begin to download.¹⁷

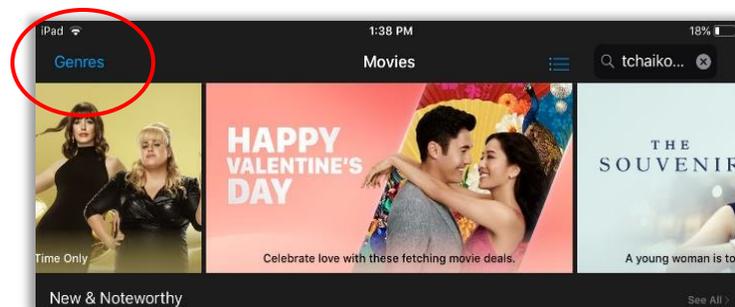


How to Purchase Movies from the iTunes Store

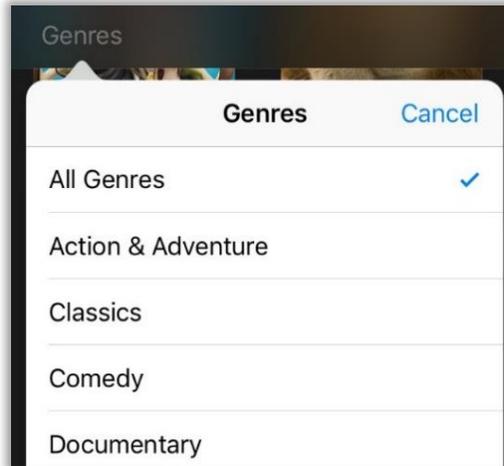
1. Tapping  **Movies** shows all of the movies available for purchase from the  **iTunes Store**. The listing gives you the movie titles along with the movie posters. Just like the music available in the store, you can also select a specific genre of movie that interests you for easier sorting from among the thousands of movies available.



2. You can also tap **Genres** to see the different categories of movies available for downloading. You can select a specific genre of movies to easily sort through the millions of movies that you can find in  **iTunes Store**.



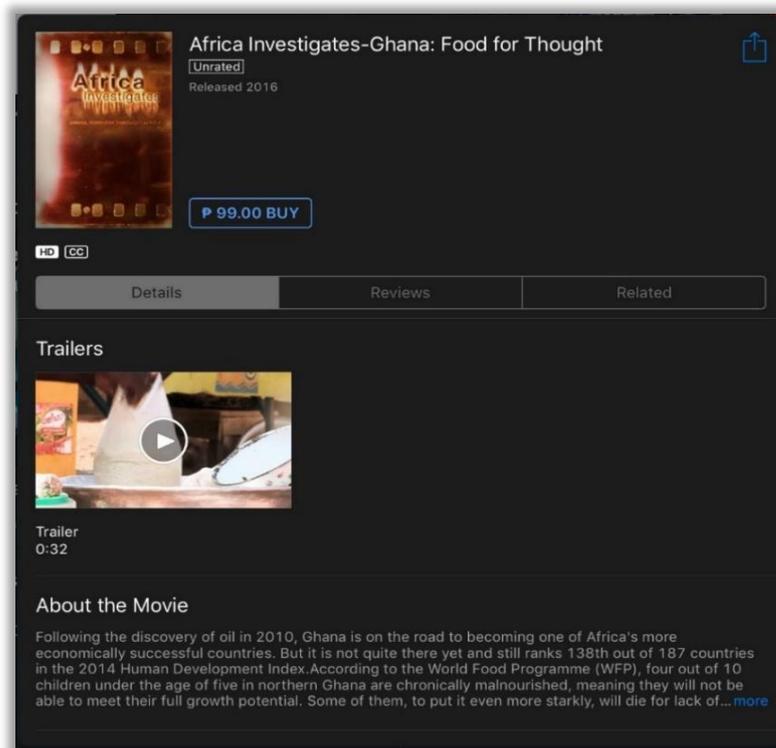
17. WikiHow. 2018, "How to Buy Music from iTunes from an iPad." <https://www.wikihow.com/Buy-Music-from-iTunes-from-an-iPad>.



Purchasing a movie is as similar process to buying a song. To purchase a movie from the  **iTunes Store**, follow the step-by-step guide below:

1. Tap the poster of a movie that interests you. It will open to a page where you can get more information about it. You will see the price, and if your tap on **Details**, **Reviews** and **Related**, you can read the synopsis, commentaries of other users and see related movies.

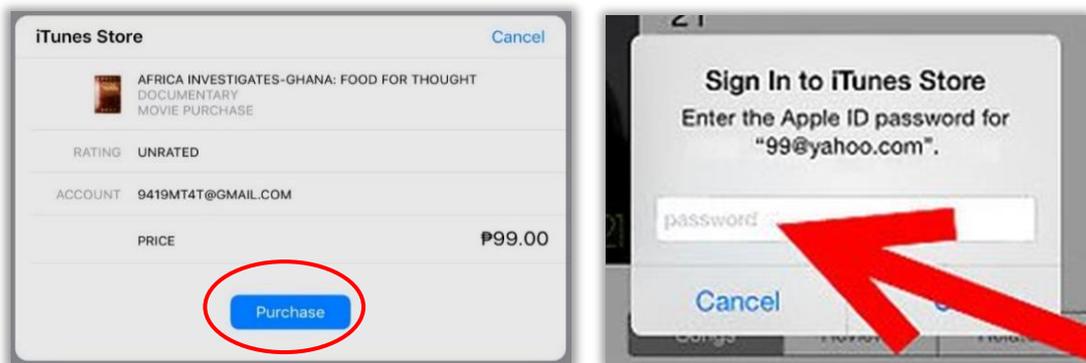
Under the movie poster you can get information about the image quality: **High-Definition (HD)** movies have very high picture quality and are bigger in terms of file size **Standard-Definition (SD)** movies, meanwhile, refer to those with clear picture and are smaller in size.



2. Under the title of the movie you can see the **Age Rating**. The scale has 5 levels: 4+, 9+ 12+, 17+ and Unrated. This shows the recommended minimum age of viewers who are allowed to watch the movie.

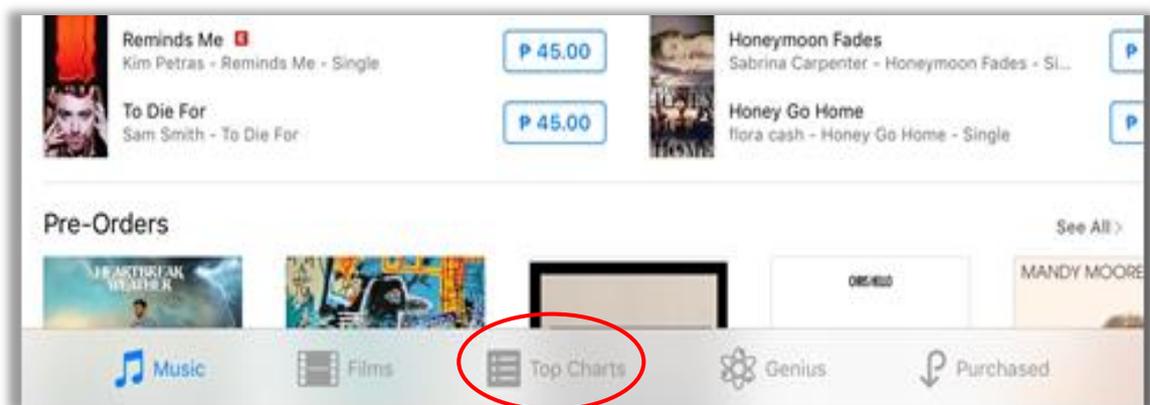


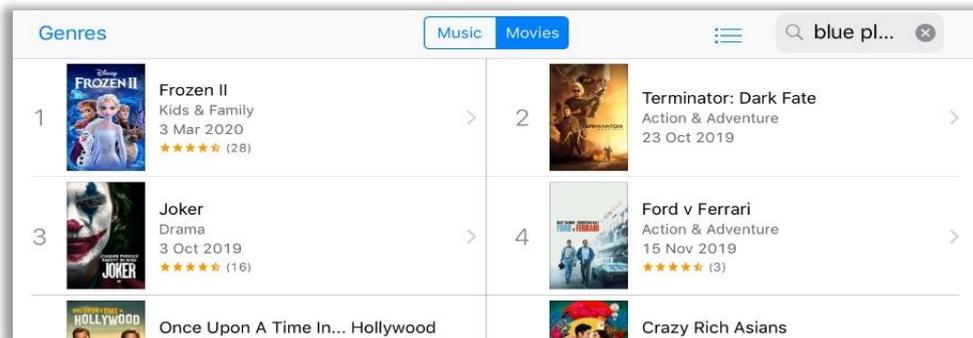
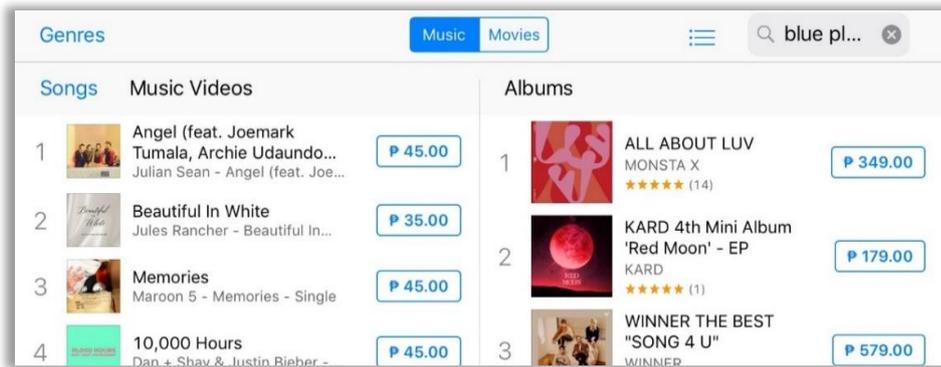
3. After getting more information about the movie that you have selected, tap the **BUY** button to purchase it. A window will open, and if you tap **Purchase**, you will be asked to type in your **Apple ID** password to be able to buy it. When done, the movie will start to download.



How to Access Top Charts Feature from the iTunes Store

By tapping  **Top Charts**, at the bottom of the page, you can see the most viewed media content in  **iTunes Store**. It is divided in two categories, **Music**—which shows songs, music videos, and albums— and **Movies**. You can choose from either of these categories depending on your preference.

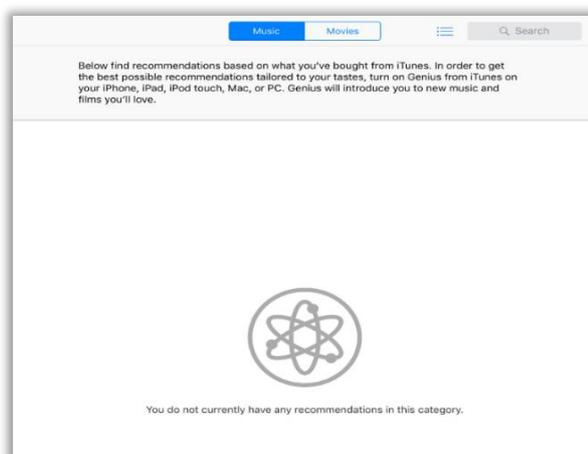
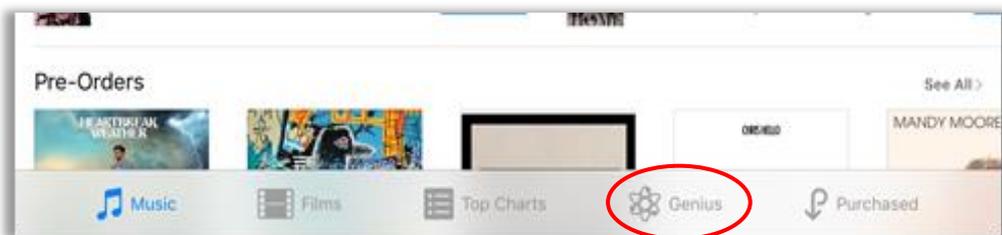




How to Access Genius Feature from the iTunes Store

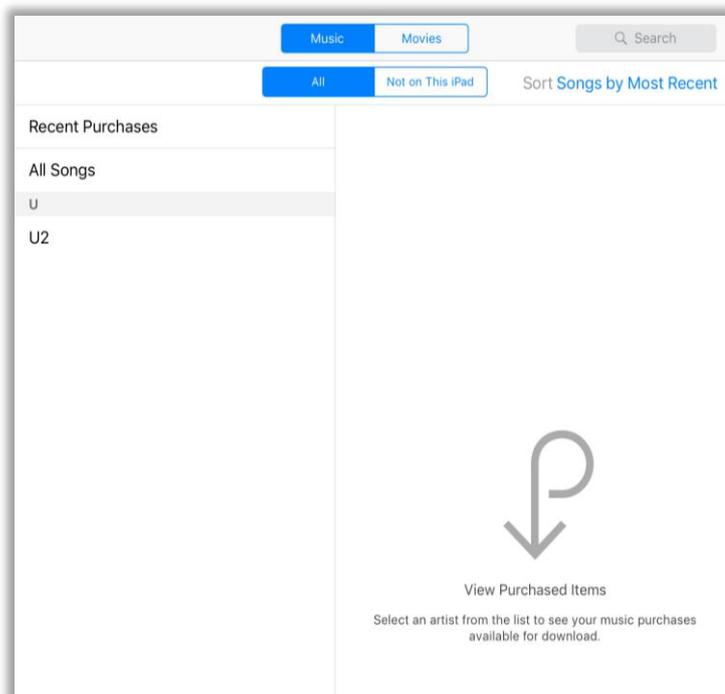
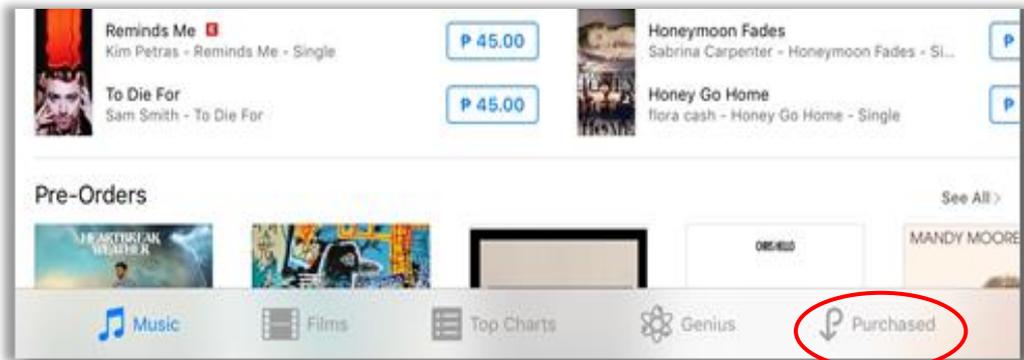


Genius can be accessed by tapping at the bottom of the page. It shows you a list of songs and albums you may be interested in purchasing based on your taste in music. Apple determines this based on the music genre you frequently play on your device.



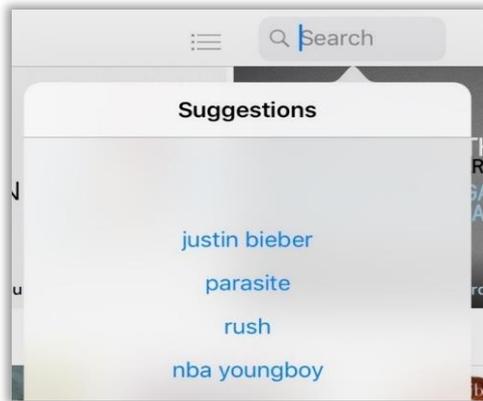
How to Access Purchased Feature from the iTunes Store

By tapping  **Purchased**, at the bottom, you will be shown all the music and movies that you have already purchased from the  **iTunes Store**. No details will be shown here if you have never made any purchase.

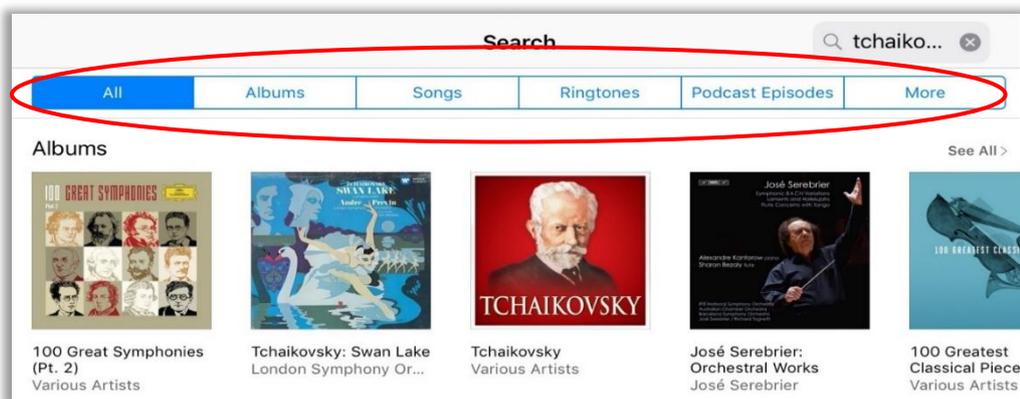
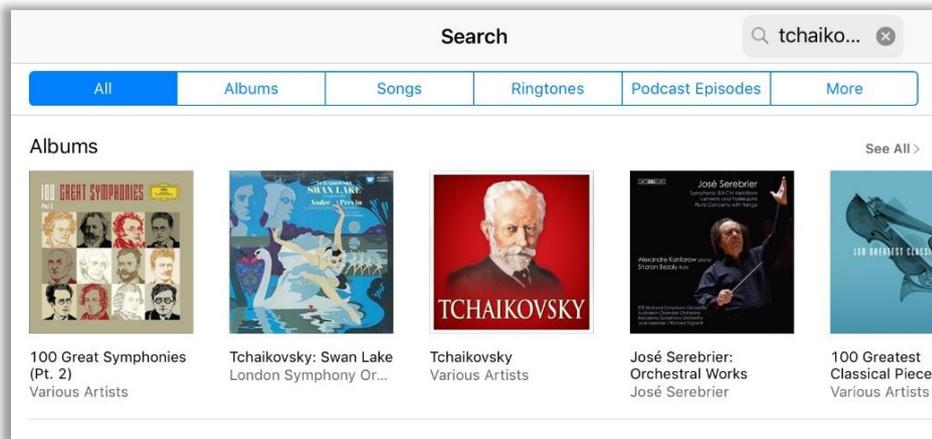


How to Use Search Feature from the iTunes Store

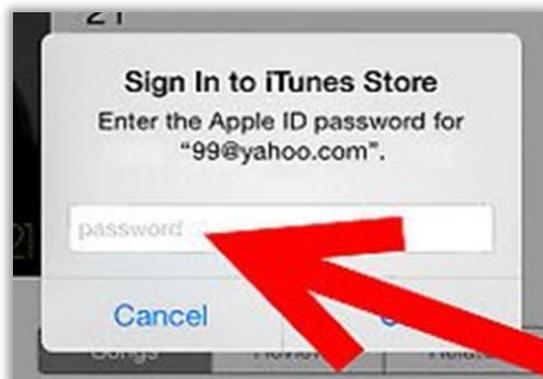
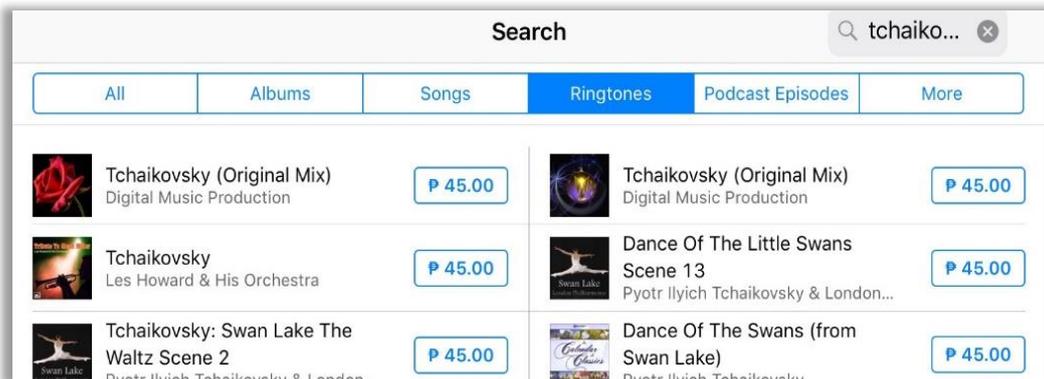
Another section of the **iTunes Store** is  **Search**, which works in the same way as in the  **App Store**. Placing the cursor in the  **Search** field will automatically give you suggested key words for searching. You should see the **Trending Searches** page when it is tapped, along with the  **Search** field. This shows the most popular searches among  **iTunes Store** users. You can also tap the  **Wishlist** next to the search bar and add titles that you would like to buy soon.



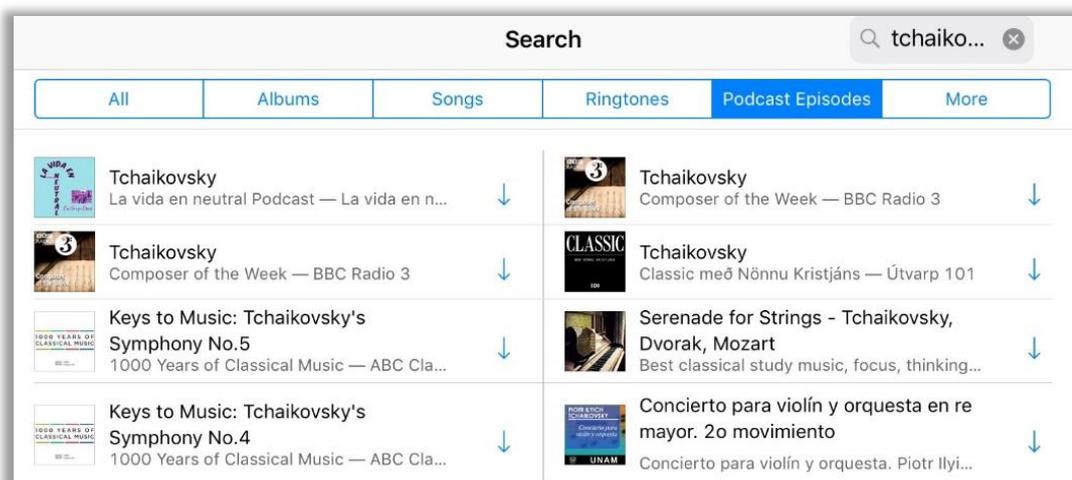
- When you search for something, you will get the results classified in **All**, **Albums**, **Songs**, **Ringtones**, **Podcast Episodes** and **More**.



- **Ringtones** is where you can purchase and download song snippets which can be used as ringtones for your mobile device. Purchasing a tone involves the same process as buying a song or a movie from  **iTunes Store**.
- Tapping the title of the tone you want to purchase allows you to hear that tone. To buy a specific tone that you like, just tap the **BUY** button beside the title. You will be prompted to sign in with your **Apple ID**. The download will begin automatically after that.



- **Podcast Episodes** will show podcasts related with your search.



- If you tap **More** you will also have the opportunity to browse podcasts, movies and music videos.



- You can check out  **iTunes U** to download free lectures, videos, and more from top universities, museums, and other cultural institutions; and  **Books** to read e-books on your device. While some books can be reader available for free, others need to be purchased first. The step-by-step guide on how to purchase and use  **iTunes U** and  **Books** will be explained further in the next chapter. Go to section [3.2 What Are Some of the Most Useful Education Apps Today?](#)

2.4.7 Mail

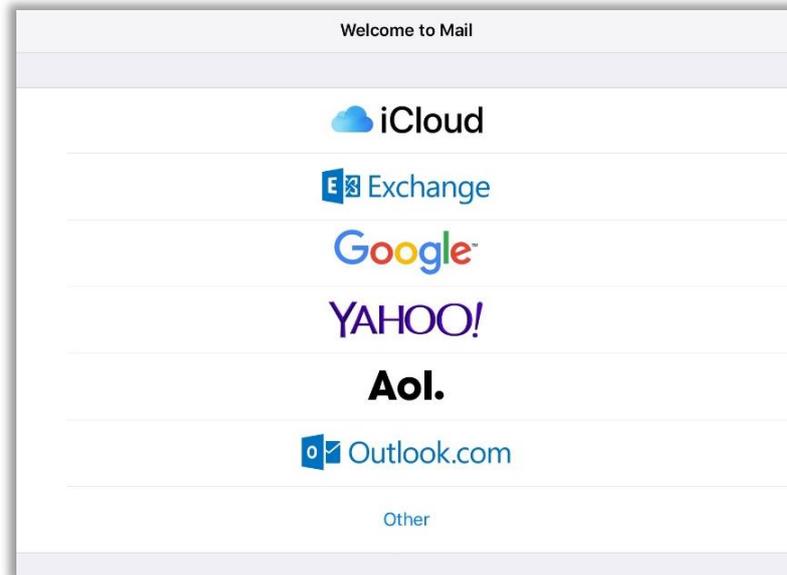
How to Use Mail

 **Mail** lets you send and read e-mails from your Apple mobile device. To use it, follow the step-by-step guide below.

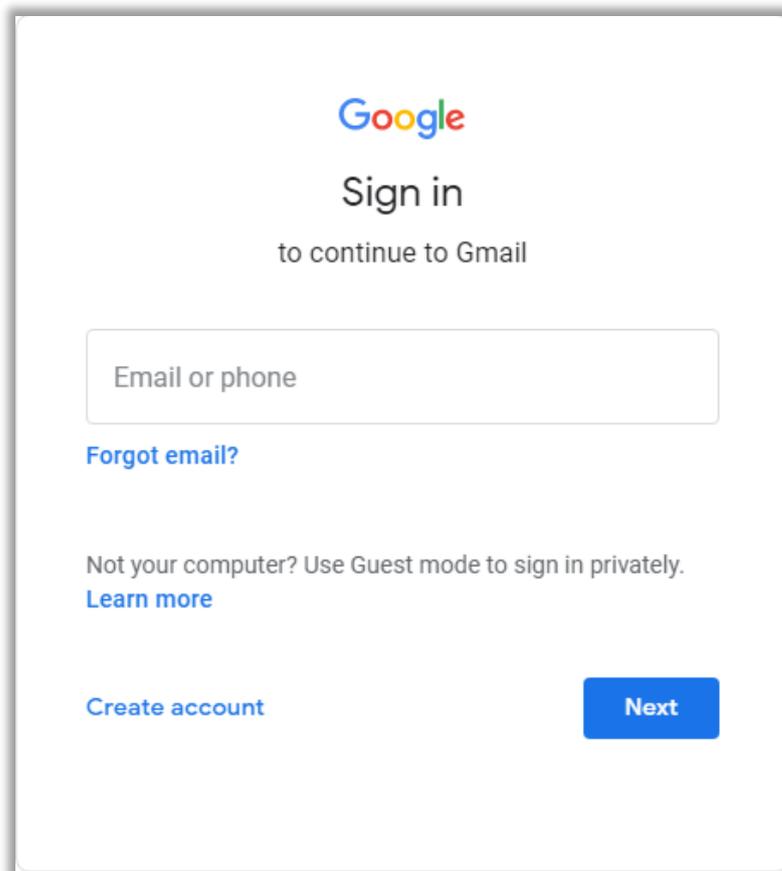
1. Unlock the device using the Home button to access the Home screen. You should see the  **Mail** icon at the bottom, together with the other quick access apps.



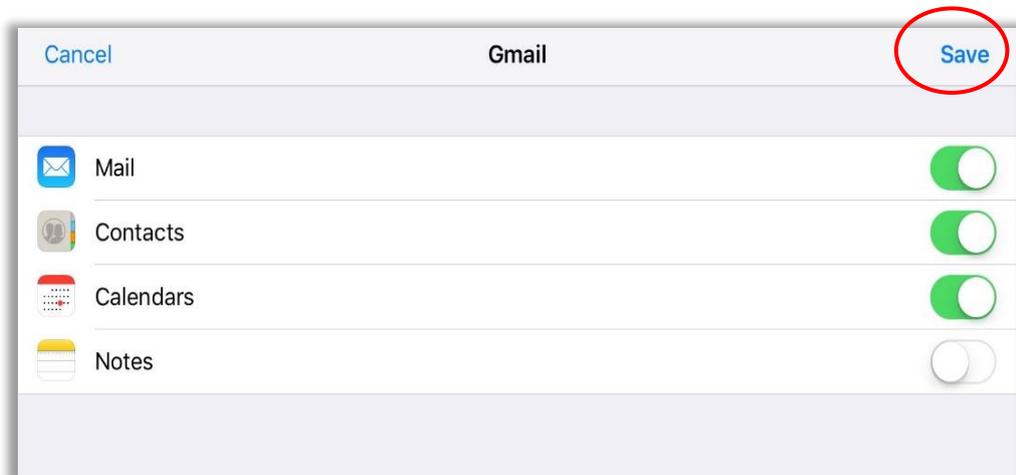
2. When you tap on  **Mail**, you should see a list of different email clients. Tap the one where you currently have an email account.



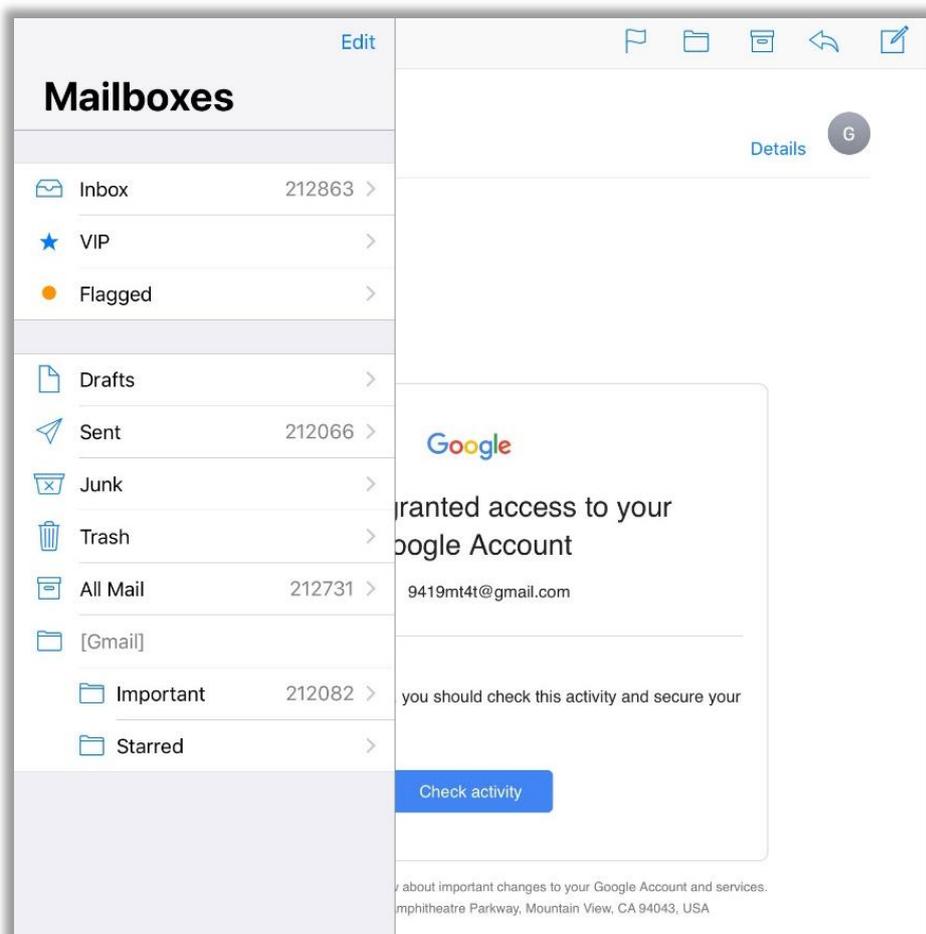
3. You should be redirected to **Safari**, where you will be prompted to enter your account's information. If you do not have a Gmail account, you can tap **Create a new account** and fill in the required information to create one.



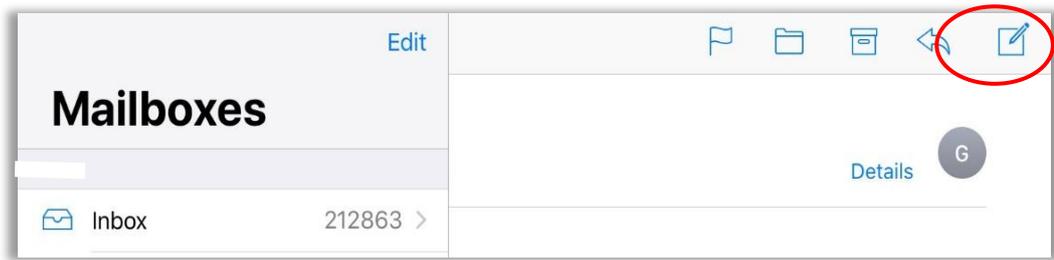
4. After that, you should be able to link your email to several apps in your Apple mobile device. To turn any of them on or off, just toggle the switch. Once you are done, tap **Save**.



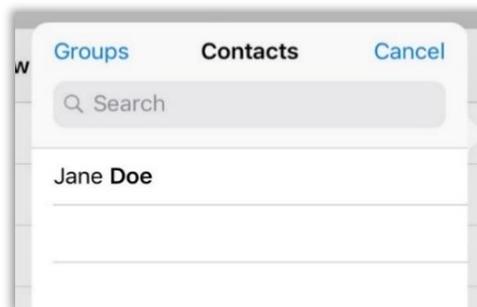
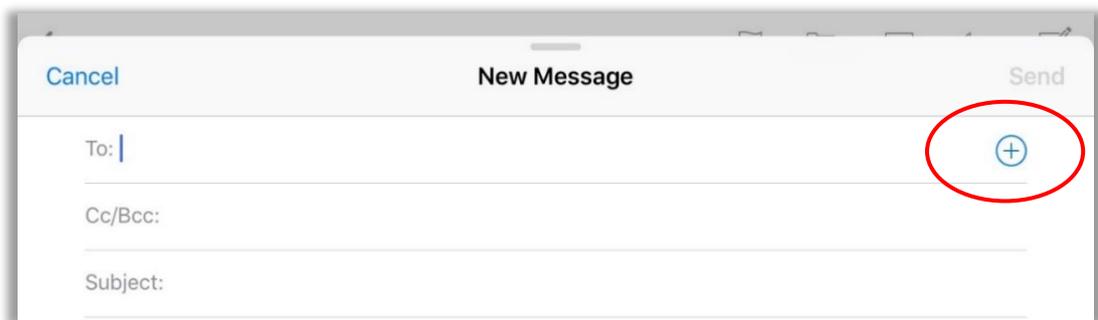
5. Your account has already been set up. Now you should be able to see your **Inbox** every time you tap on  **Mail**.



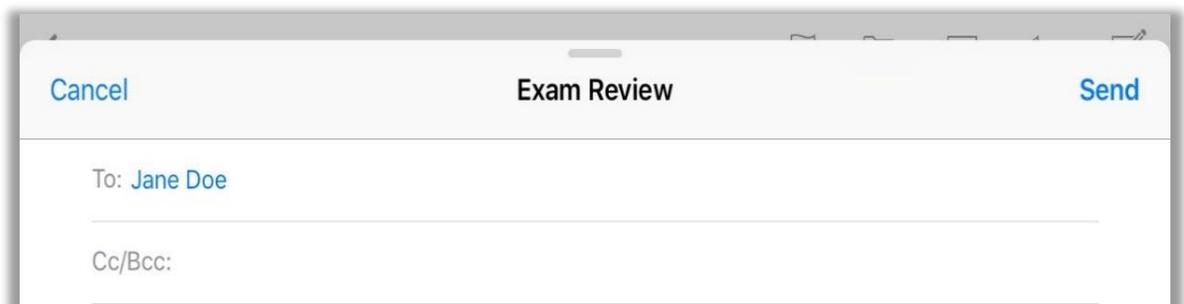
6. To write and send an e-mail, tap  on the top right corner. This will open the New Message page.



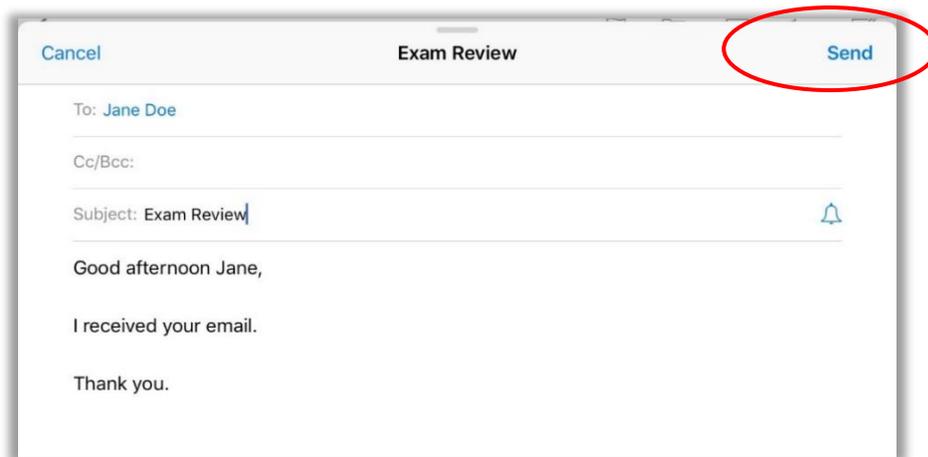
7. Tap the plus sign icon . This will open the **All Contacts** page.



8. Tap the name of a contact you want to send an e-mail. The name of that person should appear in the **To:** field.



9. Type what your e-mail is about into the **Subject** field and its content into the blank space for the message body. Then tap **Send**.



10. By tapping  **Settings** in the home screen and then  **Mail**, you can manage its settings and features.



11. Congratulations! You now know how to use  **Mail** using your Apple mobile device.

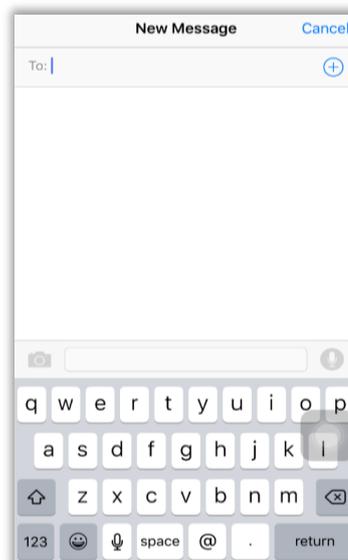
2.4.8 Message

How to Send a Message

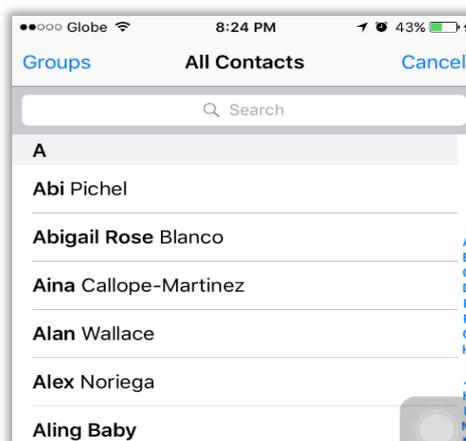
 **Messages** lets you send and receive text messages to contacts using any mobile device with cell reception or signal. On the other hand, you can also send **iMessage**, which is an Apple's own instant messaging service but works only when using data or Internet connection. **iMessage** only works with Apple mobile devices such as iPhones and iPads.¹⁵

To send a text message, follow the step-by-step guide below.

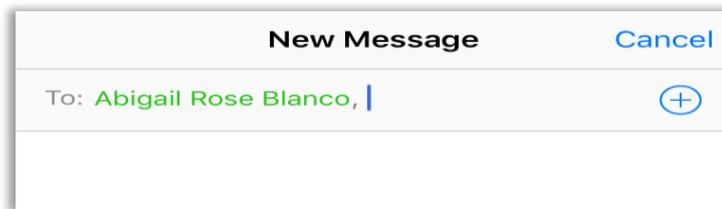
1. Tap the  **Messages** icon to open the app. To send a message to a contact, tap . This will open the **New Message** page.



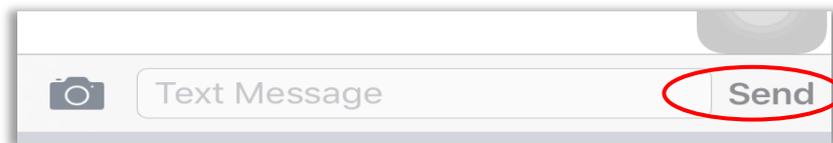
2. Tap the plus sign icon . This will open the **All Contacts** page.



3. Tap the name of the contact you want to send a message to. His or her name will be added to the **To:** field.



4. Type your message into the **Text Message** field then tap **Send**.



5. Congratulations! You now know how to send a **text message** using your Apple mobile device.

2.4.9 Photos

How to Use Photos

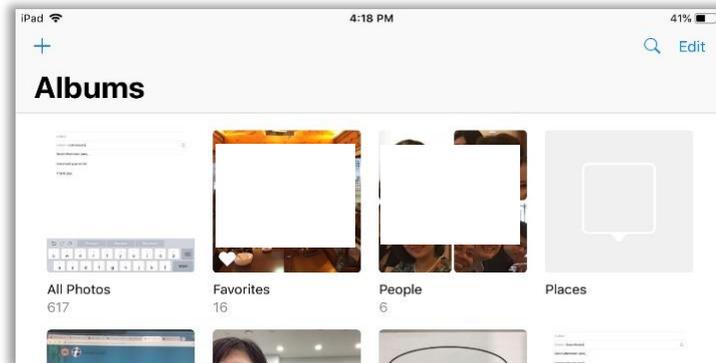
You can use the camera on your device to capture images, works of art or anything that can aid in learning. You can photograph your whiteboard after a brainstorming session for a blog post or as notes for later use.

There are so many ways you can use your device's built-in camera for teaching and learning or for personal and professional growth. All of the videos or photos saved on your Apple mobile device can be found in  **Photos**. To use it, follow the step-by-step guide below:

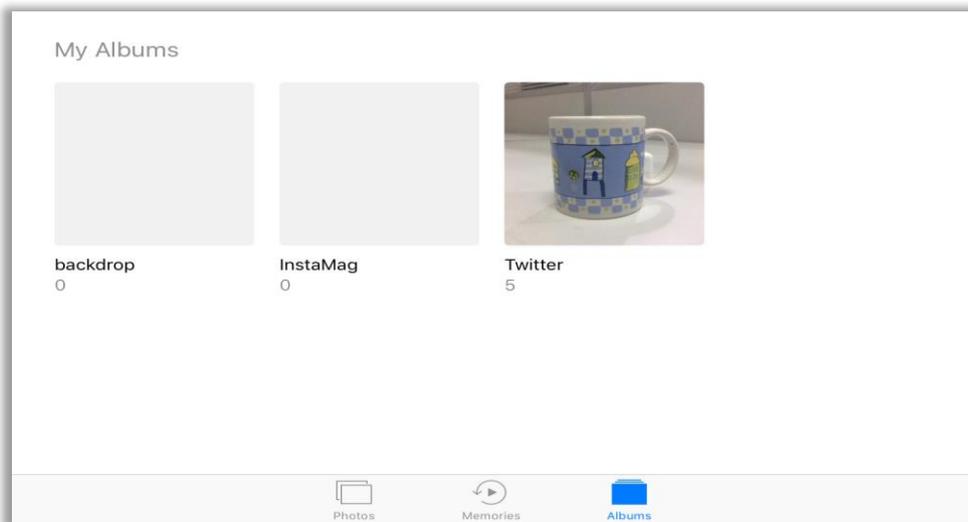
1. Unlock the device using the **Home button** to access **Home screen**. You should see the icon of  **Photos**.



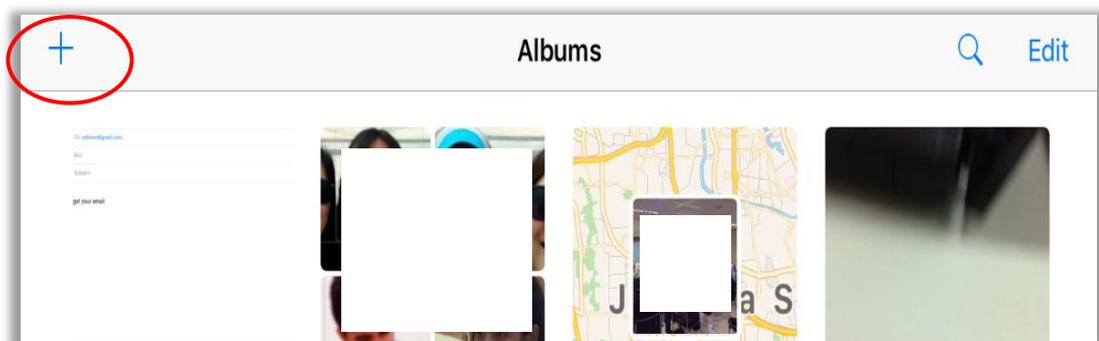
2. Tap the  **Photos** icon to open the app. You should see the **Albums** page.



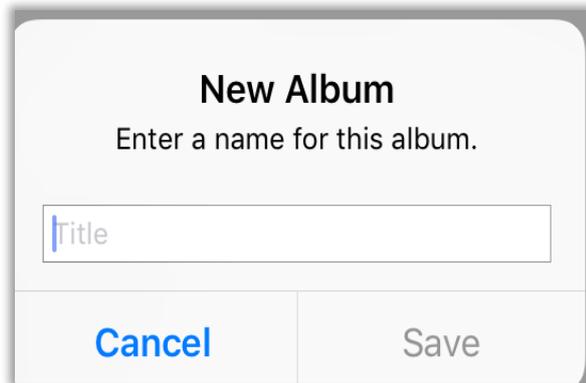
3.  **Photos** contain all other pictures saved on your Apple mobile device, even those that are not part of albums.  **Albums** contain photos that have been organized into groups.  **Albums** can be likened to physical photo albums where all your printed photos are pasted according to some form of organization.



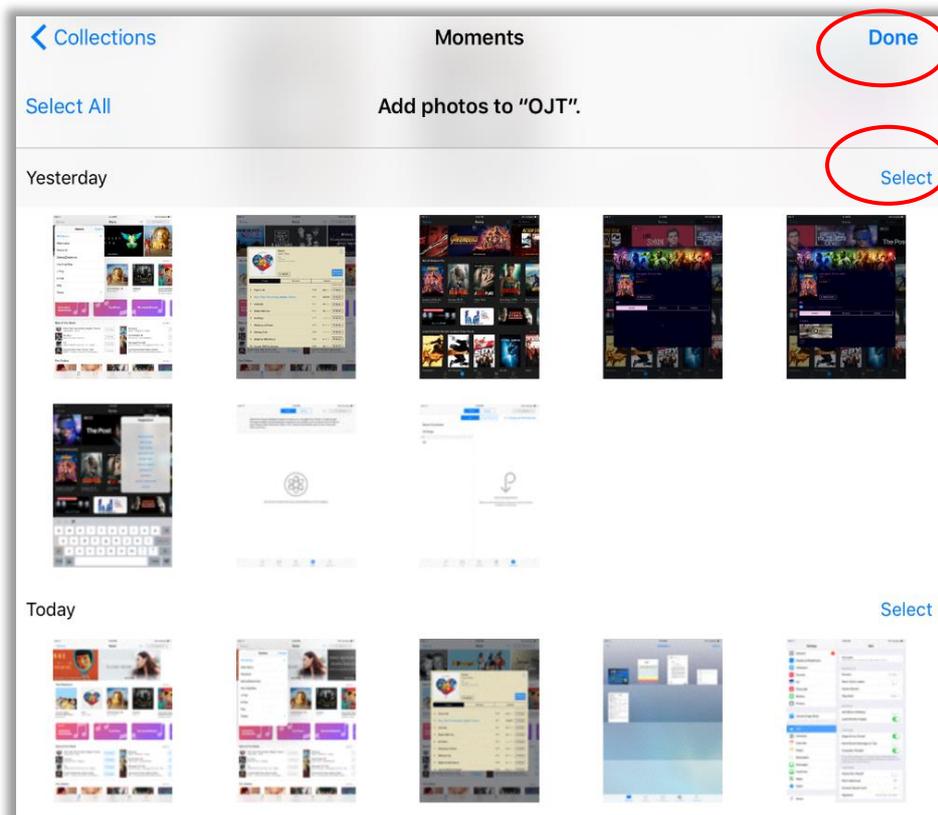
4. Tap  **Albums** then the plus sign **+** icon to create a new album.



- This will make a pop-up message appear, asking you to name the album you want to create. Type your desired album name then tap **Save**.



- This will open the  **Photos** so you can choose the photos to include in your newly created album. Just tap **Select** beside the album where you want to choose photos from. Tap **Done** to organize the photos you have selected in the album you created.



- Congratulations! You now know how to use  **Photos** using your Apple mobile device.

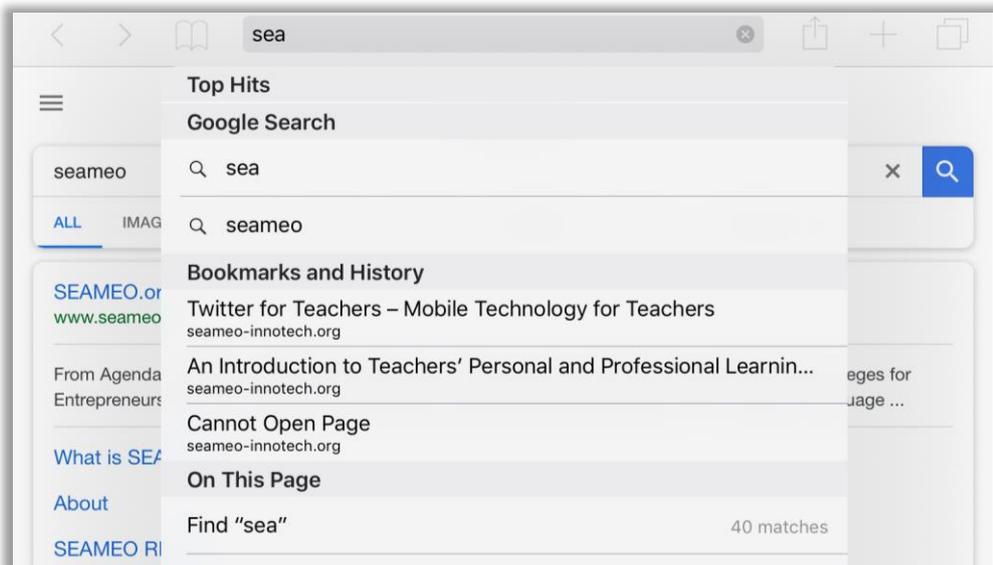
2.4.10 Safari

How to Use Safari

 **Safari** is the default web browser on any Apple mobile device. You use it to search the Internet, just like Google Chrome, Mozilla Firefox and Microsoft Edge. To use it, follow the step-by-step guide below.

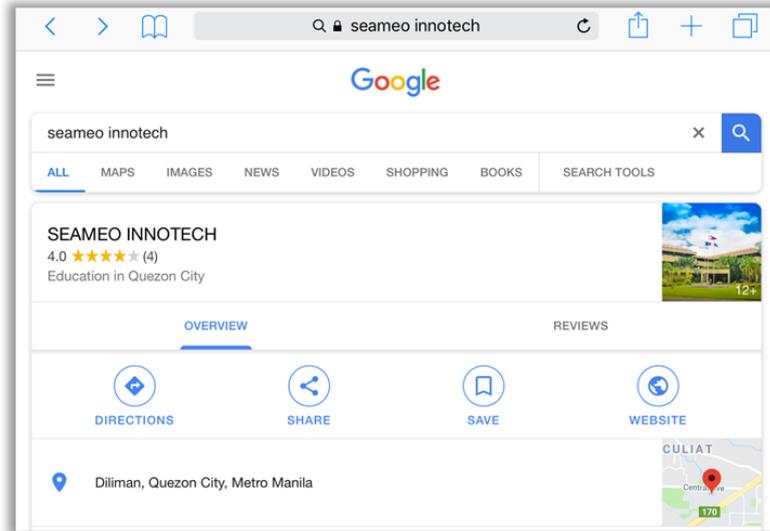
1. Tap the  **Safari** icon to open the app. In the  **Search or enter website name** field, type a website's name, or key words; in this case, "SEAMEO INNOTECH."

Note that suggestions will appear as you type. Tap the site's name if it is already on the list. If not, continue typing, then tap the **Go** button. This will open a search results page.

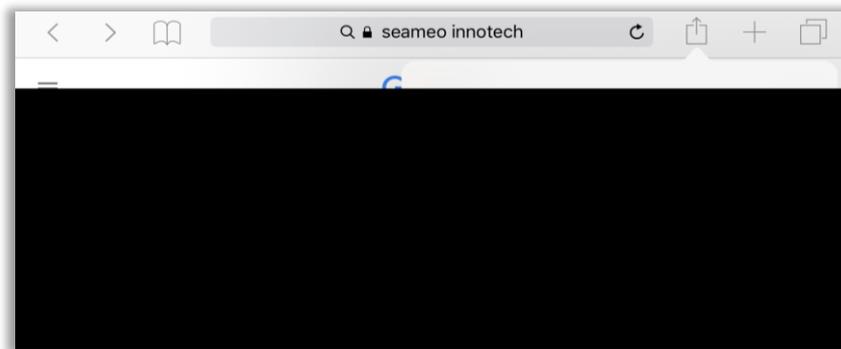


2. Scroll through the list of results and tap the one you are looking for to open the site. On the Internet, using **Hyper Text Transfer Protocol (HTTP)** means sending information in plain English while using **HTTP Secure (HTTPS)** means sending the same data in encrypted or a more secure format.
3. Entering a password (in this case, "password") in HTTP looks like "password." On HTTPS, "password" may look like "*&^%\$#*(&%^\$\$##\$#" (encrypted).¹⁸ Keep this in mind as you browse through online contents from different websites, particularly those that require you to enter personal data.

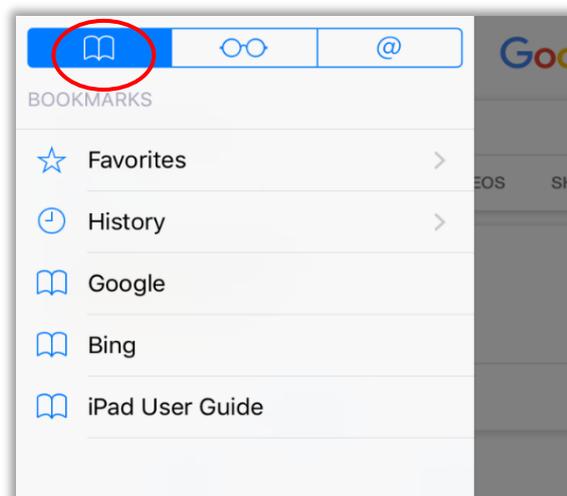
18. Brian Jackson, 2016. *Keycdn*. "What Is the Difference Between HTTP and HTTPS?" Last accessed January 22, 2021, <https://www.keycdn.com/blog/difference-between-http-and-https>

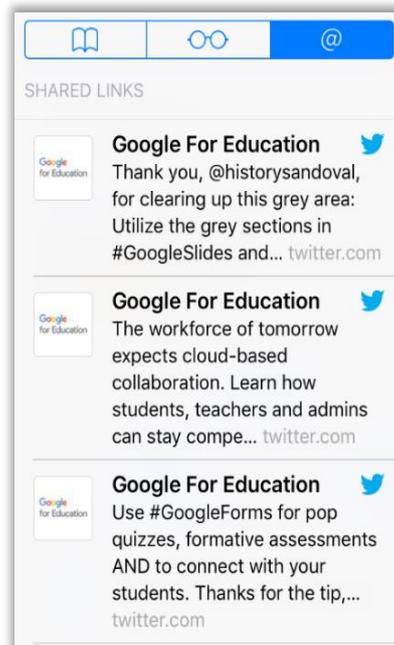
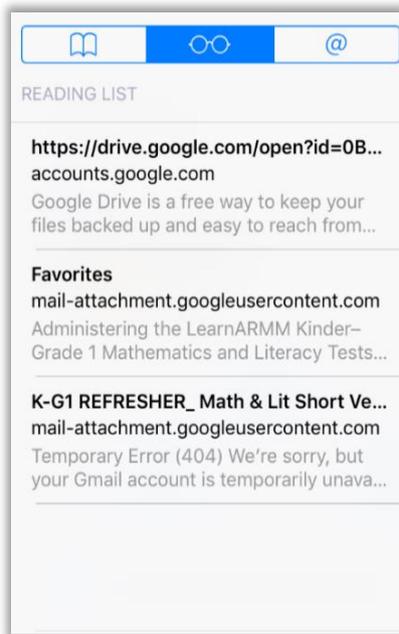


4. Tap . This will make a list of options appear. Choose the manner in which you want to share the site to your contacts (via e-mail, social media and others).

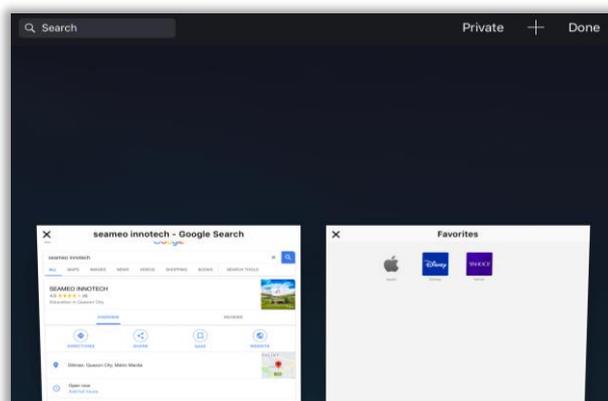


5. Tap  to bookmark a website. This will open a page where you can choose the folder to save the bookmark, whether in **Shopping**, **Reading List**, and **Shared Links**.





6. Tap  then the plus sign  icon to open another browser page.



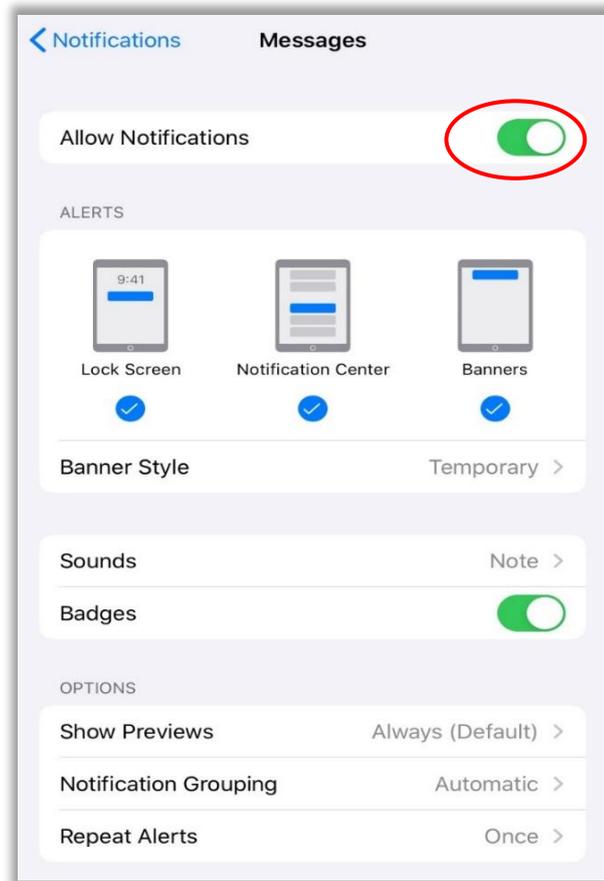
7. Congratulations! You now know how to use  **Safari** as your default browser using your Apple mobile device.

2.4.11 Settings

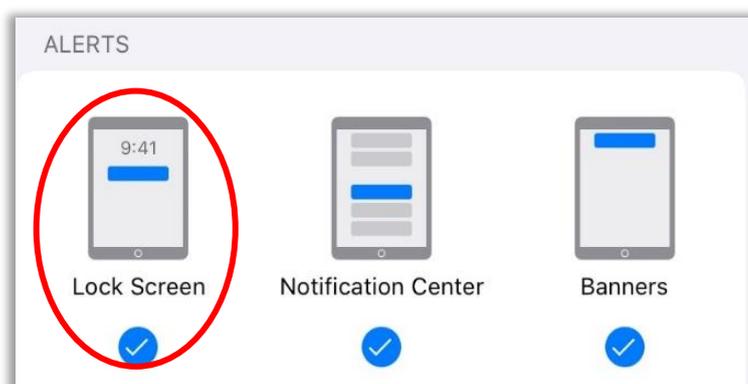
How to Use Settings

The  **Settings** is one of the most important built-in features that come with a mobile device. It acts as a conduit or a mediator between you and your device's hardware. Here, you can control how your Apple mobile devices function in certain aspects, depending on your personal preferences. On an iPad 6 running iPadOS 13.3.1, you will find controls for the following features. You should see the following in  **Settings**:

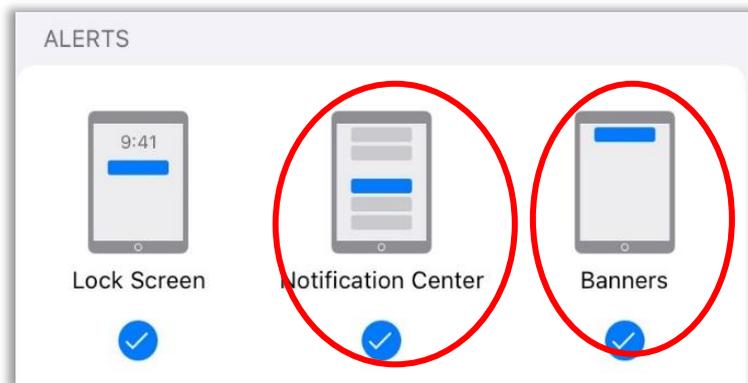
1. Tap the  **Settings** then  **Notifications**. Then, scroll down and tap  **Messages**.
2. Tap on the switch next to **Allow Notifications** to activate them.



3. Toggle the buttons to modify the specific alert settings or completely turn off all notifications for **Messages**. You can simply turn off the alert on the **Lock Screen** to ensure that new text messages will not show. This will make sure your messages' content will not appear on your device's screen even if you will still hear a sound when you receive a message and see a red dot on top of  **Messages**.



- Turning on the alerts in the **Lock Screen** shows notifications even if a device is locked. You can also switch on the **Notification Center** and **Banners**, which are different ways of seeing the notifications.



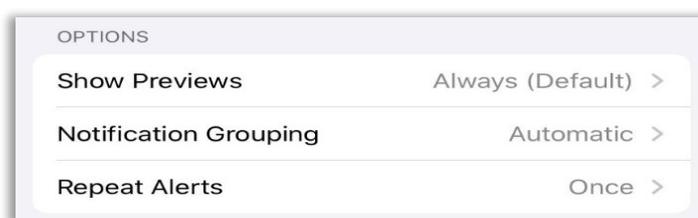
- The **Sounds** lets you choose what alert sounds to use and how loud they should be when you receive notifications. You can opt to play sounds, just get vibration alerts, or both.



- Turning on the **Badges** shows the number of pending alerts on top of app icons.



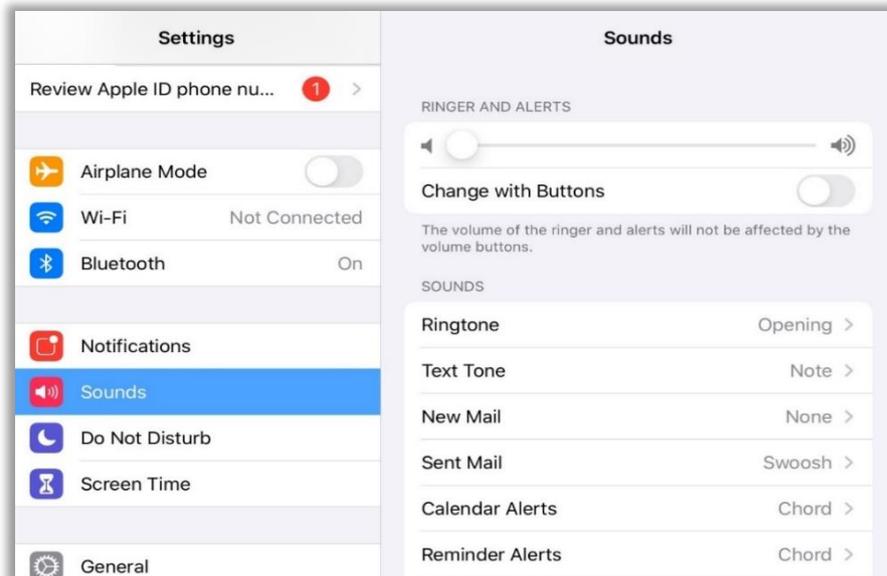
- You can manage more settings in **OPTIONS** such as notification preview, grouping and alerts.



- Congratulations! You now know how to use the  **Notifications** using your Apple mobile device.

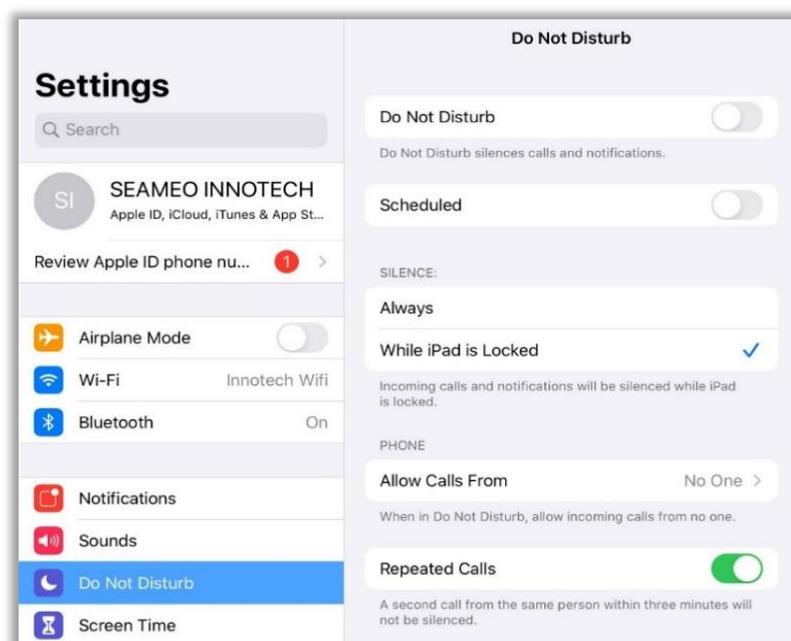
Activating the notifications on your Apple mobile device prompts you of new messages and updates about certain apps. However, activating the alerts for all the apps installed on your device can also be distracting and can pose privacy and security issues, depending on the settings that you will select. Receiving lots of app notifications can also consume battery power and your cellular data allocation. Better to be selective of the apps that you would want to receive notifications from.

- a.  **Sounds** lets you manage your device's sounds, the ringtone, text tone and more. You can also set the volume of the alerts and switch on and off the system's sounds, such as the keyboard and the lock sound.



- b.  **Do Not Disturb** lets you turn off all alerts and notifications at night or whenever you do not want to be disturbed. You can turn it on by tapping the first switch, or you can schedule it.

If you want to silence your device completely, even when it is not locked, scroll down and tap **Always**. Note that even when this feature is activated, you can still allow specific people in your Contacts to call you.



- c.  **Screen time** lets you manage settings linked with the amount of time the device is being used. You can monitor the activity time of the device, set and schedule to not use the device, set time limits to some apps, set communication limits or block inappropriate content. This function is mostly useful to restrict children’s use of mobile devices, but a teacher may also use this function to control learners’ use of mobile devices in the classroom/school.

Changing the length of time before the lock screen shows up and adjusting the brightness of your device can impact your battery life. To save and extend your device’s battery life, decrease the brightness of your device and the time of inactivity before your device goes to sleep.¹⁹



- d.  **General** allows you to control your device’s storage capacity and usage settings. It also lets those who have certain disabilities or special needs to optimize the use of their Apple mobile devices.  **General** has the following components:

19. “Adjusting the Screen Timeout and Brightness,” eTelus, accessed January 22, 2021, <https://www.telus.com/en/bc/support/mobile-device/pixel-3a/latest/adjusting-the-screen-timeout-and-brightness>.

- **About** tells your Apple mobile device's model, serial number, and other important information as shown in the sample screen below.



- **Software Update** lets you know if your device's software is up-to-date or needs updating. You have the option to allow your Apple mobile device to automatically update whenever an update is available. Just toggle the button to switch on **Automatic Updates**.

- **AirDrop** is a feature of iOS and iPad OS that allows you to transfer files wirelessly across Apple mobile devices. You can share files such as documents, videos, photos, playlists, contact information, and locations that you have pinned in the Apple maps. **AirDrop** uses Bluetooth to create a peer-to-peer Wi-Fi network between the Apple mobile devices, which makes sharing larger files much faster and more convenient.

Each Apple mobile device creates a firewall around the connection and files are sent encrypted, which makes it safer than transferring via email. The devices only need to be close enough (within 9 meters) to establish a good Wi-Fi connection.²⁰



- **AirPlay & Handoff. AirPlay** is a content casting feature on Apple mobile devices that allows you to wirelessly cast audio or video from your iPhone, iPad, or Mac to an Apple TV as long as your device is connected to the same Wi-Fi as the TV.²¹
- **Handoff** is part of Apple's continuity features that lets you move tasks and data from one device to another Apple mobile device. Handoff works when each device is signed in into iCloud with the same Apple ID. You should also turn on your **Handoff, Bluetooth, and Wi-Fi**.²²

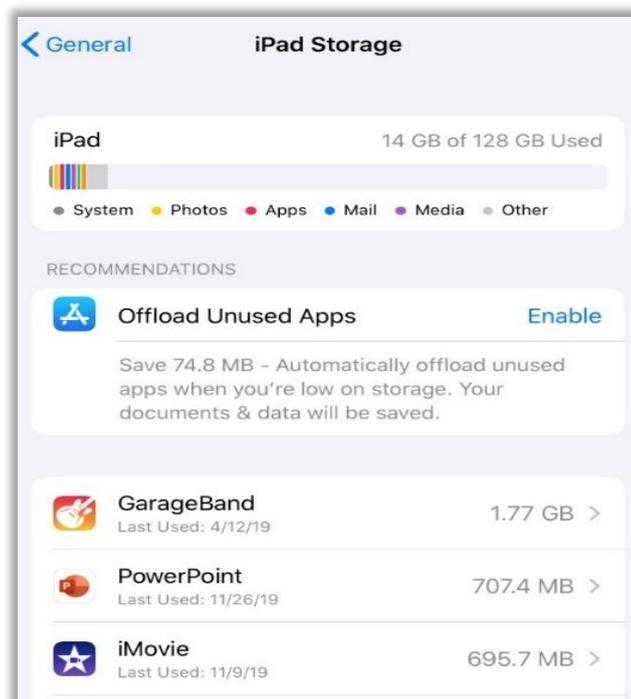
20. Daniel Nations (June, 2020). "What is AirDrop? How Does it Work?," Lifewire, accessed January 22, 2021, <https://www.lifewire.com/what-is-airdrop-how-does-it-work-1994512>.

21. Aliya Chaudry (May,2020). "How to Use AirPlay to Stream Videos to your TV," The Verge, accessed January 22, 2021, <https://www.theverge.com/21248047/airplay-apple-tv-how-to-stream-iphone-macbook-watch-video>.

22. Apple Support. "Use Handoff to Continue a Task on your other Devices," accessed January 22,2021 <https://support.apple.com/en-us/HT209455>.



The **iPad Storage** shows you how much is left of your device's internal storage space. It also helps you manage your storage page.

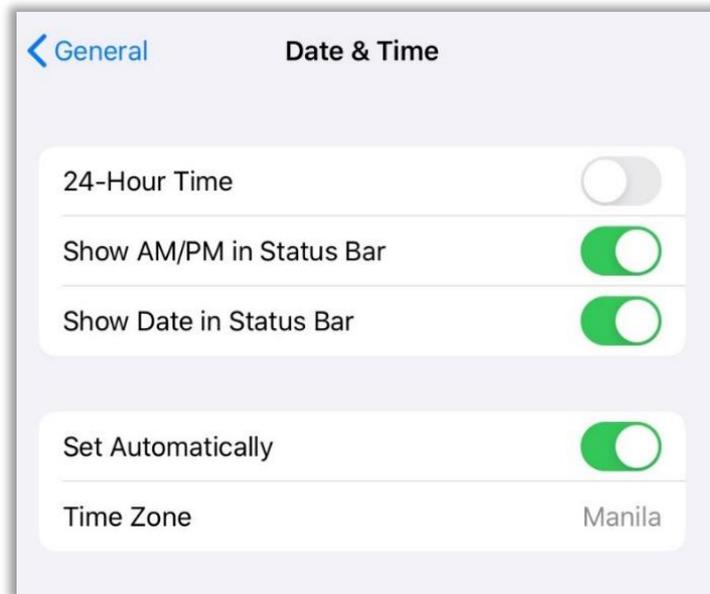


- **Background App Refresh** lets you automatically refresh the apps when Wi-Fi or cellular data is turned on so the apps remain up-to-date when it is opened. However, the Background App Refresh can be heavy on your battery life and data consumption.

To save some battery life and precious data allocation, you may disable this feature completely or for certain apps only. Adjust the settings by going to Settings > General > Background App Refresh. Turn the feature off or opt to have it active only when connected to a Wi-Fi network.²³

23. Jason Cohen (April, 2020). "How to Save Battery Life on your iPhone," PCMag Aisa, accessed on January 22, 2021, <https://sea.pcmag.com/apple-ipad-reviews-news-tips/32714/how-to-save-battery-life-on-your-iphone>.

- **Date & Time** lets you manage the date and time shown on your Apple mobile device. You can toggle the button to set this automatically, which means the device will provide the settings depending on the given time zone setting.



- **Keyboard** lets you manage how your keyboard looks and enables spelling and grammar checks, and other extra features when typing.
- **Fonts.** You can download and install different text fonts in your Apple mobile device. By tapping on **Fonts**, you can manage them.



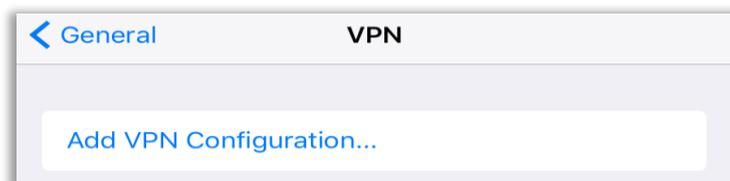
- **Language & Region** lets you choose what default language to use on your Apple mobile device.



- **Dictionary.** Here you can choose dictionaries to aid you with spelling, particularly when the auto-correct function is switched on.

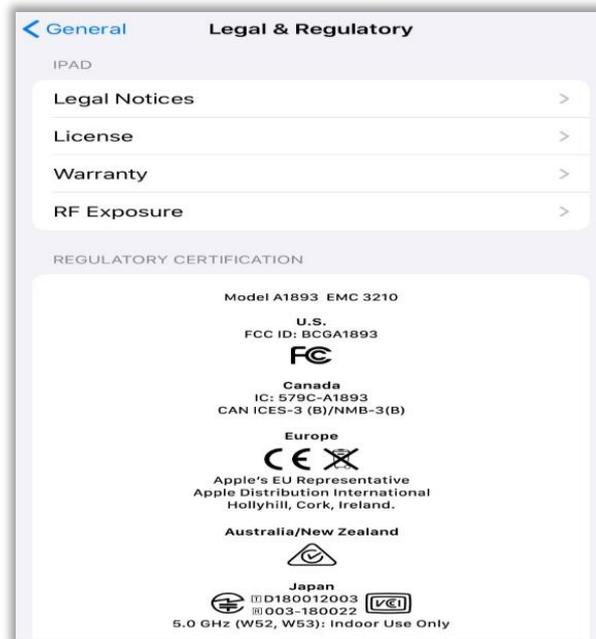


- **Virtual Private Network (VPN)** lets you access a VPN,²⁴ usually for work, to make sure confidential data is not sniffed, hacked, or accessed by people who should not be able to do so. There are some apps that will provide you with a VPN, otherwise you can ask an information technology (IT) personnel to help you since this will require complex network administration.



24. *Webopedia*. "VPN-Virtual Private Network," <https://www.webopedia.com/TERM/V/VPN.html>. A VPN secures the private network, using encryption and other security mechanisms to ensure that only authorized users can access the network and that the data cannot be intercepted. This type of network is designed to provide a secure, encrypted tunnel in which to transmit the data between the remote user and the company network.

- **Legal & Regulatory.** This opens the **Regulatory** page where more information on licenses related to your Apple mobile device can be seen, as well as legal information on the warranty, the copyright, and more.

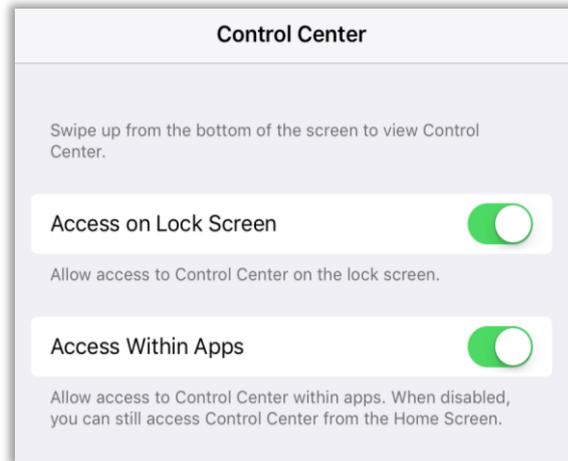


- **Reset.** This lets you reset your device to factory settings if you want to erase everything on it and start over. Usually, resets are done when you buy a second-hand or pre-owned device to erase all the previously stored information. However, sometimes the amount of stored data and downloaded apps can slow down the device and create glitches. For that reason, it is good idea to reset the device to factory settings when the system has become too inefficient.

Note that when you opt for reset, all current files, information and settings will be erased, so you need to create a backup first. After resetting the device, you will also need to set-up everything on your device again.



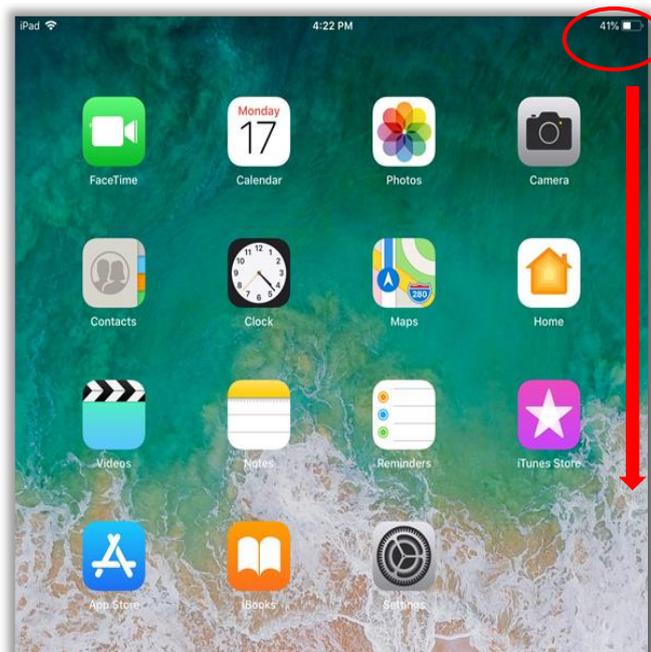
- e.  **Control Center.** This lets you adjust the brightness of your device's screen, control media playback, and turn Wi-Fi on and off, among other tasks. By default, it is accessible even if your screen is locked. It can be accessed from the **Home** screen or within any app. To do that, go to  **Settings** then tap **Control Center.** Use the toggle buttons to turn on access to the Control Center.



How to Access the Control Center

To access the  **Control Center** from the **Home** screen or within any app, follow the step-by-step guide below:

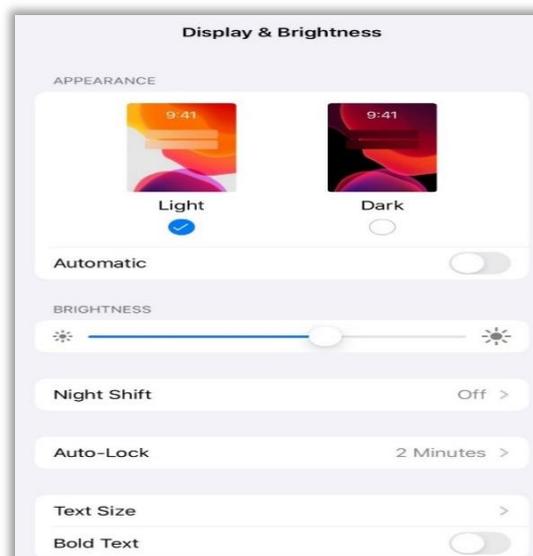
1. Tap on the battery icon, on the top right corner, and slide your finger downward. This will make  **Control Center** appear.





2. On the top left corner, you can turn on and off the  **Airplane Mode**,  **AirDrop**,  **Wi-Fi** and  **Bluetooth**. Below these, you can adjust your screen's brightness. Next to these features, you can stop and skip the songs you are listening to on your Apple mobile device.
 3. You can also manage the **Screen Rotation**, **Night Mode**, **Screen Mirroring**, **Silent Mode**, **Screen Brightness** and **Volume**. You can also tap on  or  to access the **Timer** or **Camera**.
- f.  **Display and Brightness** lets you adjust your device's display settings and screen's brightness. You can turn on **Auto-Brightness** from here so your screen will automatically adjust, depending on how bright it is where you are.

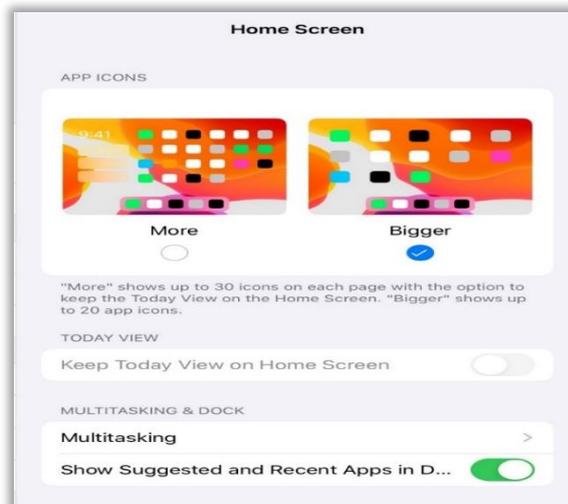
Note: The higher the brightness setting the more power will drain from your mobile device's battery when the screen is active.



- g.  **Home Screen & Dock.** Here you can adjust the size of the icons on your **Home Screen** and the multitasking apps.

-  **Accessibility.** This is intended for users who have visual, physical, or age-related limitations that prevent them from fully viewing the screen, perceiving audible information and alerts, or using the touch screen.

This section provides accessibility features and services to help them more easily navigate their devices, such as **Voice Over** and **Zoom**, invert their screen's colors, use grayscale, and adjust **Speech** settings, among others.

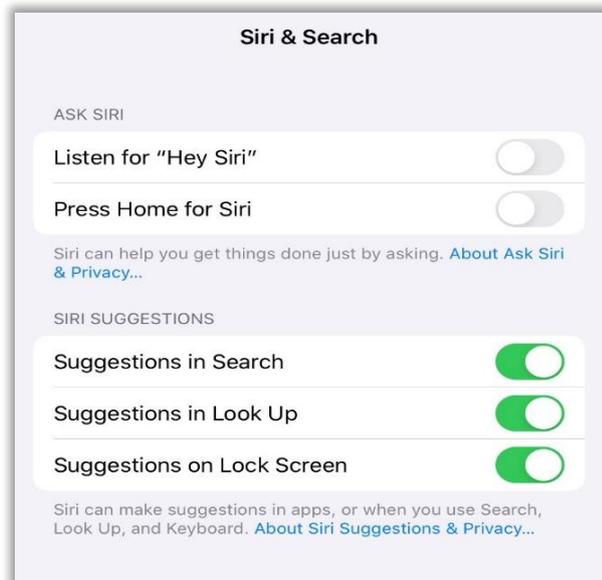


-  **Wallpaper.** The **Wallpaper** is the picture you see in the background of the **Lock Screen** and **Home Screen**. By tapping on **Choose a New Wallpaper**, you can select a new pic for the **Wallpaper** from the gallery. The main reason to change the **Wallpaper** is for aesthetic value, however some people also use motivational photos or photos of their loved ones.



- h.  **Siri & Search.** This is Apple's virtual personal assistant. It lets you issue voice commands, which saves you the trouble of tapping or typing.

Siri only works if you are connected to the Internet through Data or Wi-Fi. **Siri** sources its answers to your questions from remote servers and the Internet. **Siri** cannot therefore be used offline.



You can switch on **Listen to "Hey Siri"** to access **Siri** without having to press the **Home** button. All you need to do is say, "Hey Siri." You can also just turn on the **Press Home for Siri** option. You can manage **Siri's** suggestions.

The list of commands is related to all of the default apps on your device. You can use **Siri** to call a person on your contact list by saying, "Call Angela," for instance. To use this feature, you will need your device to recognize your voice when saying "Hey Siri."

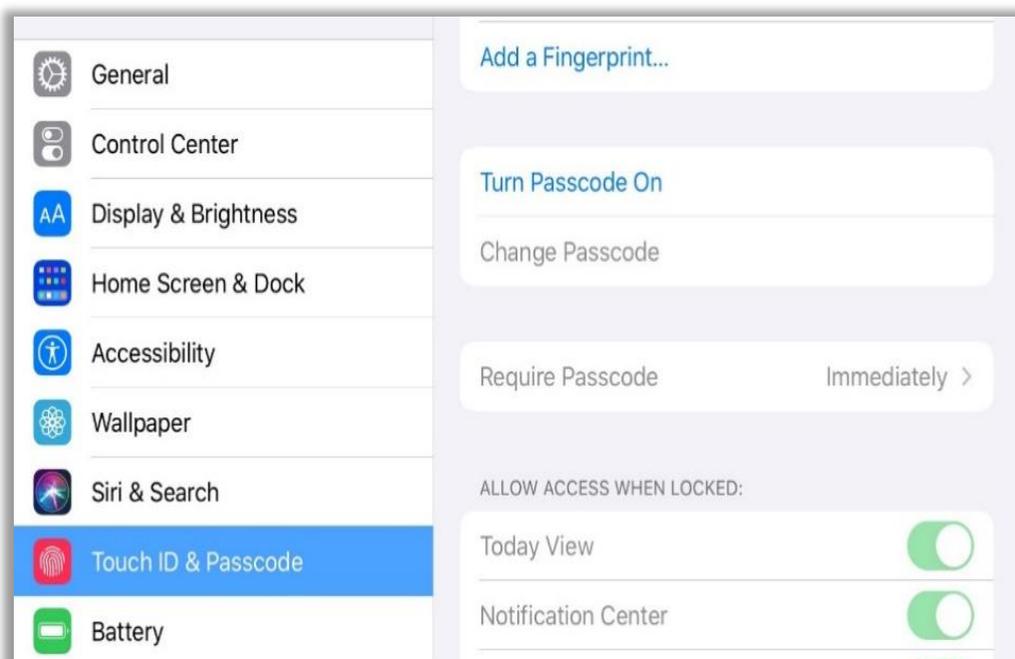
The following are some ways you can use **Siri**:

How to Use Siri

- **Give voice commands.** Turning Wi-Fi and Bluetooth off when you are traveling can be a significant battery saver. You can manually turn these off or tell **Siri** to do so by saying, "Turn off Wi-Fi" or "Turn off Bluetooth." You can also ask **Siri** to turn them back on if you need them.

There are, however, some features that **Siri** cannot adjust such as turning the flashlight on or off and changing your device's screen orientation. It can, however, decrease or increase the sound volume.

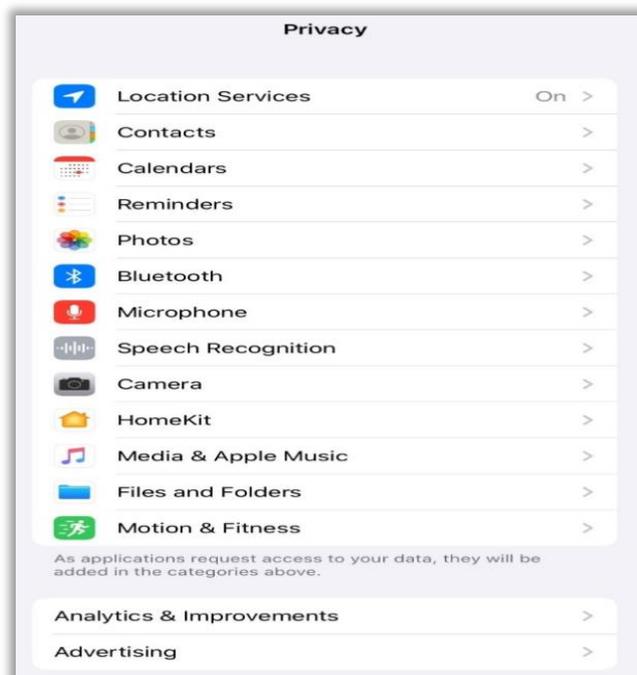
- **Launch apps.** You can ask **Siri** to open an app that you want to use. Just say "Open Edmodo," for instance.
 - **Ask questions and get answers.** **Siri** can provide answers to mathematical and factual questions, such as "What is the square root of 128?" or "How far away is the sun from Earth?"
- i.  **Touch ID & Passcode.** This lets you set your passcode so you can unlock your device with it, as well as save your fingerprints to use them as passcode.



- j.  **Battery.** This shows you how much battery power is left for your device's use. From here, you can turn **Low Power Mode** on or off, if you want to conserve power.



- k.  **Privacy.** In 2012, there were a number of instances where high-profile apps were found to upload information from the users' address books to servers without their knowledge. This prompted Apple to add a privacy feature on its devices to prevent this from happening. Through  **Privacy**, you can control which apps in your Apple mobile device have access to your data.



Privacy Features

The  **Privacy** section lists all the features of your Apple mobile device that you can control, which includes the following:

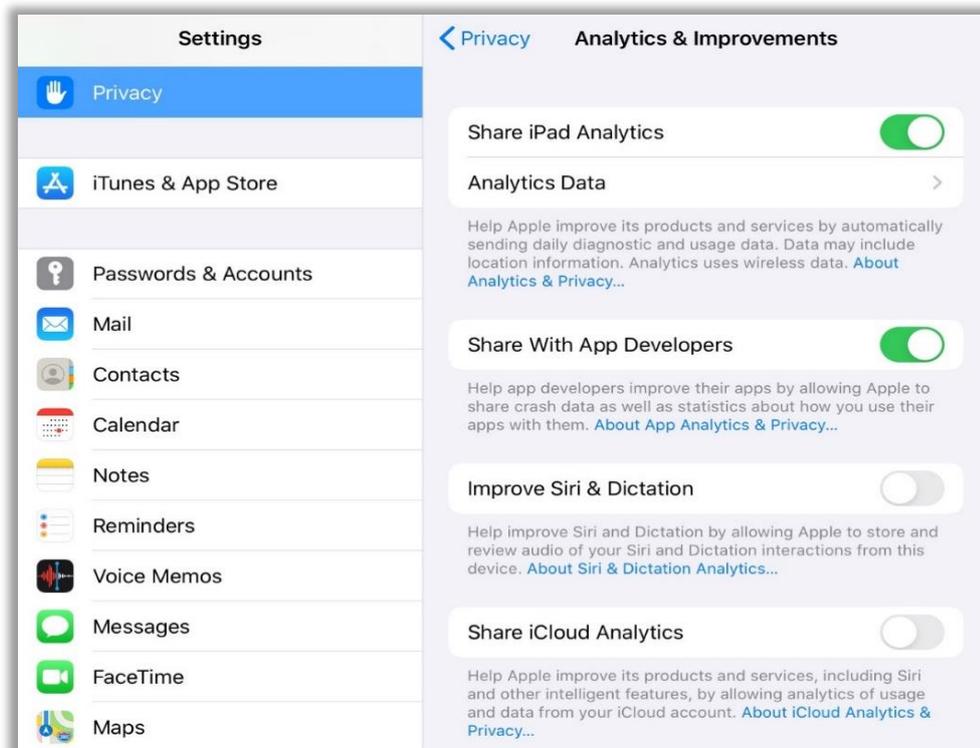
-  **Location Services.** This lets you control the Global Positioning System (GPS) features of your Apple mobile device. GPS lets you know exactly where you are, gives directions, finds nearby places, and more. While activating this feature has many useful benefits, note that it can also allow anyone to track your movements.

This can be a threat to your privacy, as some apps have been accused of collecting users' personal data and selling it to other companies. (See Facebook's scandal with Cambridge Analytica.²⁵ You might want to consider if activating the **Sharing My Location** feature is really needed. You can also see here a list of apps that access your location data.

-  **Contacts.** Here, you should be able to see the apps that have access to the contacts saved on your Apple mobile device and modify this access if you choose.
-  **Calendars.** You should be able to see here the access of some apps on your **Calendar** and modify such access if you choose.
-  **Reminders.** You can modify here the access of apps to your **Reminders**.
-  **Photos.** You will see here the apps that have access to the photos stored on your Apple mobile device. Note that if access is granted, the apps also have access to other information related to the photos and videos like the dates and places those were taken.
-  **Bluetooth.** You should be able to see here the apps that have access to  **Bluetooth.** Note that apps with access to Bluetooth can share data even when you are not using those apps.
-  **Microphone.** This lists the apps that can access your device's microphone to send voice messages or make voice/video calls.

25. Alving Chang. "The Facebook and Cambridge Analytica scandal, explained with a simple diagram," Vox, last modified May 2, 2018, <https://www.vox.com/policy-and-politics/2018/3/23/17151916/facebook-cambridge-analytica-trump-diagram>.

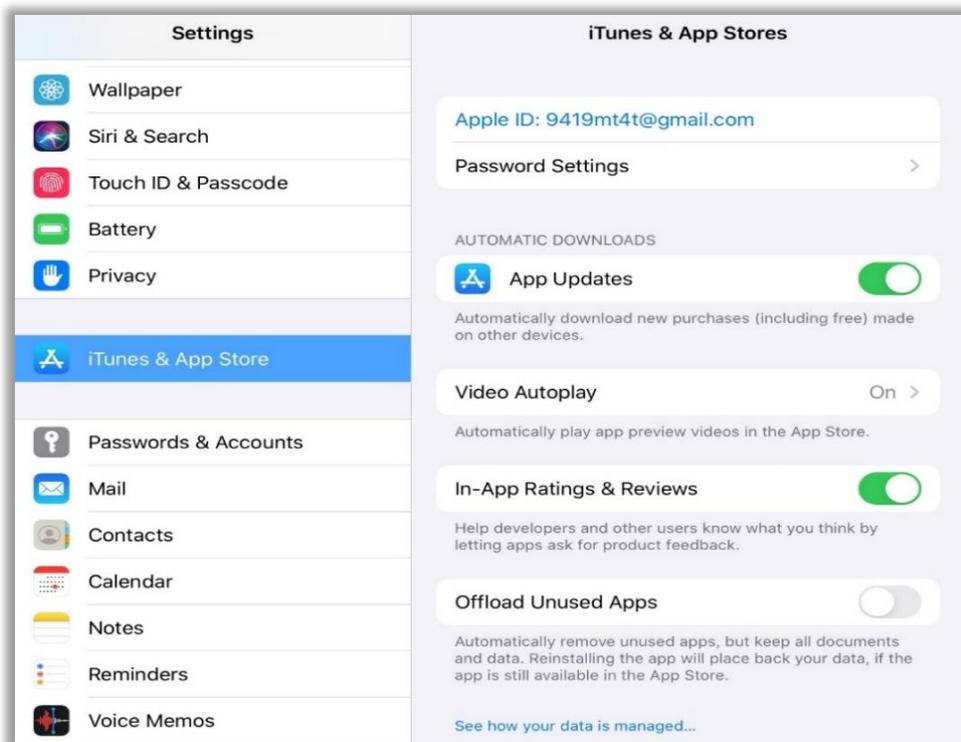
-  **Speech recognition.** This lists the apps that access speech recognition, which is used to send recorded voice to Apple to process your requests.
-  **Camera.** This lists the apps that access your device's built-in camera, especially to send pictures or videos in instant messaging apps.
-  **HomeKit.** This lists the apps that access the home data that is stored in this app.
-  **Media & Apple Music.** This lists the apps that access the media (songs, videos, etc.) stored on your device, usually for sending as part of instant messaging or for uploading content to social media.
-  **Files and Folders.** This lists the apps that access your device's files and folders, to serve as attachments to emails or instant messaging, and for managing and organizing them.
-  **Motion & Fitness.** This lists the apps that access information related to the movements stored in your device.
- **Analytics & Improvements.** This lets you automatically send diagnostic and usage data to Apple and to app developers, so they can improve their services and mend errors.



- l. **Advertising.** Advertisers can track your online activities so they can target the sending of ads based on your previous Internet searches, user profile and other predictive software. You may or may not want advertisers to do this. To reduce the amount of ad tracking, toggle the button off.



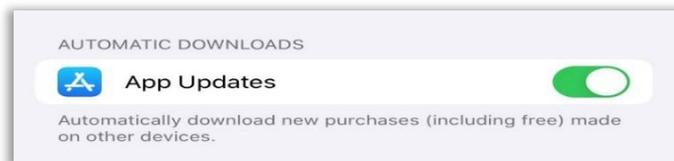
- m. **iTunes & App Store.** This lets you manage your **App Store** settings.



- In **Password Settings** you can select when your password will be required by the  **App Store** or the  **iTunes Store**, especially when purchasing an app and doing in-app purchases.
- Selecting **Always Require** is the safest option in this case, because people who do not know your **Apple ID** password will not be able to use your bank account to purchase things in the  **App Store** or  **iTunes Store**. For free downloads, you can switch on or off the **Require Password** setting.



- Switching on the **App Updates** option will automatically download all apps that are purchased using your **Apple ID**, even from other Apple mobile devices.
- However, you must be aware that this will only happen if your Apple mobile device has Internet connection, and there may be apps you do not want installed in every Apple mobile device you might have.



- You can manage other  **App Store** features, such as automatically playing preview videos, providing in-app reviews, or automatically deleting unused apps.



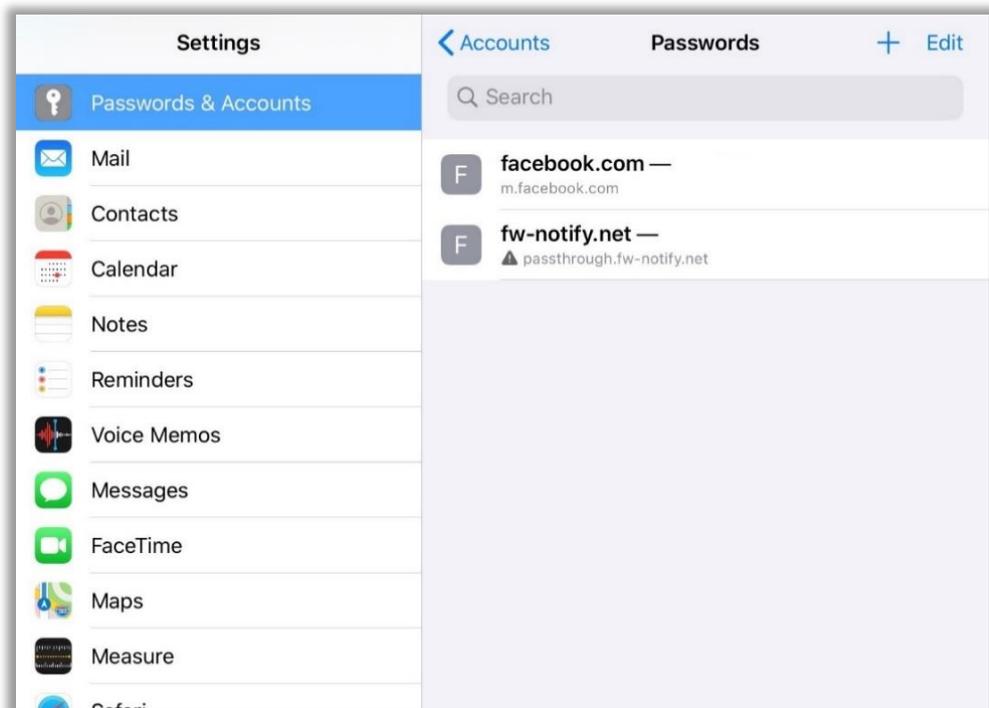
- n.  **Passwords & Accounts.** Here you can manage the passwords that have been saved on your Apple mobile device, as well as the online accounts that have been synced.

How to Delete the Passwords

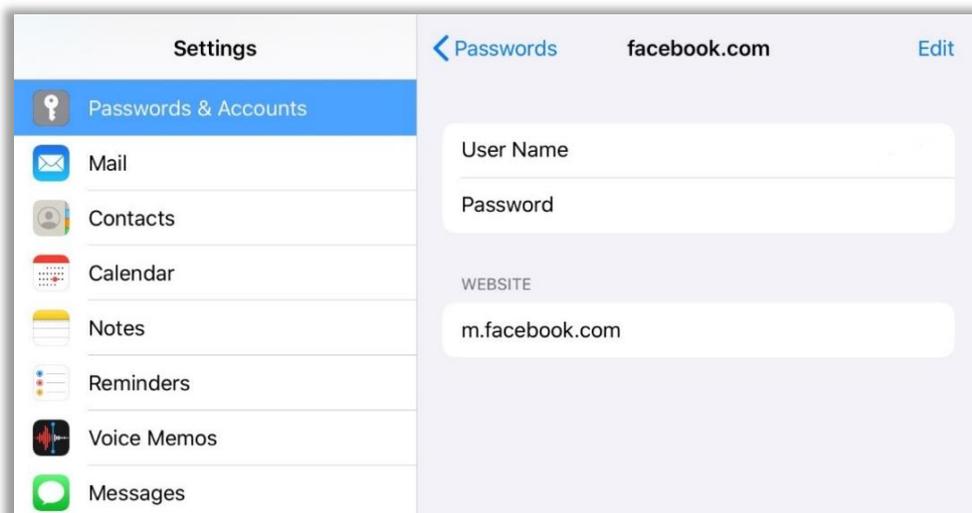
To edit and delete the passwords, follow the step-by-step guide below.



1. Tap on  **Website & App Passwords.** You will be able to see the saved passwords.



2. Tap on the password you want to edit to open the data page.



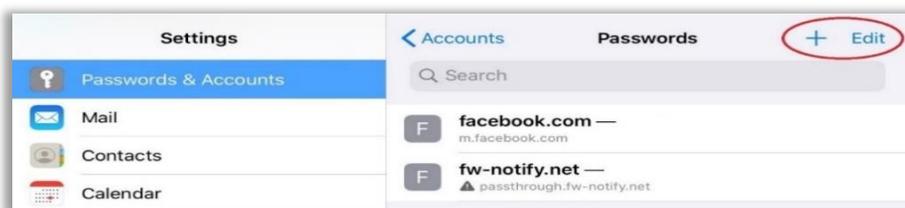
3. Then tap on **Edit**, at the top right corner to edit the data.



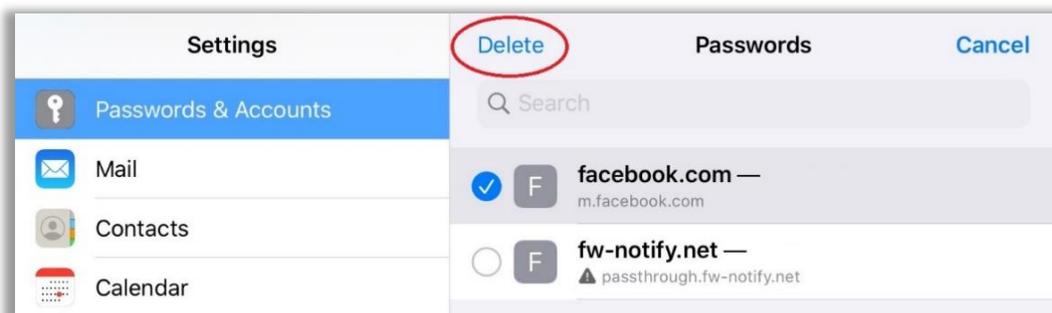
4. When you are finished, tap **Done**.



5. If you want to delete a password, go back to the list of saved passwords. While on this page, tap **Edit** at the top right corner.



6. This will allow you to select the passwords you want to delete. Select an account, or several accounts which passwords you want to delete and then tap **Delete** (found at the top left corner).



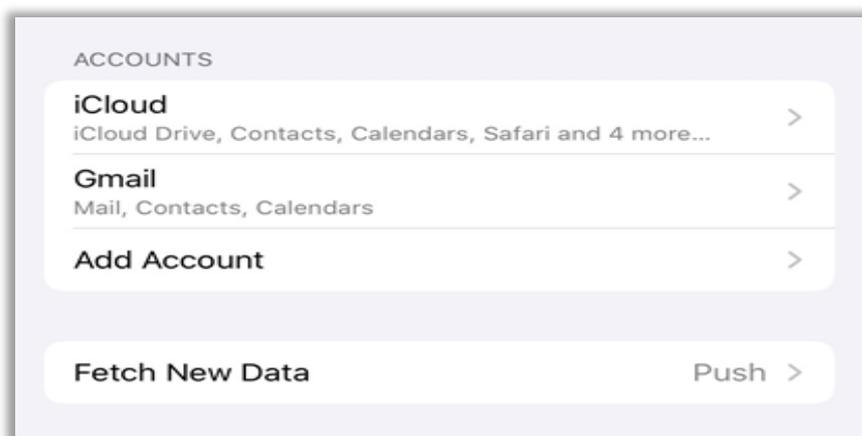
How to Edit and Delete an Account

In **Passwords & Accounts** you can also manage the accounts that have been linked to your Apple mobile device. To edit and delete an account, follow these steps:

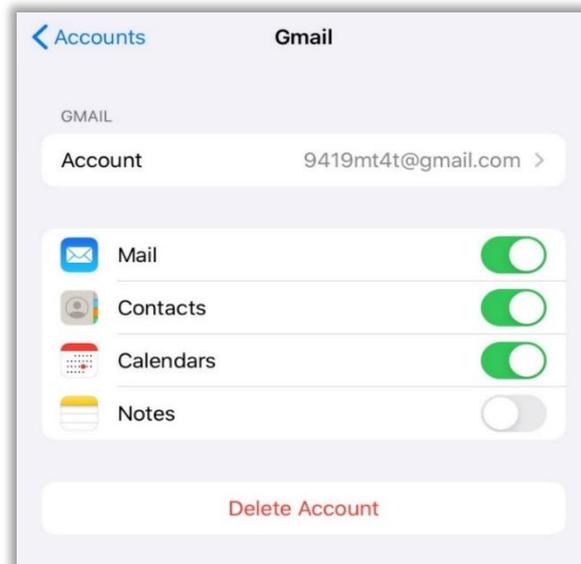
1. Tap **Settings** and then **Passwords & Accounts**.



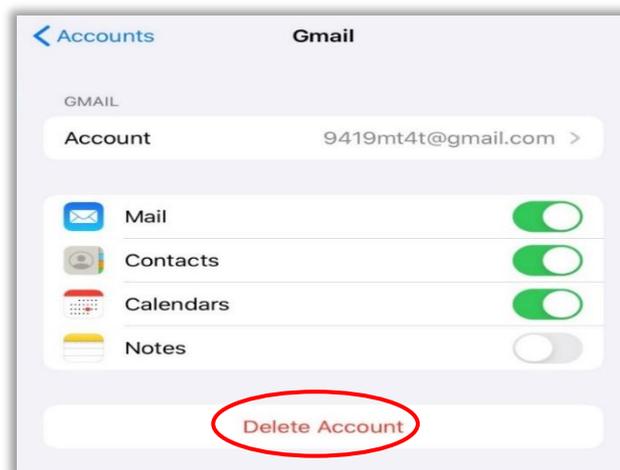
2. Tap on the account you want to manage.



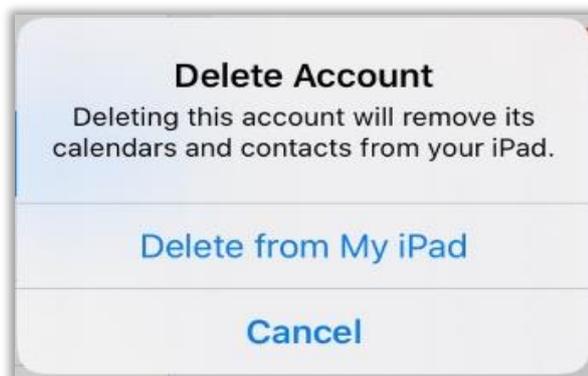
3. You will see the apps to which an account has access. Toggle the switch to continue or stop an app's access.



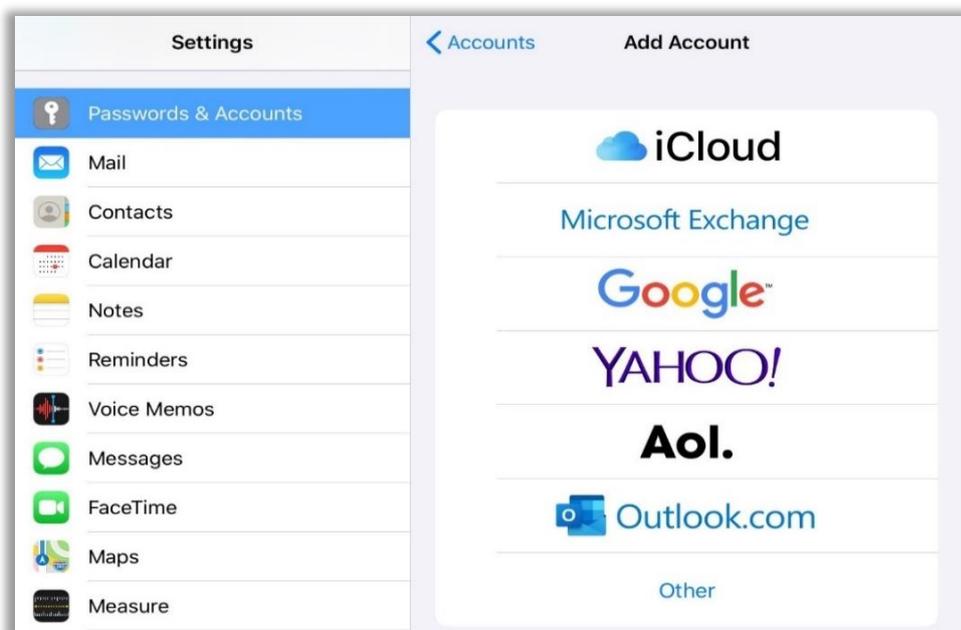
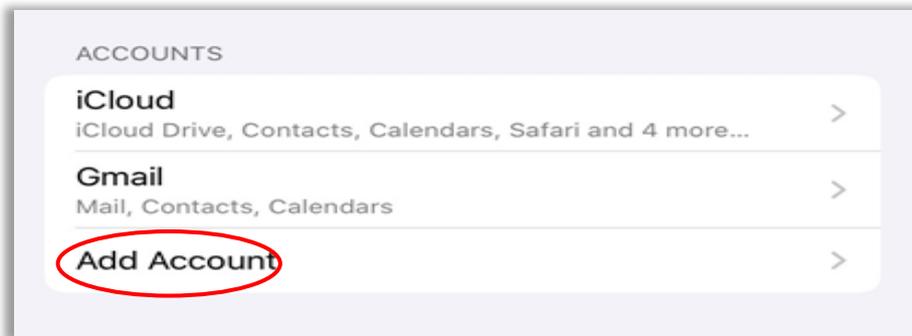
4. To delete an account, just tap **Delete Account** found at the bottom of the page.



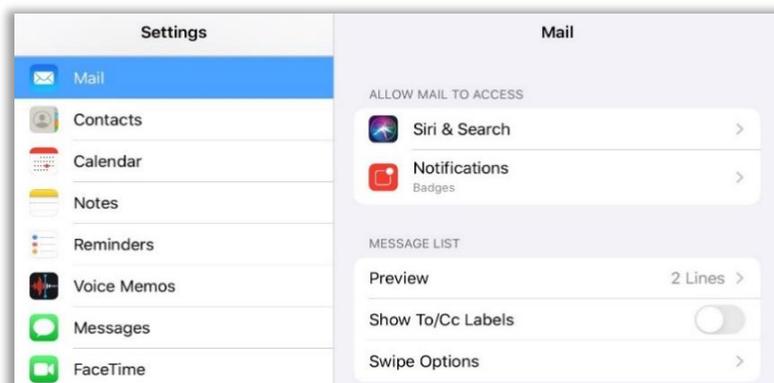
5. You will be asked to confirm. If you really want to delete the account, tap **Delete from My iPad**. Note that you can always link an online account, such as your Gmail account to your device again.



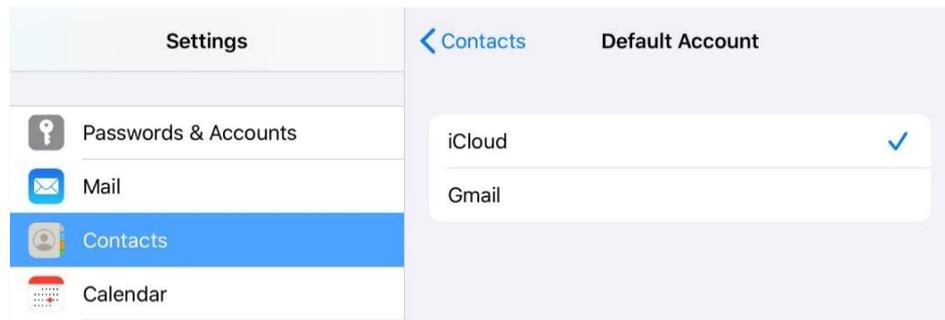
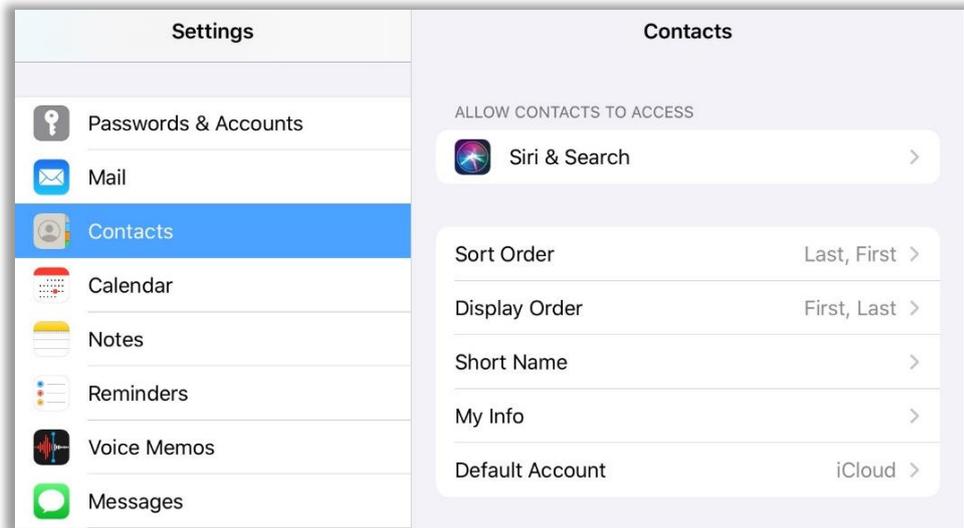
6. To add an account, tap on **Add Account** and choose your provider. From here, you can follow the same steps provided to explain how to set up your email account in your device.



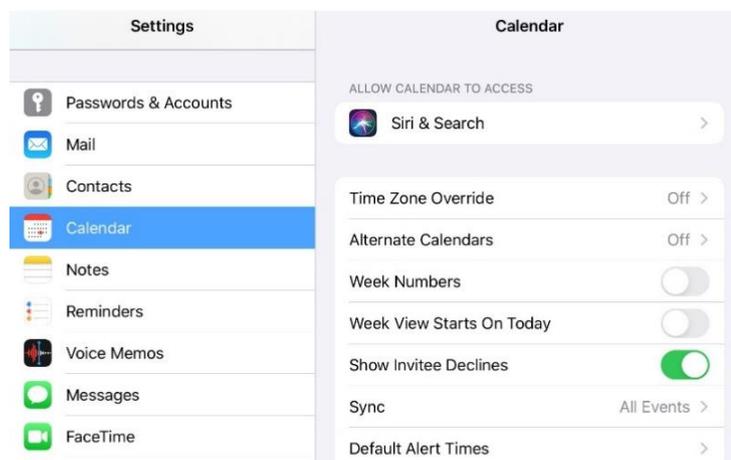
- o.  **Mail.** This lets you adjust the settings for your emails, such as how many lines from an email will show in the preview, how email threads are organized, and others. You can also manage the apps that have access to  **Mail** and adjust notifications.



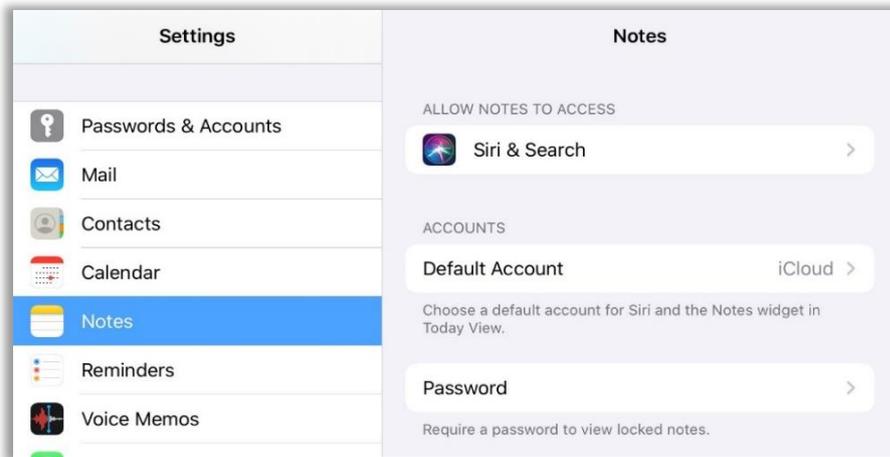
- p.  **Contacts.** You can adjust the display settings of the contacts page, such as the sort order, the display order, etc. By tapping on **Default Account**, you can select which account will save the contact's information, to be able to access it from any Apple mobile device. You can also manage the apps that have access to  **Contacts.**



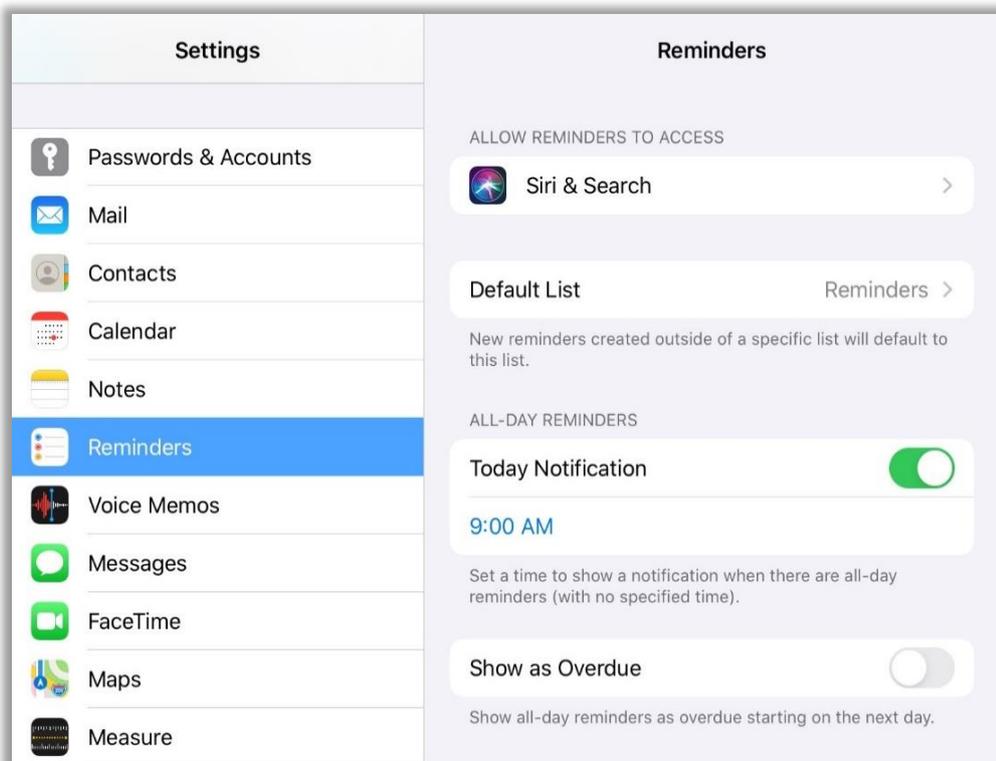
- q.  **Calendar.** Here you can manage the time zone, syncing and display features of . You can also manage the apps that have access to it.



- r.  **Notes.** This lets you adjust the  **Notes** settings on your Apple mobile device, such as selecting the default account that will store the notes you create, setting a password to access locked notes, and others.



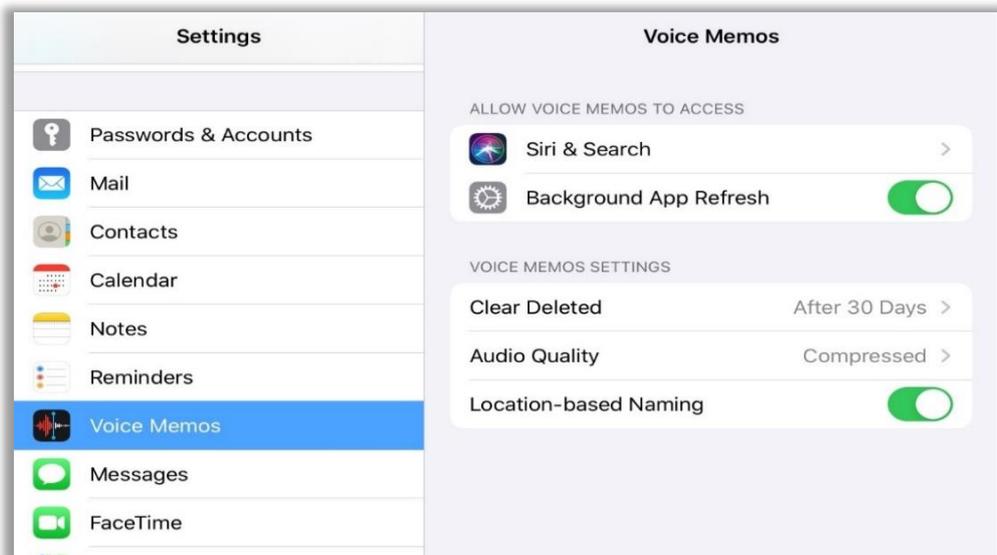
- s.  **Reminders.** In an iPadOS you can create reminders with subtasks and attachments, and set alerts based on time and location.²⁶ In this way, your phone will send you a notification with the information of the reminder. Here you can adjust their settings, such as the time of the reminder and browse the reminder list.



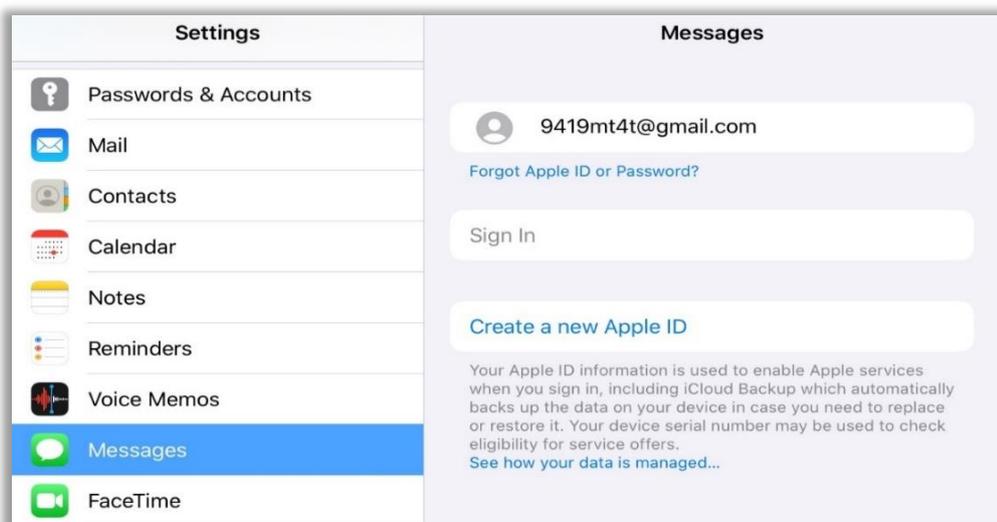
26. Apple Support. "Use Reminders on your iPhone, iPad, or iPod touch," accessed on January 22, 2021, <https://support.apple.com/en-us/HT205890>.

- t.  **Voice Memos.** This app enables you to use your Apple mobile device as a portable recording device²⁷ to make audio recordings of meetings, classroom discussions, and others. **Voice Memos** use the built-in microphone of your Apple mobile device to record an audio.

From the **Settings**, you can manage the audio quality, the apps that have access to  **Voice Memos**, and activate the naming of voice memos based on location. Note that to enable **Location-based naming**, you need to allow the app to access your **location** while you are using the app.



- u.  **Messages.** This lets you adjust the  **Messages** settings on your Apple mobile device, such as the default account that will store messages and contacts' information.



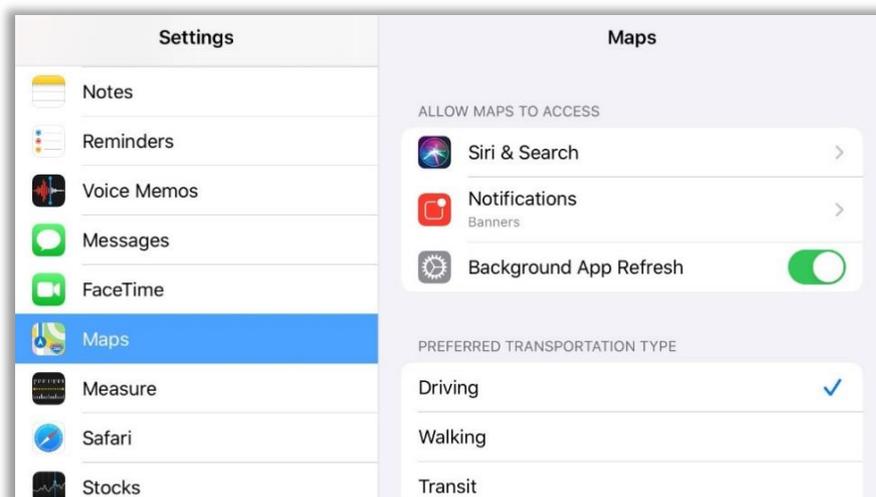
27. Apple Support. "Make a recording on Voice Memos on iPad," accessed on January 22, 2021, <https://support.apple.com/en-ph/guide/ipad/ipadf455678c/ipados>.

You can also customize and control the following apps that you should see in  **Settings**:

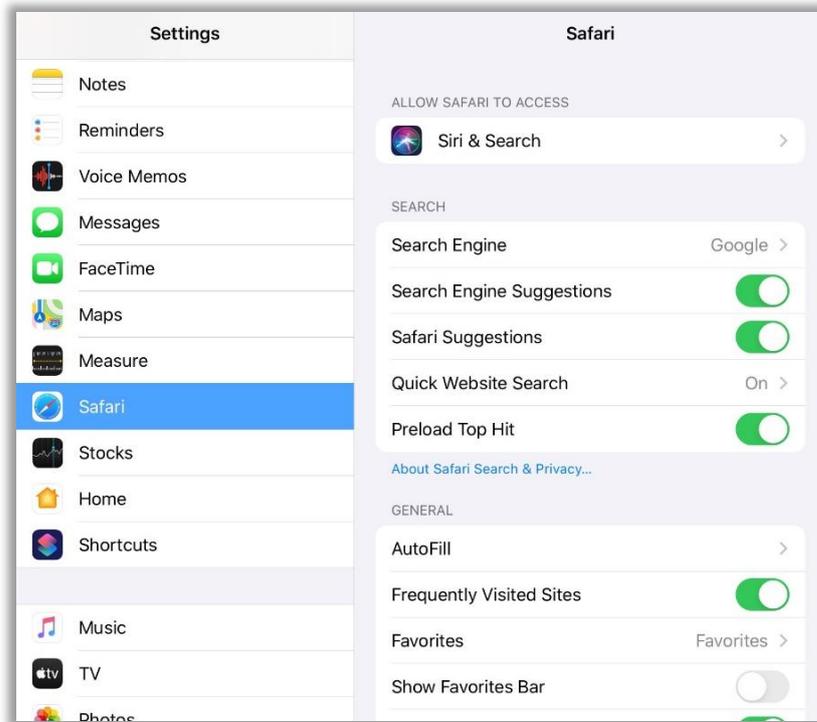
- a.  **FaceTime**. This lets you adjust the  **FaceTime** settings on your device. You can add e-mail addresses for the app's use here and more.



- b.  **Maps**. This lets you adjust the  **Maps** settings on your device. You can use a voice for navigation, adjust its volume, and more here.



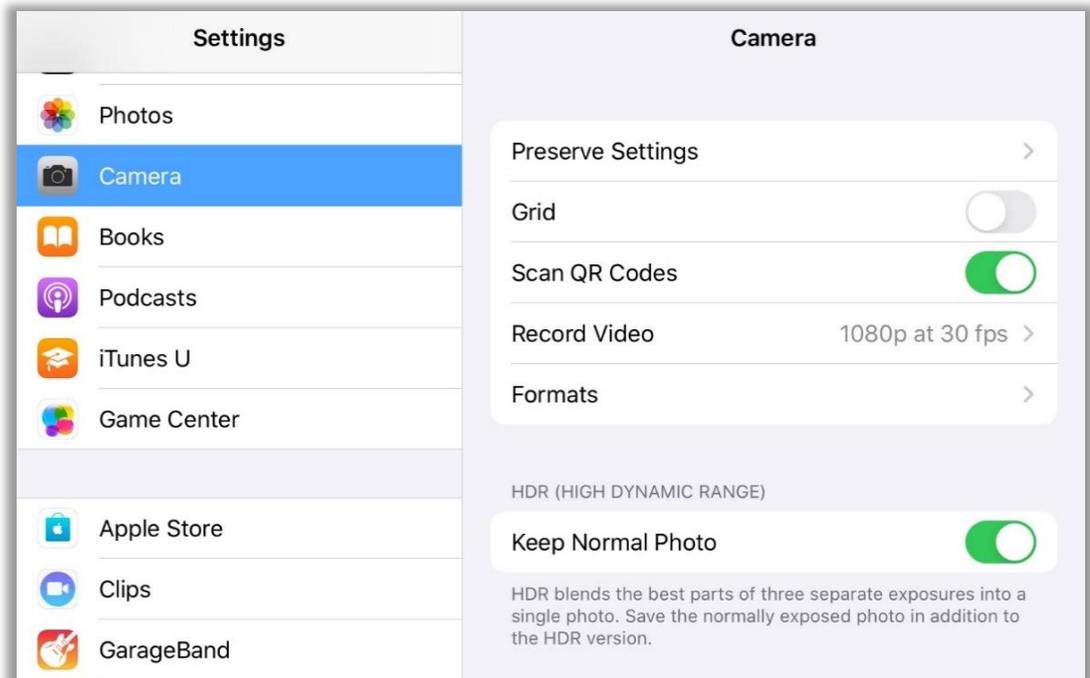
- c.  **Safari.** This lets you adjust the Internet settings of your device. You can choose which default search engine to use, enable suggestions as you type, and enable your device to save site passwords, among others.



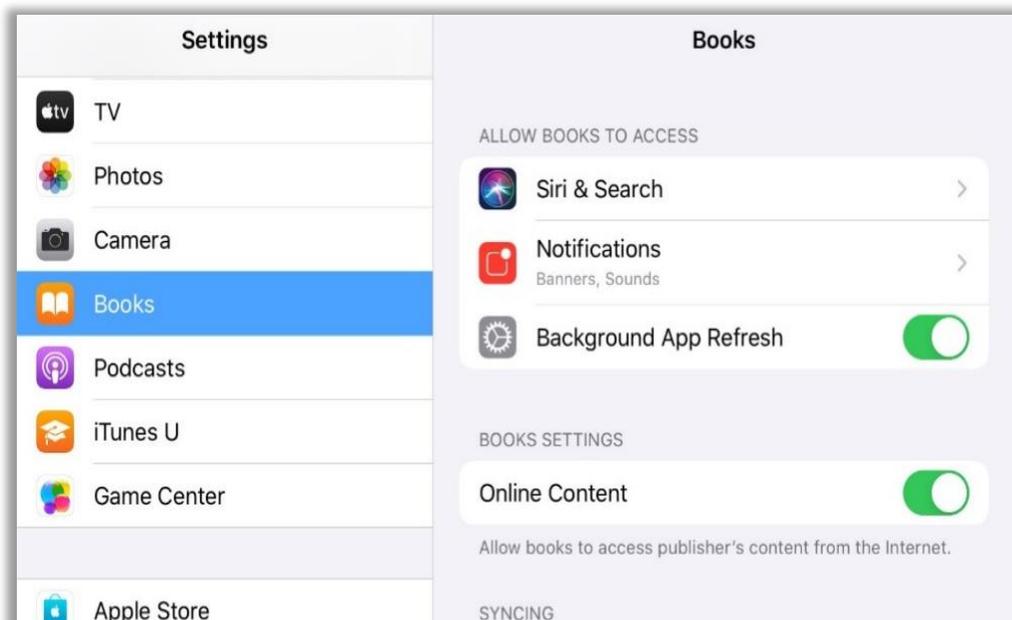
- d.  **Photos.** This lets you adjust the  **Photos** settings on your device. Among others, you can choose to enable **iCloud Photo Library**, which will automatically store your photos in the cloud, thereby, making these photos accessible from any device using your **Apple ID** to access.



- e.  **Camera.** This lets you adjust the  **Camera** features, such as QR Code scanning, the quality of the recorder videos, the format, etc.



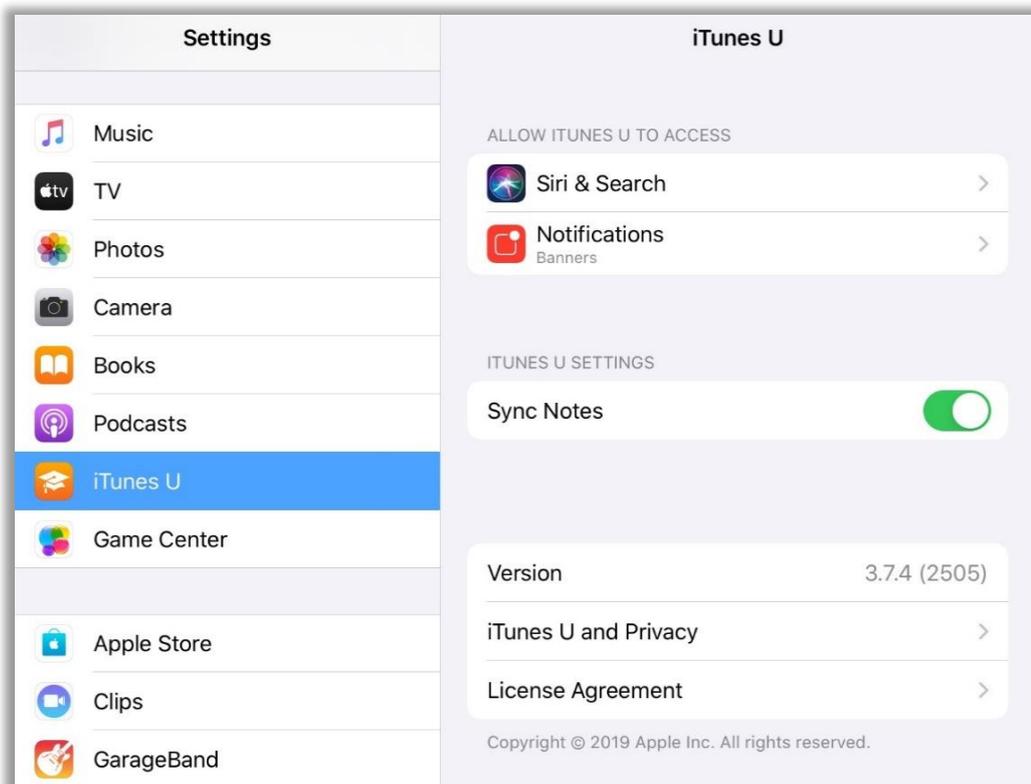
- f.  **Books.** This lets you adjust the  **Books** settings on your device. You can, for instance, customize the notifications, sync the content with iCloud, among others.



- g.  **Podcasts**. This lets you adjust the  **Podcasts** settings on your Apple mobile device. You can enable the  **Notifications** and the  **Background App Refresh**, among others.



- h.  **iTunes U**. This lets you adjust the  **iTunes U** settings on your Apple mobile device. You can manage the **Notifications** and which apps have access to  **iTunes U**.



2.5 How to Connect Your Device to a Cellular Data Network

All smartphones can obtain Internet access by connecting to cellular data networks of various carriers. Older devices can access third-generation (3G) networks that meet a certain speed and access criteria set by the International Telecommunications Union (ITU). Note, however, that using cellular data to access the Internet will result in data charges on your monthly bill or prepaid card, so it should be used prudently and reserved for when access to safe, reliable Wi-Fi is not available.

Newer mobile devices are capable of even faster cellular data connections such as fifth-generation (5G) network, which comes in the form of Millimeter wave (mmWave). With 5G, high amounts of data can be transmitted more efficiently than fourth-generation (4G) network which comes in the form of Long Term Evolution (LTE).²⁸

Though many countries worldwide already support 5G, some areas are still not 5G ready. To know how to utilize the 5G services, read the article about ["Use 5G with your iPhone."](#) Note, however, that using 5G services will result in data charges on your monthly phone bill or prepaid card.

Cellular data is primarily designed to access the Internet on mobile phones when access to Wi-Fi is unavailable. Some Apple mobile pads also have slots for SIM cards, enabling the device to access a Cellular Data Network. That said, this e-book does not have instructions for connecting your Apple iPad to such a connection. However, accessing Cellular Data through an iPad works in a similar way to iPhones.

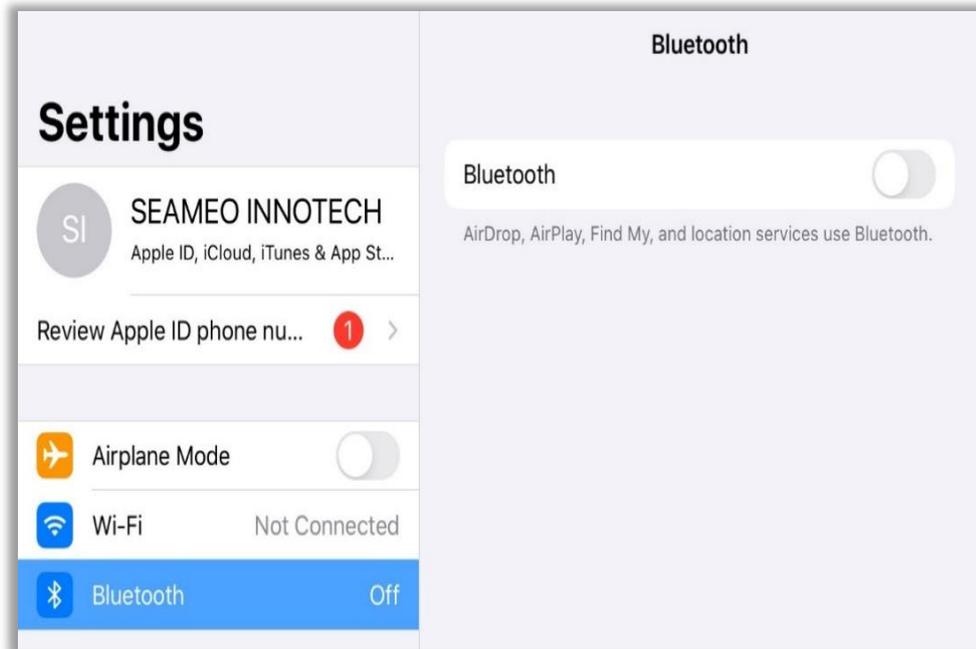
2.6 How to Connect Your Device to a Bluetooth-Capable Device

Bluetooth network communication is used to link mobile phones, PCs, and other network-capable devices over short distances wirelessly.²⁹ Bluetooth was primarily designed for wireless network consumer devices and peripherals, including mobile phones, personal digital assistants (PDAs), and headsets. Wireless signals transmitted via Bluetooth cover short distances, typically up to 30 feet or 10 meters. To connect your device to a Bluetooth-capable device, follow the step-by-step guide below.

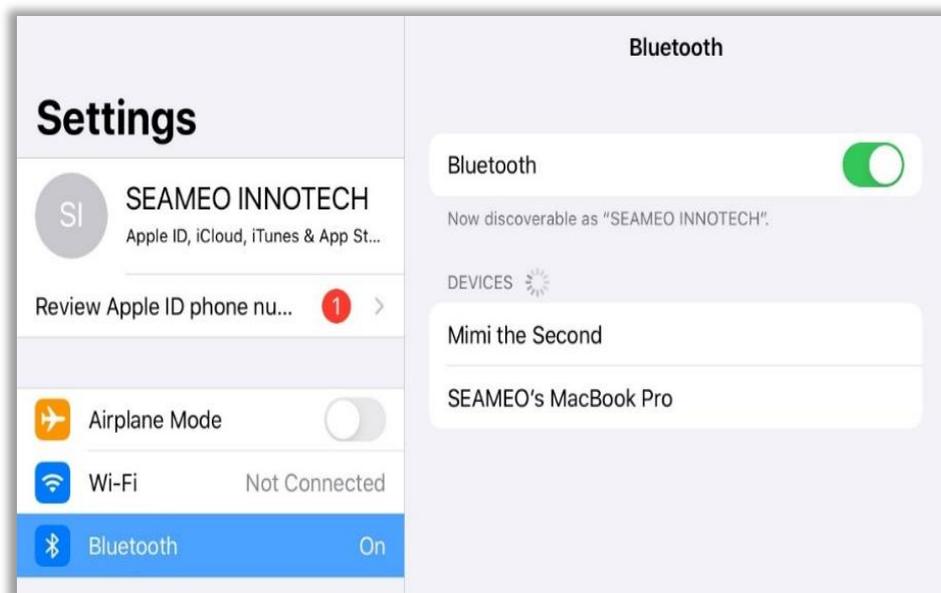
28. *Thales*, 2020. "5G vs. 4G: What's the Difference?" accessed January 22, 2021, <https://bit.ly/3spCZck>.

29. Bradley Mitchell, "What is Bluetooth Wireless Networking?," Lifewire, last modified January 4, 2020, http://compnetworking.about.com/cs/bluetooth/g/bldef_bluetooth.htm.

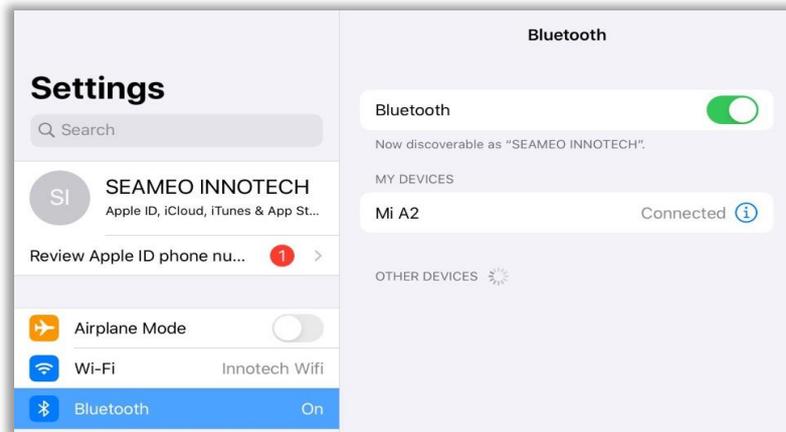
1. Tap the  **Settings**. This will open the **Settings** page. Then, tap the **Bluetooth**  icon. This will open the **Bluetooth** page.



2. Toggle the  **Bluetooth** button on. This will make a list of Bluetooth-capable devices appear.



3. Choose a device you would like to connect to your Apple mobile device to by tapping its name under **AVAILABLE DEVICES**. If there are nearby **Bluetooth** devices, they will show up on a list. This will automatically connect your Apple mobile device to the chosen peripheral.



4. Once you have done a successful connection, the device's name will be saved under **MY DEVICES** so you can easily connect to it next time.
5. Congratulations! You now know how to connect your **Apple** mobile device to another Bluetooth-capable device.

2.7 How to Connect Your Device to a Wireless Network

Wi-Fi refers to a popular wireless networking technology that uses radio waves to provide wireless high-speed Internet and network connections.³⁰ Nowadays, almost every modern mobile device is Wi-Fi capable—from smartphones to tablets—and Wi-Fi connections can be found everywhere—in public buildings and spaces, in workplaces, in restaurants, in schools, in public transport—making it easier to stay connected at every moment.

The following are some advantages of using Wi-Fi, according to Scott Shpak in “The Advantages of Using Wi-Fi on Your Smartphone.”³¹ While the text only refers to smartphones, these advantages apply to iPads too, as Wi-Fi works essentially in the same way regardless of the device.

- **Data usage.** Your monthly mobile plan may have a limit on the amount of data you can transfer to and from your device. Exceeding this will incur additional charges over the regular fee. Using Wi-Fi lets you access the Internet without using a cellular data network, thus saving on cost.
- **Travel convenience.** Travelers can use free Wi-Fi access in hotels, restaurants, terminals, and other public areas. Browsing the Internet and e-mailing are thus made easy.

30. Kaiti Norton, “Wi-Fi Definition & Meaning,” Webopedia, Technology Advice, accessed January 22, 2021, <http://www.webopedia.com/TERM/W/Wi-Fi.html>.

31. Scott Shpak, “The Advantages of Using Wi-Fi on Your Smartphone,” Itstillworks. Accessed January 22, 2021 <http://oureverydaylife.com/advantages-using-wifi-smartphone-28085.html>.

- **Increased speed.** Wi-Fi is generally faster than cellular data connection, so it offers better results when browsing or streaming content.
- **Extended battery life.** Not only the chances for a stronger signal are bigger, but the efficiency of your device increases as data transfer will finish faster, giving your device longer battery life.

Using public Wi-Fi has some risks too, according to “5 Security Risks of Using Public Wi-Fi” and “Warning: These 7 Public Wi-Fi Risks Could Endanger Your Business.”³² Below are some of these risks.

- **Snooping and sniffing.** While packet sniffing is usually safe computer programs that monitor a network’s traffic, they are susceptible to hacker attacks via “side jacking” or special software kits to steal users’ information.
- **Rogue Wi-Fi networks and Evil Twins.** These are malicious Wi-Fi networks set up by hackers to steal and collect information of their users or infiltrate their devices. The names of these networks are often intentionally misleading and, in the case of Evil Twins, the same as trusted networks.
- **Man-in-the-middle attacks.** In these attacks, hackers intercept data by positioning themselves between two or more users who are communicating, or between the user and the Wi-Fi connection point.
- **Distribution of malware and worms.** Hackers can use unsecured Wi-Fi networks to infect devices with malware that collect users’ information or grant them access to their devices. Worms, on the other hand, can travel among devices connected to the same Wi-Fi network and compromise them.

To learn how to protect your devices from these attacks in an easy way, and to learn more about public Wi-Fi networks you can access the following websites:



Web Resources

Scan or click on the QR codes to access the linked resources

Web articles

“Is Using Public Wi-Fi still a Bad Idea”
Bree Fowler (2019) for *Consumer Reports*
<https://www.consumerreports.org/digital-security/is-using-public-wifi-still-a-bad-idea/>

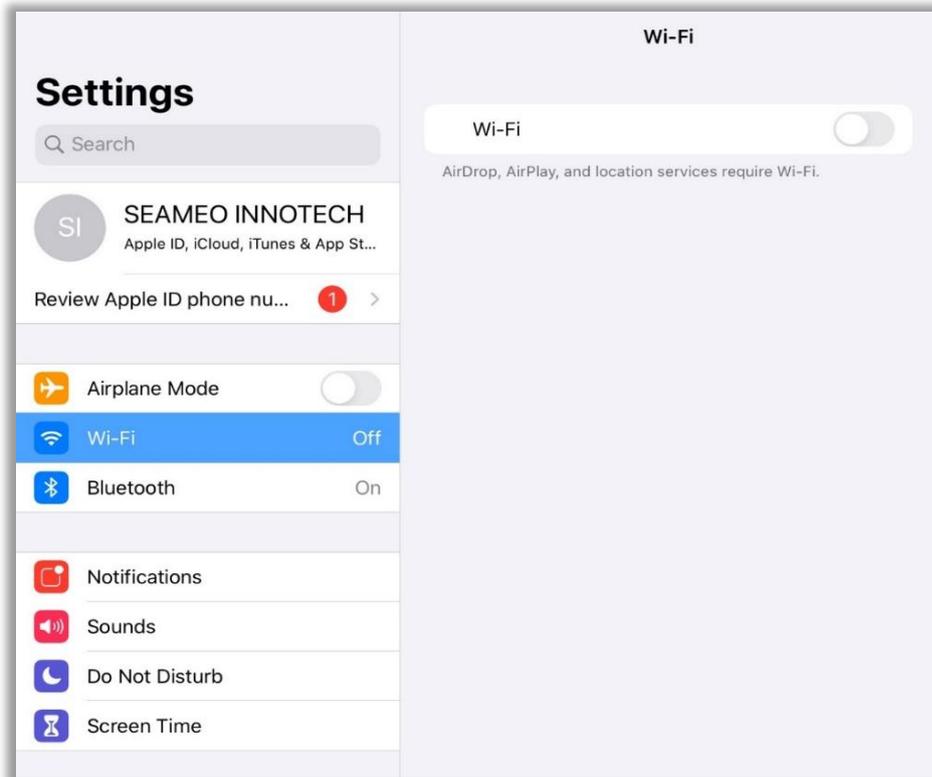
“It’s 2020. Is Using Public Wi-Fi still Dangerous?”
Chris Hoffman (2020) for *How-to Geek*
<https://www.howtogeek.com/558115/its-2020.-is-using-public-wi-fi-still-dangerous/>

32. Olanrewaju Sodiq Olamide, “5 Security risks of using public Wi-Fi,” Dignited, last modified November 9, 2019, <https://www.dignited.com/34393/5-security-risks-of-using-public-wi-fi/>; Anita Campbell, “Warning: These 7 Public Wi-Fi Risks Could Endanger Your Business,” INC, accessed January 22, 2021, <https://www.inc.com/comcast/risks-of-using-public-wifi.html>

2.7.1 How to Connect to a Wireless Network

To connect to a wireless network, follow the step-by-step guide below.

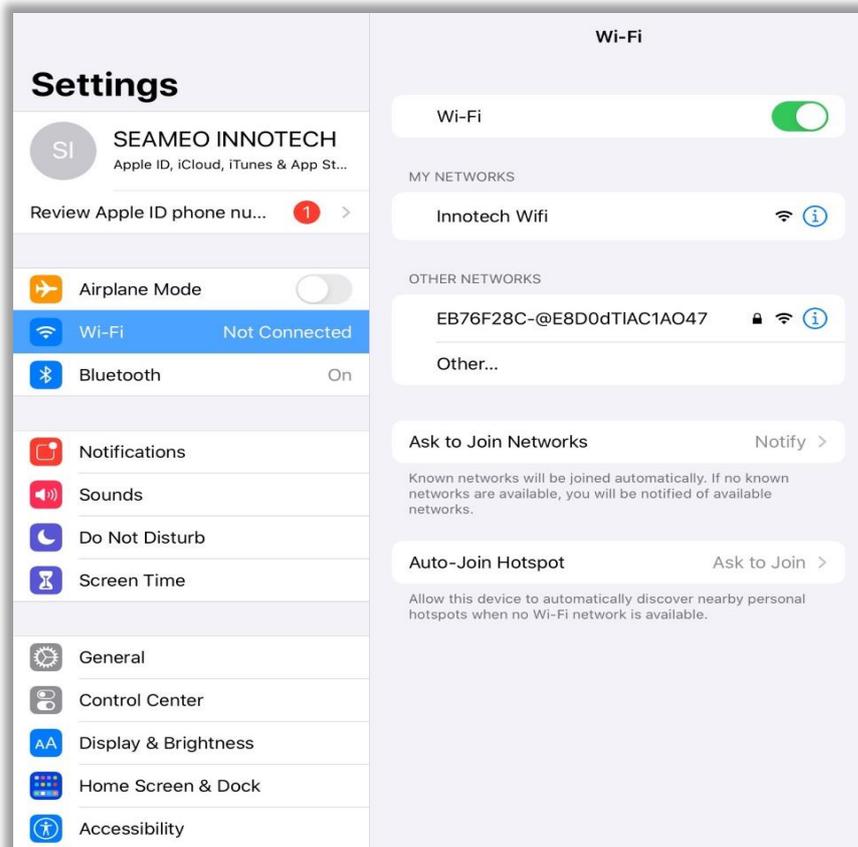
1. Tap the  **Settings**. This will open the **Settings** page. Tap the  **Wi-Fi**. This will open the **Wi-Fi** page.



2. Toggle the **Wi-Fi** button on. This will make a list of available wireless networks appear.



3. Select the network you want to connect to. Private networks require a password. Type the password, then tap **Join**. Your device will connect to the chosen Wi-Fi network marked by ✓ on the left.



4. Congratulations! You have successfully connected your Apple mobile device to a wireless network.

2.8 How to Keep Your Device Secure

Today's mobile devices are capable of doing so much more than those produced years back. The range of functions had greatly expanded, but so have security threats. If you use your device for social networking, online shopping, mobile banking, and surfing the Web, take the necessary precautions to ensure that your mobile device and the information stored on it are safe from cybercriminals. Cybercriminals are those who commit wrongful acts against people over the Internet or on any online network. Take the following advice from Kaspersky.³³

- **Keep it locked.** Make sure your device's screen is locked at all times so there will be fewer risks in case it ends up in cybercriminals' hands.
- **Monitor how apps behave.** Be aware of permission access requests made by apps installed on your device. This is especially important to prevent malicious apps from sending personal and confidential data to cybercriminals.
- **Protect your mobile device and the data on it.** Today's mobile devices are as powerful and vulnerable to the same risks as PCs. Make sure you use a reputable anti-malware program on your mobile device.
- **Switch off Bluetooth when you can.** If you are not using your Bluetooth connection, switch it off. That way, you can make your device less vulnerable to cybercriminal attacks while extending its battery life.

For more information on securing your device from cybercriminal attacks and all kinds of Web threats, view "Unwrapping Mobile Security."³⁴

2.9 How to Save Battery Life

Your mobile device is basically electricity dependent and wall outlets are not always available, especially when you are traveling. If you need to conserve battery life, making simple changes to how you use your device can make a big difference. You may want to start by treating your device's battery right from the moment you take it out of the box. Some batteries require full charge and discharge cycles while others work better with shallow refills. Be sure to read your device's instructional manual and follow its manufacturer's recommendations.

33. "Smartphone Security," Kaspersky, AO Kaspersky Lab, accessed January 22, 2021, <https://www.kaspersky.com/internet-security-center/internet-safety/smartphones>.

34. "Unwrapping Mobile Security," Trend Micro, Trend Micro Incorporated, accessed January 22, 2021, <https://blog.trendmicro.com/trendlabs-security-intelligence/unwrapping-mobile-security-during-the-holidays/>

In general, mobile devices use lithium-ion batteries, which work best when you keep them charged 40–80%. You should not leave your device plugged when it is fully charged and should let it completely drain its battery once a month.³⁵ The following are some more ways to save your device's battery life from Jim Martin in "How to Improve Smartphone Battery Life: 10 Tips to Make Your Phone's Battery Last Longer—and the Battery-Saving Myths That Won't Help at All".³⁶

- **Dim the screen brightness or use auto-brightness.** You love your smartphone's large, colorful display but it is the battery's mortal enemy. More than any other component of your device, the display consumes battery life at a devastating pace. Most devices include an auto-brightness feature that automatically adjusts the screen's brightness to suit ambient lighting levels. This mode uses less power than constantly running your screen at full brightness. Also, you can get even better results by turning your screen's brightness down to the lowest setting that you can tolerate and leaving it there. Even if you do nothing else, we suggest following this one tip will dramatically extend the life of your device's battery.
- **Keep the screen timeout short.** Under your phone's display settings menu, you should find an option labeled "Screen Timeout" or something similar. Every second counts here so set your timeout to the shortest available time. On an iPad, look for **Auto-Lock** in  **Display and Brightness** under  **Settings**. This setting controls how long your device's screen stays lit after receiving input such as a tap. Every second counts here, so set your timeout to the shortest available time. On an iPhone and an iPad, the minimum you can set is 30 seconds.
- **Turn off Bluetooth.** No matter how much you love using Bluetooth with your hands-free headset, wireless speaker, or activity tracker, the extra radio is constantly listening for signals from the outside world. When you are not in your car or playing music wirelessly, turn off the Bluetooth radio. This way, you can add an hour or more to your device's battery life.
- **Turn Wi-Fi off.** As with Bluetooth, your device's Wi-Fi radio is a serious battery drainer. While you will at times need to use your home or office Wi-Fi connection rather than 3G or 4G for Internet access and other data services, there is little point in leaving the Wi-Fi on when you are out and about. Toggle it off when you go out the door and turn it back on only when you plan to use data services within the range of your Wi-Fi network. Simply swipe up from the bottom of the screen to display the  **Control Center**. The exception to this rule is for location services since Wi-Fi can help your phone to obtain a GPS fix using less power.

35. Jackie Dove and Paula Beaton, "Learn How to Boost Your Smartphone Battery Life with These Tips," Digital Trends, December 1, 2020, <https://www.digitaltrends.com/mobile/how-to-save-battery-life-on-your-smartphone/>.

36. Marie Black, "How to Extend Phone Battery Life," Tech Advisor, IDG Communications Ltd., April 25, 2019, <http://www.pcadvisor.co.uk/how-to/mobile-phone/how-improve-smartphone-battery-life-facebook-myths-3284240/>.

- **Go easy on location services and GPS.** Other big battery suckers are apps that use GPS, Wi-Fi, and mobile data to monitor your location. As a user, you can revoke apps' access to location services. There's a guide about  **Location** in [2.4 What Apps Come Pre-installed on an iPad Air?](#)
- **Do not leave apps running in the background.** Multitasking—the ability to run more than one app at a time—is a powerful feature. It can also burn a lot of energy because every app you run uses a share of your device's processor cycles, but this is not true for all apps. Some apps are particularly heavy on battery life.

For example, Facebook has confirmed it is investigating reports that its iOS app could be blamed for significant battery drain and is working on a fix. By closing apps that you do not actually use, you can drastically reduce your central processing unit (CPU)'s workload and cut down on power consumption.

Double-tap the **Home** button to make the multitasking screen appear then swipe upward to close an app. The iOS and iPadOS have battery monitors so you can check exactly how much power each app uses and easily spot those that use too much power. Then you can either uninstall or simply make sure you quit the apps when not in use.

- **Do not use vibrate.** Do you prefer to have your phone alert you to incoming calls by vibrating rather than playing a ringtone? We understand the inclination. Unfortunately, vibrating uses much more power than playing a ringtone. After all, a ringtone only has to make a tiny membrane in your device's speaker vibrate, enough to produce sound. In contrast, the vibration motor rotates a small weight to make your whole device shake. That process takes a lot more power. If you do not want to be audibly disturbed, consider turning off the vibration for all of your app notifications and leave your device in view so you can see when a new call is coming in. This approach is as courteous to your battery as it is to your friends and colleagues. Note that the vibrate feature is not available on iPads. The hardware for this feature is not found on iPads.
- **Turn non-essential notifications off.** It seems as though almost every app now polls the Internet in search of updates, news, messages, and other information. When it finds something, the app may chime, light up your screen and display a message, make your light-emitting diode (LED) blink, or do all of the above. All of these things consume energy. You probably do not want to turn off notifications about new text messages or missed calls but turning off superfluous ones will help your battery last a little longer and eliminate pointless distractions throughout your day.

- **Push e-mail.** Having your device constantly check if you have a new e-mail is a waste of power. Instead of allowing e-mail to be pushed to your device at any time, why not change the setting to fetch mail every so often—maybe 15 or 30 minutes-- if you do not need to immediately respond to anyone?
- **Power-saving mode.** Depending on your device, you may find that the manufacturer has provided power-saving features that go beyond anything available in Apple by default. Enabling a battery-saving mode manages the device's various power-sapping features for you. It can, for example, prevent apps from updating in the background, dim your screen, reduce the screen timeout setting, disable on-screen animations, and turn off vibration.

By default, this mode usually turns on when your battery level drops to 20% but you can set it to kick in at 30% instead. And the sooner the device switches to this power-saving mode, the longer its battery will last.

2.10 Syncing Apps Across Devices

Sync is short for **synchronize**. It simply means making the data in one app available across your Apple mobile devices such as Mac, iPhone, and iPad. When you synchronize your data on your Apple mobile devices, it allows you to keep your files updated and access the same versions of the files across synced devices. Examples of files that can be synced across Apple mobile devices are music, movies, TV shows, podcasts, books, and more.³⁷

2.10.1 How to Sync Data on your iPhone and iPad Using Apple iCloud

Apple iCloud allows you to keep your data on your iPhone and iPad in sync at all times. As long as both your devices are connected to the Internet and have the same iCloud settings and you access them using the same Apple ID—your data will stay in sync.³⁸ For example, you can sync items including photos, music, movies, and more. According to the article entitled **"5 Ways on How to Sync iPhone and iPad with/without Computer"** written by Katrin, there are two options on how to sync iPhone and iPad using iCloud—**sync the entire device or sync specific app data.**³⁹

37. *MacOS User Guide*. "Overview to Syncing your Mac and your Devices," accessed January 22, 2021, <https://support.apple.com/en-ph/guide/mac-help/mchl923c1147/11.0/mac/11.0>

38. Sam Costello. (December, 2020). "Sync Your iPhone and iPad in a Few Simple Steps," Lifewire, accessed January 22, 2021, <https://www.lifewire.com/what-you-need-to-know-to-sync-iphone-to-ipad-1999222>

39. Katrin. (January, 2021). "5 Ways How to Sync iPhone and iPad with/without Computer," Ease US, accessed January 22, 2021, <https://www.easeus.com/iphone-data-transfer/sync-ipad-and-iphone-without-computer.html>

How to Sync Entire Device between iPhone and iPad

This option allows you to copy almost all the data and settings between your iPhone and iPad except files that are already stored in **iCloud** such as **Contacts, Notes, iCloud Photos, Messages, Touch ID settings, Apple Pay information and settings, and iCloud Music Library and App Store Content**. To sync your entire device between iPhone and iPad, follow the step-by-step guide below.

1. Open the **Settings** app, tap your name to open the **Apple ID** screen, then select **iCloud**.
2. Tap **"iCloud Backup"** and select **"Back Up Now."** Wait until the process ends.

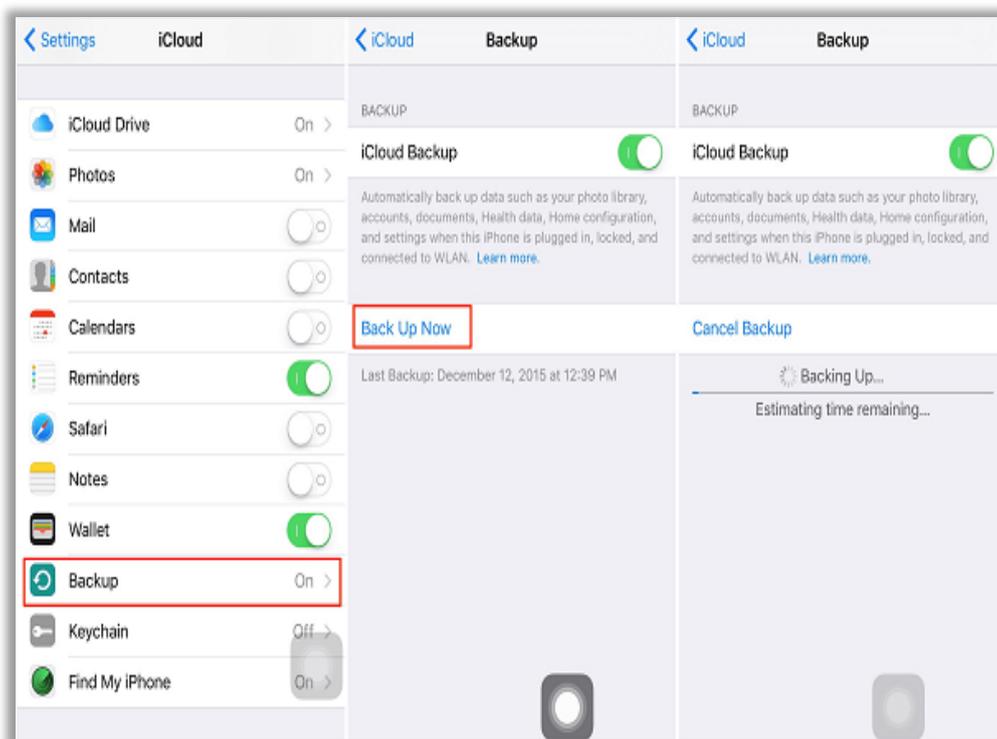


Image source: <https://www.easeus.com/images/en/screenshot/mobimover/icloud-back-up-now.png>

Follow the steps below to restore your target iPhone/iPad from iCloud Backup:

1. Turn on your iPhone or iPad to begin the setup process.
2. You should follow the onscreen instructions until you reach the Apps & Data Screen.
3. Choose **Restore** from **iCloud Backup** and sign in to **iCloud** with your **Apple ID**.
4. To begin the synchronization process, select the correct backup. Note that the time it will take depends on the size of the backup data and the speed of the network.

How to Sync Specific App data between iPhone and iPad

1. Go to the **Settings** on your Apple mobile device and tap **iCloud**.
2. You need to log in to your **iCloud** account with the correct **Apple ID and password**.
3. Enable the button to turn Auto Sync On beside the app that you want to synchronize.



Image source: <https://www.easeus.com/images/en/screenshot/mobimover/icloud-turn-on-iphone.jpg>

2.10.2 How to Sync iPhone to iPad Using iTunes on a Computer

Apple Support identified that you can sync specific categories like **Apps, Music, Movies, TV Shows, Podcasts, Photos, Videos, Contacts, and Calendars** on your iPad and iPhone using **iTunes**. Learn how to sync data using iTunes on **macOS** or a Windows PC. Follow the step-by-step guide below:⁴⁰

40. Apple Support. "Use iTunes to Sync your iPhone, iPad, or iPod With Your Computer," accessed January 22, 2021, <https://support.apple.com/en-ph/HT210612>

1. Open your **iTunes** and connect your Apple mobile device to your computer with a USB cable.
2. Click the device icon found on the upper-left corner of the **iTunes** window.

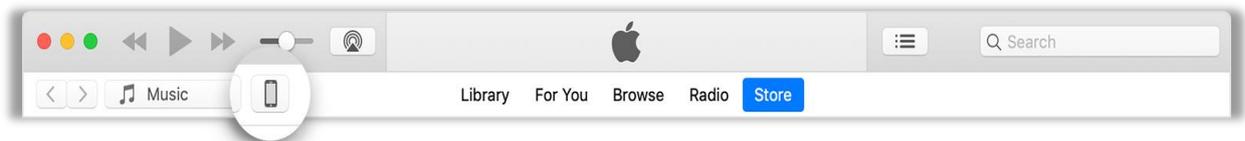


Image Source: <https://support.apple.com/en-ph/HT210612>

3. You should see the list under the **Settings** found on the left side of the **iTunes** window. Click the type of content that you want to sync.

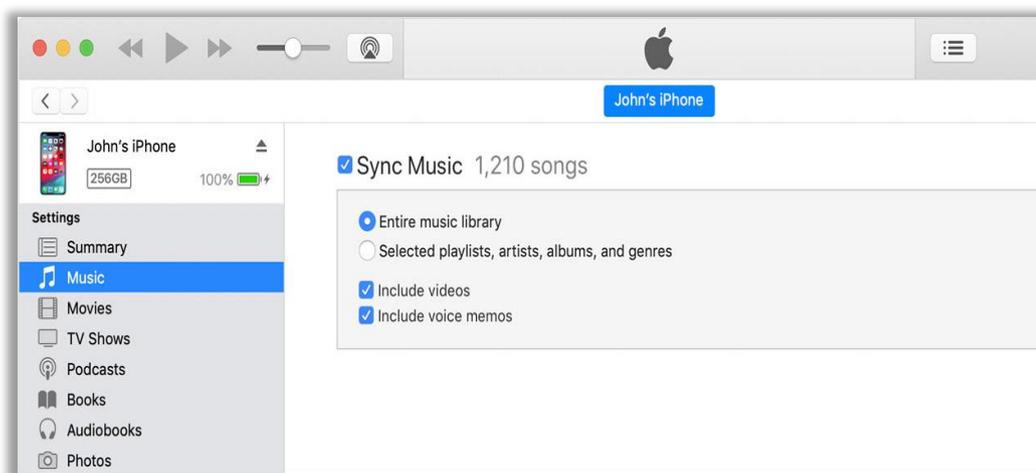


Image Source: <https://support.apple.com/en-ph/HT210612>

4. Select the checkbox next to each item that you want to sync.
5. Click the **Apply** button found on the lower-right corner of the iTunes window.

Chapter 3: Intermediate Users

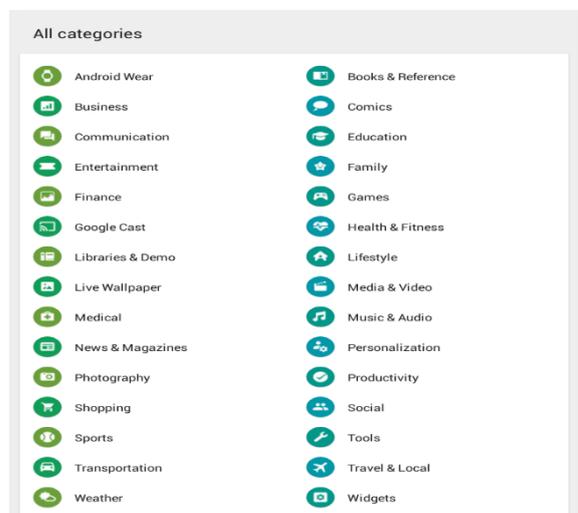
Intermediate users refer to those who are already familiar with using Apple mobile devices beyond sending messages. In this section, you will learn how to access the built-in apps on your Apple mobile device and app stores. You will also learn what the different categories are in the  **App Store**.

3.1 What Are the Different App Categories?

The app categories on any app store may change without warning, depending on its owner's design. Categorizing apps helps store's customers more easily find the apps they are looking for. All you should do is to know what category or classification an app is under. This is especially useful for those who do not have a particular app in mind but would like to see all of the available apps that may suit their needs.

Thousands of apps are available in  **App Store**, which are grouped into **25 categories**, including:

1. **Books.** You will find a variety of book titles from fiction to academic here. Many novels are also available. Books in different languages are also found here.
2. **Business.** This shows apps specifically created for business purposes (business management, entrepreneurship, etc.).
3. **Catalogues.** This list apps that catalog various things such as superheroes, aircraft crashes, and more.
4. **Education.** This lists apps related to education. Some apps can aid in teaching and learning as well as classroom management. A few apps can also be used in classroom activities, and act as teaching tools.
5. **Entertainment.** This lists apps that aim to entertain. You will find games, music, jokes, photos, quotes, comics, videos, and other similar apps here.
6. **Finance.** This lists game apps that help you manage your finances (budgeting, computing, finance tracking, online banking, and even stock market monitoring).



7. **Food & Drink.** This lists apps that let you find the nearest and best restaurants, cafes, and other food and drink establishments anywhere in the world.
8. **Games.** This lists apps that help you have fun and be challenged. It has 16 subcategories that let you more easily find the type of game application you are looking for. These include *Action, Adventure, Arcade, Board, Card, Casino, Casual, Educational, Music, Puzzle, Racing, Role Playing, Simulation, Sports, Strategy, and Trivia.*
9. **Health & Fitness.** This lists apps that help you keep an active and healthy lifestyle. The apps here are designed to get you hooked on physical activity or help you monitor your diet and nutrition.
10. **Kids.** This lists apps specifically created for children. It has three subcategories, according to age—**Kids 5 & Under, Kids 6–8, and Kids 9–11.**
11. **Lifestyle.** This lists apps that help you find places to eat at, shop in, watch a movie at, and more. Some apps even help you decide what to wear on different occasions.
12. **Magazines & Newspapers.** This lists apps that keep you updated on current events. You can find here online versions of newspapers, feeds from news channels, and even magazines. It has 22 subcategories according to interest—Arts & Photography, Automotive, Brides & Weddings, Business & Investing, Children’s Magazines, Computing & Internet, Crafts & Hobbies, Entertainment, Fashion & Style, Health & Well-Being, Home & Garden, Literary Magazines & Journals, Men’s Interest, News & Politics, Outdoors & Nature, Parenting & Family, Pets, Professional & Trade, Science, Sports & Leisure, Travel & Regional, and Women’s Interest.
13. **Medical.** This lists apps that provide information on many common illnesses, teach you about anatomy, and just about anything related to medicine.
14. **Music & Audio.** This lists apps for music enthusiasts. You can also find online radio apps here. Using an online radio app is just like listening to your favorite radio station on your mobile device. Music is broadcast over the Internet.
15. **Navigation.** If you need apps to help you find your way around, this category is for you. You will find map, route, address-finding, and other navigation apps here.
16. **News.** This lists apps that keep you updated on current events. You can find online versions of newspapers and news channel feeds here.
17. **Photo & Video.** If you like taking pictures and recording and editing videos, this category is for you. You can find apps for editing photos and videos here.
18. **Productivity.** Apps for writing, presenting, notetaking, and more that help you become as productive in work as possible can be found here.

19. **Reference.** Encyclopedia, dictionary, and history apps can be found here. It has hundreds of apps that you can use to look for detailed information on certain topics.
20. **Shopping.** This lists apps for online shopping and more.
21. **Social.**  **Facebook**,  **Twitter**, and any other social networking apps can be found here.
22. **Sports.** If you love sports and want to constantly be updated on scores and your favorite teams' performance, this category is for you.
23. **Travel & Local.** This lists apps related to airports, airfare, travel booking, and airlines. You can also find apps that tell of tourist spots and fascinating places to visit.
24. **Utilities.** You can find online payment, banking, and similar apps here.
25. **Weather.** If you want to know the weather forecast today, tomorrow, or even months from now, this category is for you.

3.2 What Are Some of the Most Useful Educational Apps Today?

With great developments in technology comes a more complicated life. Let us take using an iPad as an example. The more advanced your Apple mobile device is, the more apps there are for it, and education has not been left behind. Throughout the past years, many educational apps have been developed, which improve learning outcomes. Limewire's "**The 10 Best Learning Apps for 2020**" article presents some of the top-rated educational apps available today:⁴¹

1.  **Duolingo.** This is one of the main educational applications nowadays. It is a free language learning app that provides a wide array of languages to choose from, offering a linear path of learning, which boosts conversation and vocabulary both in written and spoken formats. It also uses a reward system and a social component, to help the users stay motivated and make language learning a daily habit.
2.  **TED.** TED is an organization that records and posts conferences and talks. This app provides access to TED's library for free, allowing both teachers and learners to watch multidisciplinary short videos from diverse academic areas. The interesting aspect is that each talk, no matter the subject, is presented by experts in the field through accessible and easy-to-understand presentations.

41. Jonathan Terrasi, "The 10 Best Learning Apps for 2021," Limewire, last modified January 5, 2021, <https://www.lifewire.com/best-learning-apps-4176357>.

3.  **Codecademy.** This app offers an easy programming language learning experience. It has built-in code editors and interactive consoles, so you do not have to download extra software. You can choose the projects you are more interested in and access their courses. Each course offers explanations, coding exercises, and quizzes.
4.  **Memrise.** This app encourages the use of mnemonic techniques to improve language learning. When learning new words or phrases, you are encouraged to write a short association to use as a memory device. If you are unable to think of one, though, you can choose from those submitted by fellow users. By thinking about mnemonics, users build confidence and vocabulary in new languages with associations that are natural to them. Aside from this, the app's regimen yields a fairly standard gradual increase in vocabulary and concepts.
5.  **Khan Academy.** This completely free app offers courses on a broad range of subjects, placing a strong emphasis on diagrams and visual aids. It favors science topics, but it also offers some courses on humanities and art.
6.  **edX.** This provides free access to extensive real university courses, via video. While the app is free, you can pay for certification and get college credit from the courses, but it is usually expensive. It is based on video lectures, quizzes, and interactive online labs.
7.  **Tinycards.** This offers flashcard decks of a wide range of subjects submitted by fellow users. However, you can also create your own deck easily, adapting the app to your needs. After you have created it, you can share it to help other users. Tinycards also produces quizzes to test your knowledge about your flashcard decks.
8.  **Brilliant.** This is a puzzle-solving app that teaches science and math subjects through problem-solving. The app describes concepts and pairs them with problems and includes factors that may cause you to hesitate.
9.  **NASA.** This is NASA's official app, which collects scientific articles, videos, and photos of the latest findings. It also has articles that explain the basics of astronomy and let you catch on upcoming celestial events, like eclipses.
10.  **MATH 42.** This app is designed as a math aid, as it helps users solve math problems, showing the steps along the way. This app includes a whole set of math tools, such as a calculator and graphing tools for solving equations. When you are reading about mathematical principles, the app will pose questions and problems for you to work on.

Get more information on the apps you can use from the following articles:



Web Resources

Scan or click on the QR codes to access the linked resources

Web articles

“75 Digital Tools and Apps Teachers Can Use to Support Formative Assessment in the Classroom”
Kathy Dyer for *Nwea*
<https://www.nwea.org/blog/2019/75-digital-tools-apps-teachers-use-to-support-classroom-formative-assessment/>

“Top 25 Education Sites & Apps for 2020”
David Kapuler for *Tech&Learning*
<https://www.techlearning.com/buying-guides/top-25-education-sites-and-apps-for-2019>

“Best education apps for iPad in 2021
Dhvanesh for *iGeeksBlog*
<https://www.igeeksblog.com/best-ipad-education-apps/>

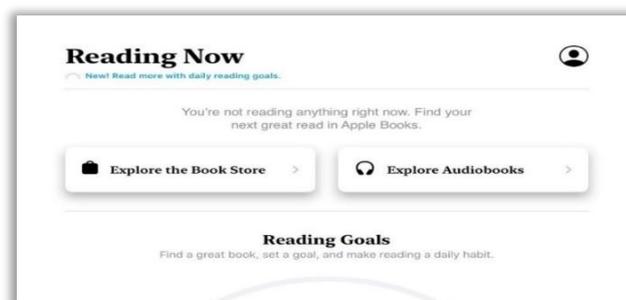
3.2.1 Books

How to Use Books

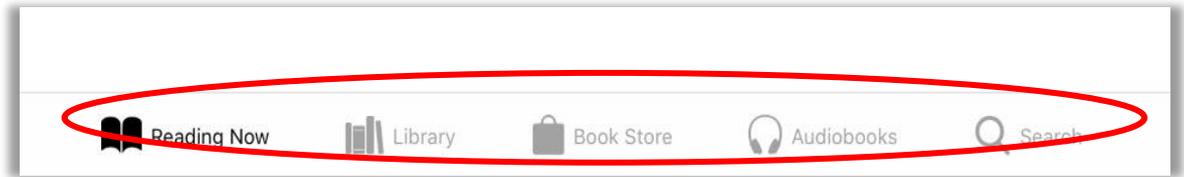
Books is an e-book reader developed by Apple to let users read e-books and PDF files. At present, it only supports the electronic publication (e-pub) and Portable Document Format (PDF) formats. The e-pub is the standard format for publishing books online. It is also the format for online magazines and newspapers. Unlike printed documents, e-pub files can suit the many display dimensions of mobile devices. Books and other publications created with it are more flexible in terms of font size and layout, allowing users to read the same material on any mobile device.

To use the  **Books**, follow the step-by-step guide below:

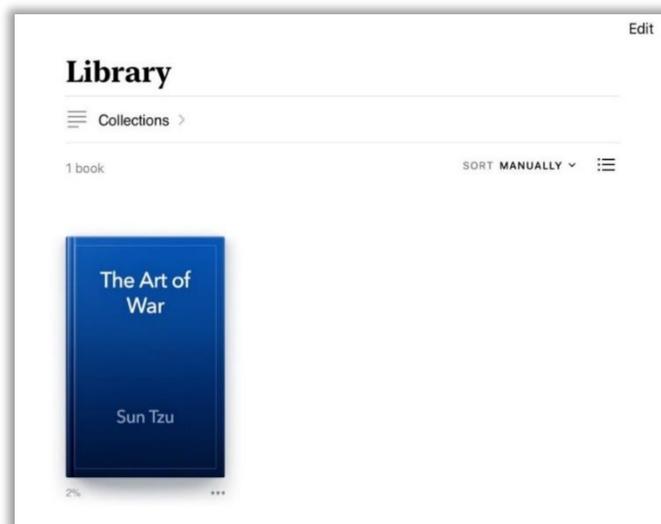
1. Tap  **Books** icon to open the app. You should see the  **Reading Now** page.



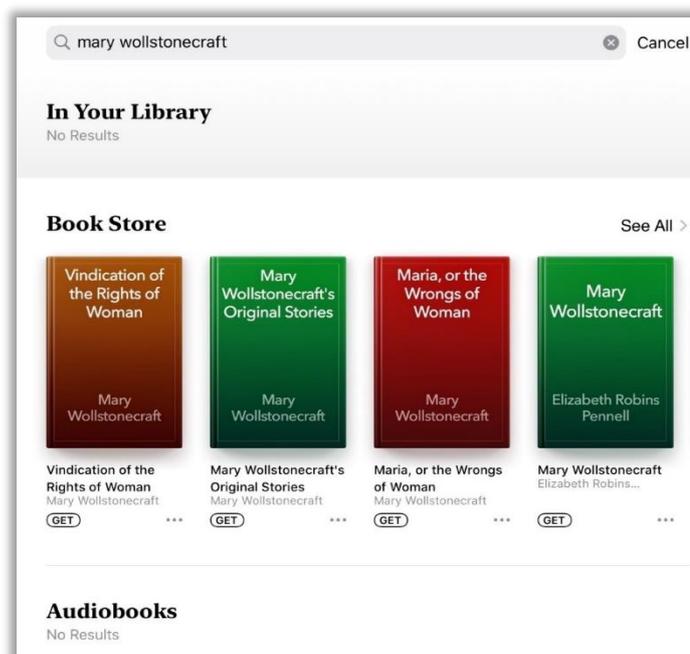
- At the bottom of the page you will see the different features of  **Books**. Tap on any of them to explore.



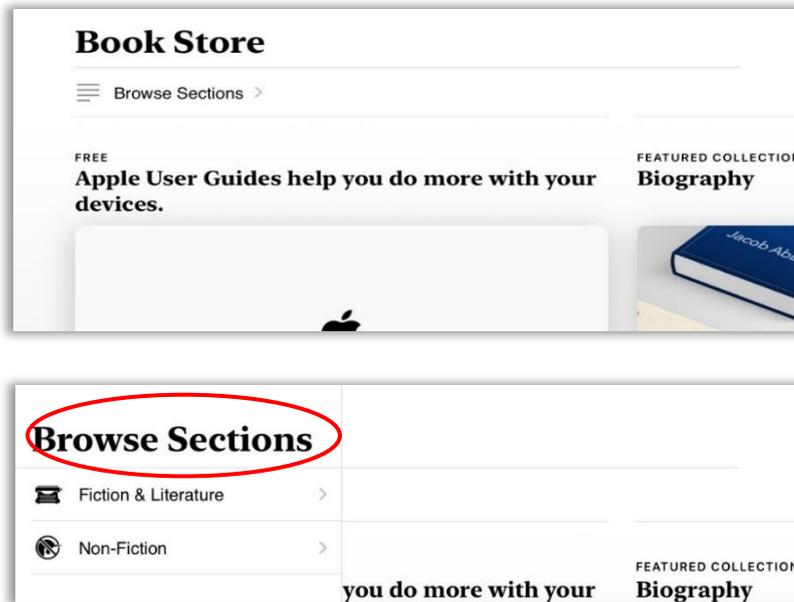
- In  **Library** and , you will be able to see the books that you have already acquired.



- In  **Search**, you can type the title of a book or an author's name and explore the results shown under **In Your Library**, **Book Store**, and **Audiobooks**.



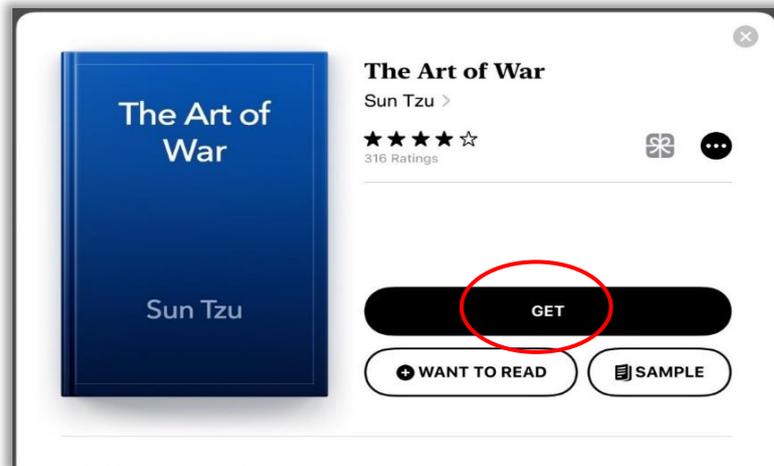
5. In  **Book Store**, you can browse all available e-books and download the ones you are interested in. By tapping in  **Browse Sections**, you can choose between fiction and non-fiction e-books.



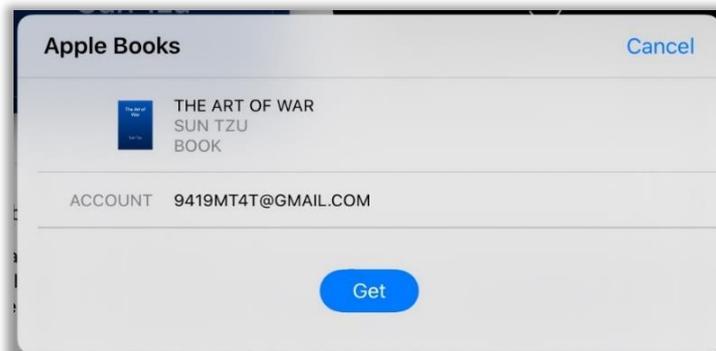
6. To download an e-book, tap the e-book cover. This will open the e-book's page where you can see more information. Like the  **App Store**, some e-books can be downloaded for free while others will require you to purchase.



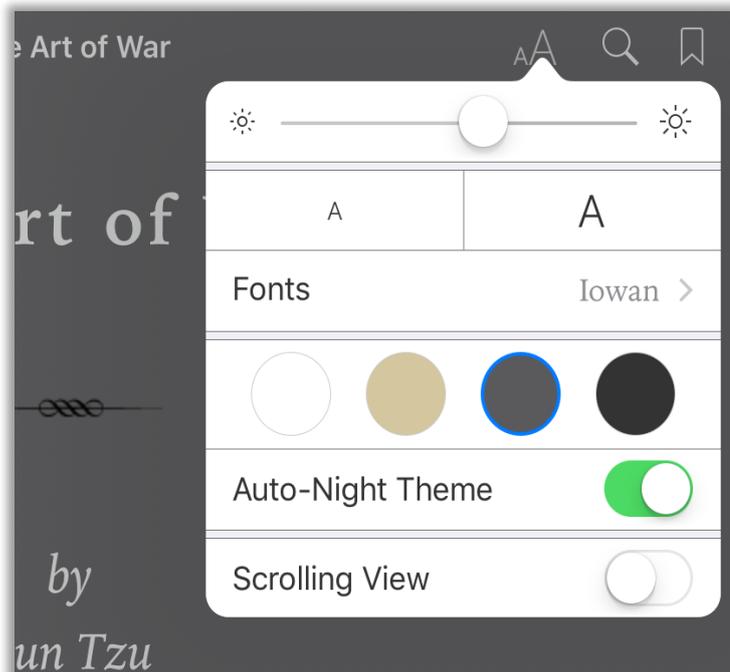
7. In this sample case, download the e-book titled "The Art of War." It does not require a fee. Tap the **GET** button.



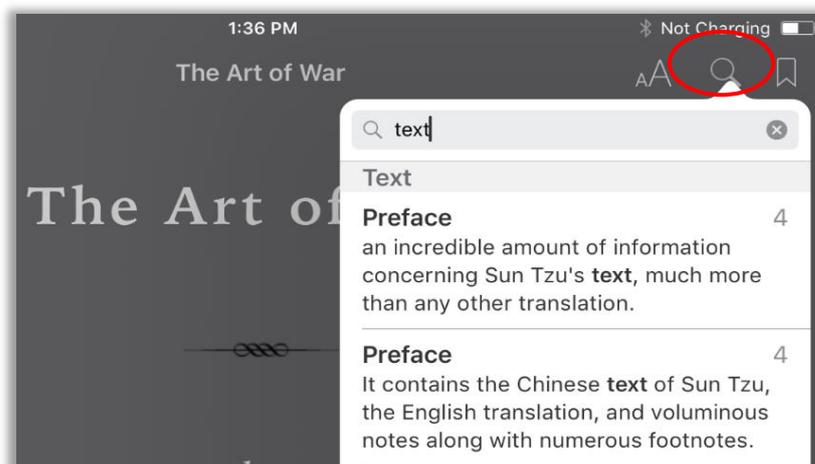
8. You may be prompted to sign in to  **iTunes Store**. Type your password into the **Password** field, then tap **OK** or use **TouchID**. This will start the download process. You will know the download is done when you see the **READ** button. Tap the **READ** button. This will open the e-book you downloaded.



9. Tap **AA** if you want to adjust the display's brightness, choose another font, change the theme, or enable scrolling view.



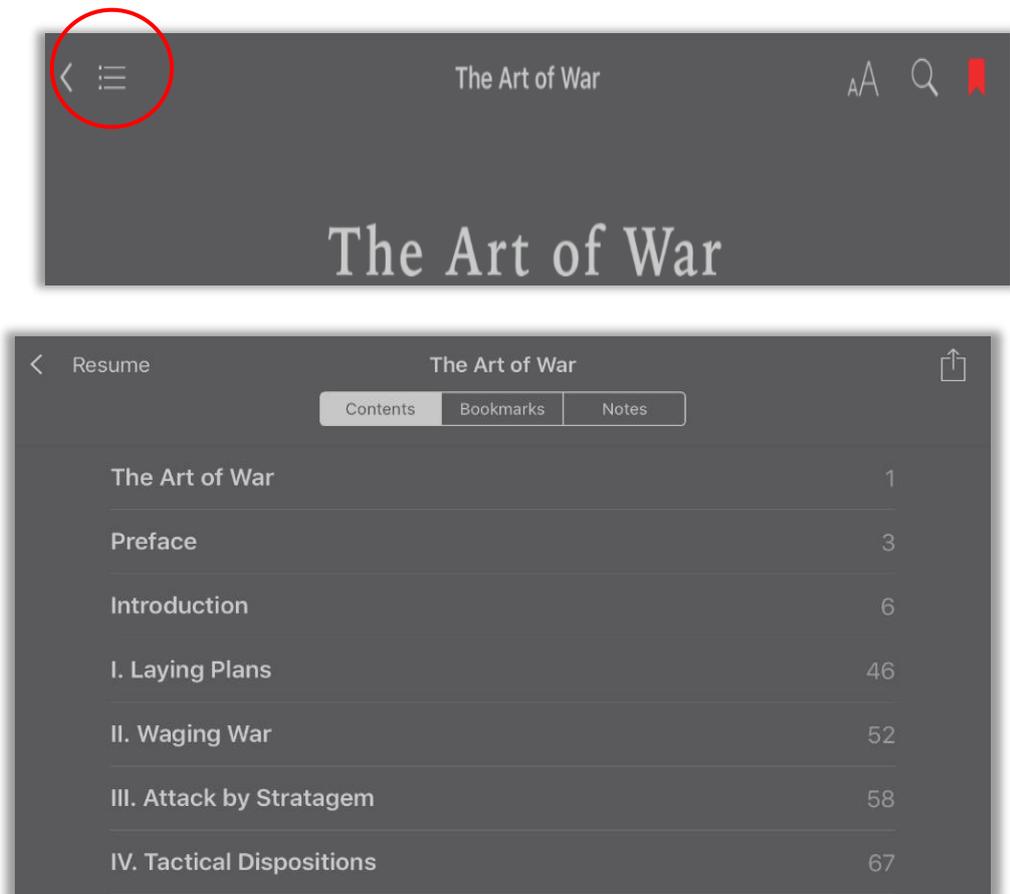
10. Tap **🔍** if you want to search for a certain word or page in the e-book. Just type the word or page you are looking for into the **🔍 Type a word or page number** field to do that.



11. Tap **🔖** to bookmark the current page. This will tell you where you stopped or where you should start reading again. **🔖** changes color to red when tapped.



12. Tap  if you want to see the contents of the e-book you are reading. Tapping a section title takes you to that section.



13. Congratulations! You now know how to use  **Books** using your Apple mobile device.

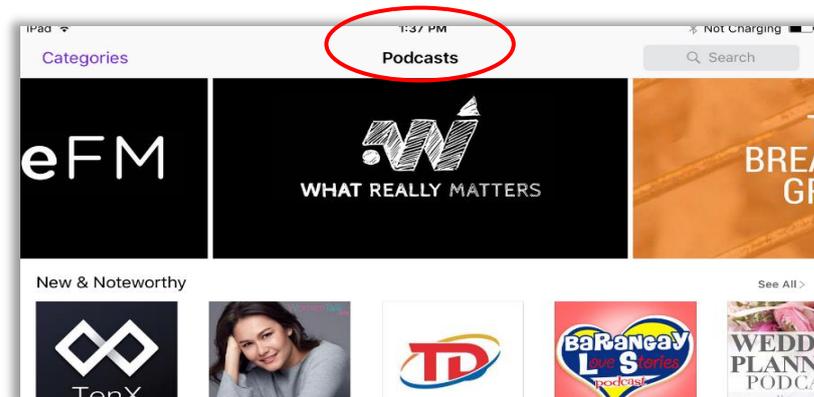
3.2.2 Podcasts

How to Use Podcasts

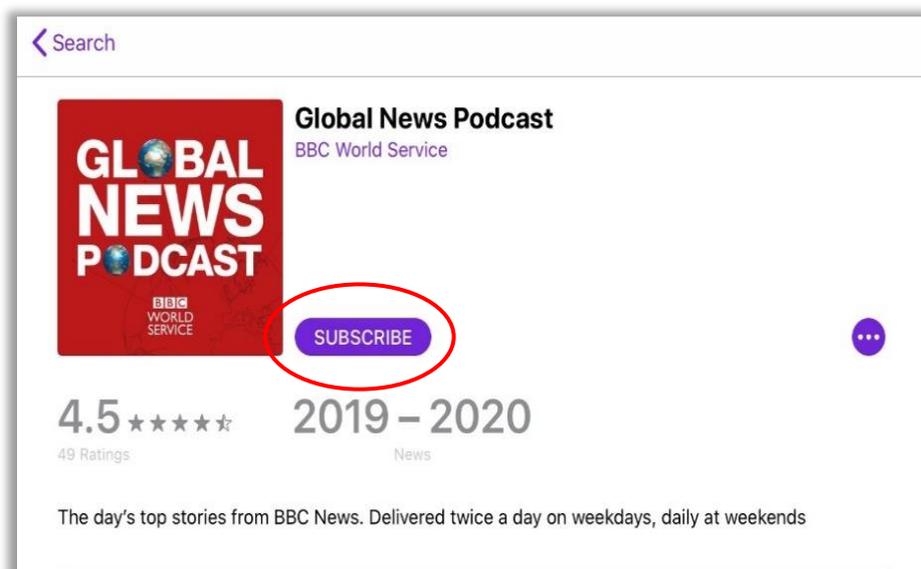
A **podcast** allows you to download and listen to or watch audio or video programs on a wide range of topics such as arts, music, education, science, medicine, technology, and more. Podcasts are formatted for playback on any Apple mobile device. They are like shows on the radio or TV that are produced by professionals and amateurs alike, and posted online for downloading. You can download podcasts individually or you can subscribe to a series of podcasts.

Podcasts can be particularly useful if you teach or are trying to learn a foreign language. Some podcasts are dedicated to just that purpose. To use the app, follow the step-by-step guide below:

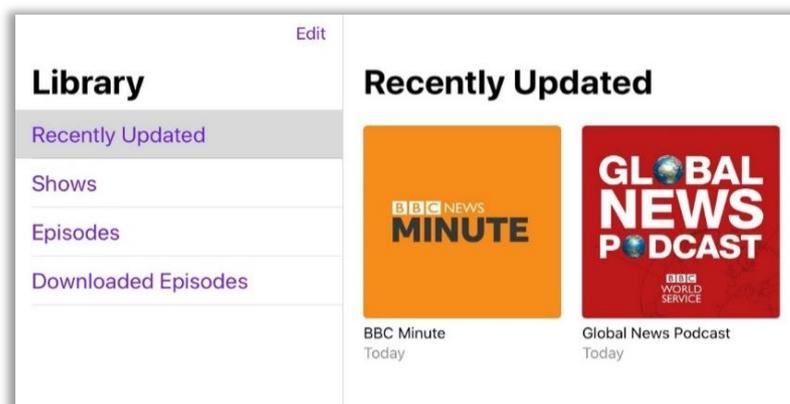
1. Tap the **Podcasts** icon to open the app. You will be taken to the **Welcome to Podcasts** page.



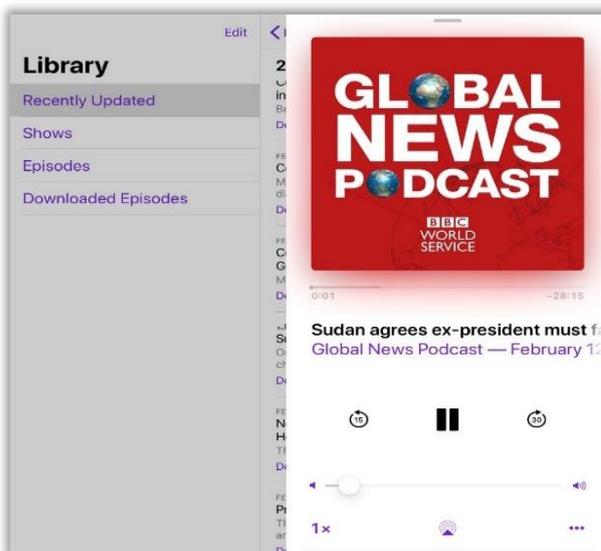
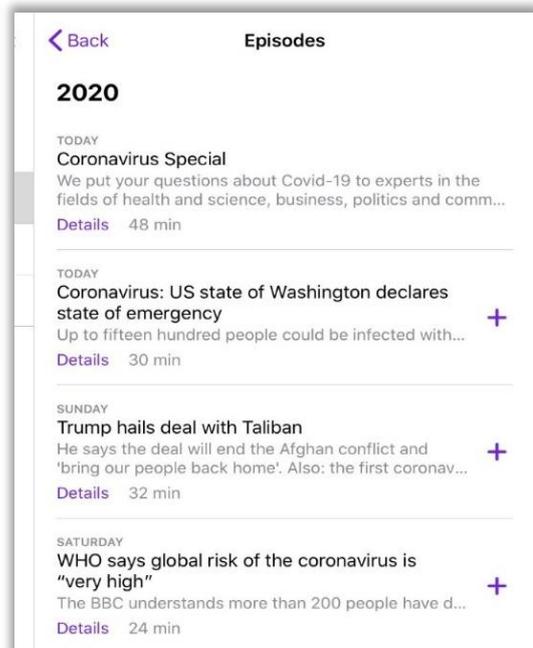
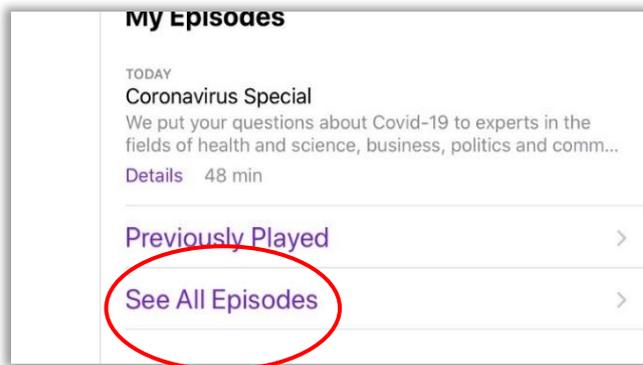
2. Tap the icon of the podcast that you would like to listen or subscribe to. This will open the podcast's page. Tap **SUBSCRIBE** to get access to the episodes of the podcast.



3. You will know you are done downloading when the podcasts appear on your **Library**.



4. To play a podcast, tap on its name to listen to the newest update. Or you can select **Shows**, tap on the podcast you want to listen, tap on **See All Episodes**, and select an older episode.
5. Tap the episode you would like to listen to or view. Congratulations! You now know how to use  **Podcasts** using your Apple mobile device.



3.2.3 iTunes U

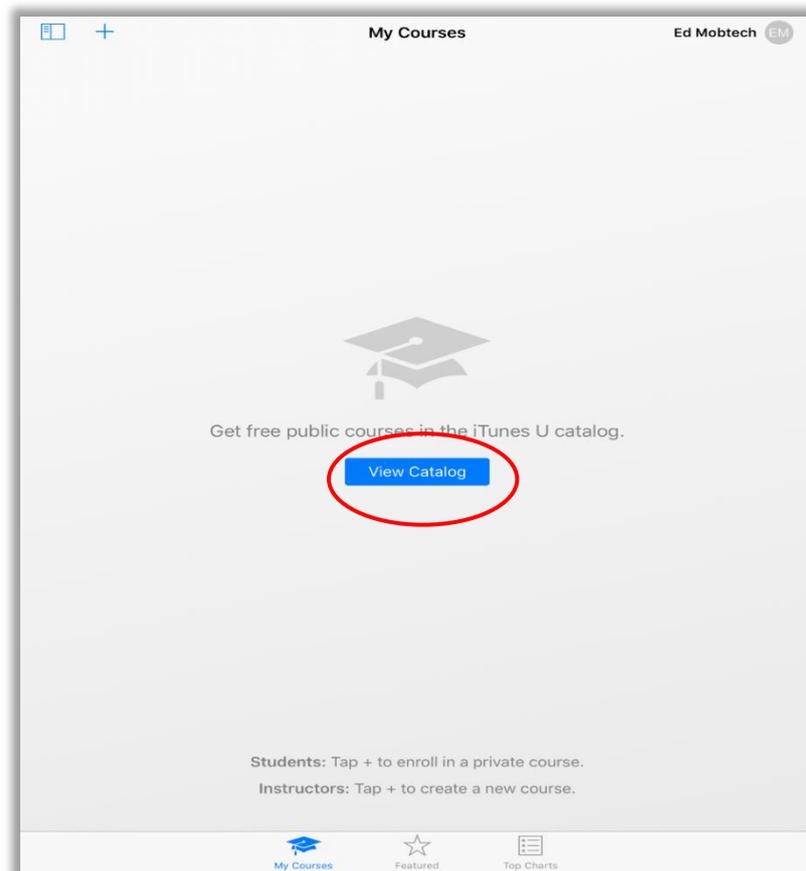
How to Use iTunes U

iTunes U is an app that offers a vast range of learning resources for free. Educational content from many colleges and universities, nonprofit organizations, and other educational institutions can be found here. Course lectures, lab demos, and campus tours come in the form of audio and video files that anyone can use.⁴²

42. Andy Bowman & Trudy Muller, 2014. *Business Wire*. "Apple Expands Worldwide Access to Educational Content," accessed January 22, 2021, <http://www.businesswire.com/news/home/20140121005946/en/Apple-Expands-Worldwide-Access-Educational-Content#UuhR8yqwqM8>.

To use  **iTunes U**, follow the step-by-step guide below.

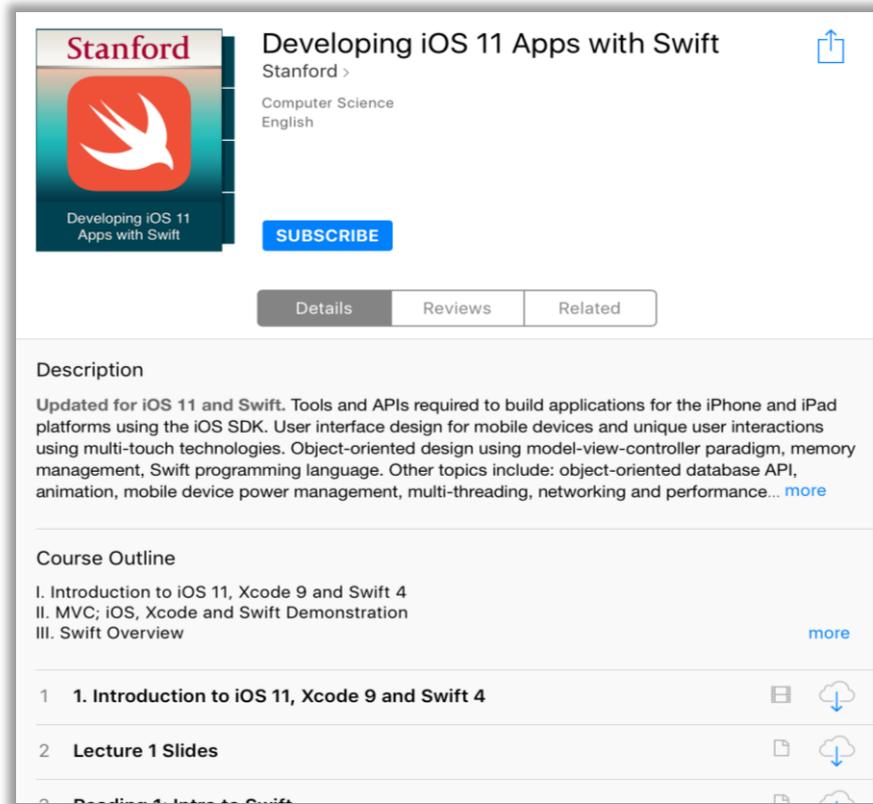
1. Tap the  **iTunes U** icon to open the app. This will open the **My Courses** page. If you have already subscribed to a course, you will be able to see it in this page. If you do not have any course subscriptions yet, you can tap **View Courses** to browse all the available courses.



2. In  **iTunes U**, you can choose courses from different categories (Business, Science, etc.) by tapping the **View Catalog** button. This will open the **iTunes U** page.



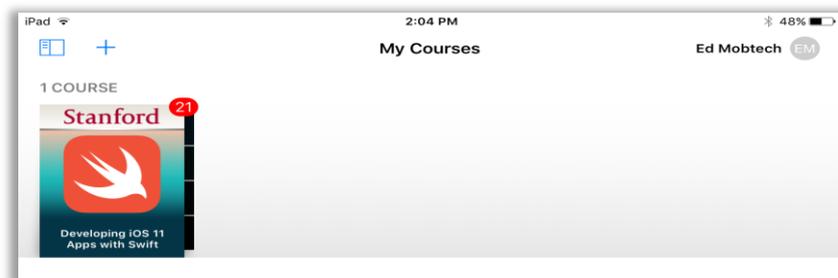
3. Tap the icon of an available course (in this case, "Developing iOS Apps with Swift"). This will open the course's page.



4. Tap the **SUBSCRIBE** button. This will change into the **GET COURSE** button.



5. Tap the **GET COURSE** button. This will automatically add the course to the **My Courses** page.



6. Tap the name of a course section that you would like to learn first. This will introduce your chosen section. Go through all of the sections and enhance your knowledge on certain topics for free.



7. Congratulations! You now know how to use  iTunes U using your Apple mobile device.

3.3 What Are Some of the Best Communication Apps Today?

In today's global environment, many large companies and institutions are spread out, with numerous offices or campus locations, telecommuters, partners, and more. In spite of and because of this situation, today's employees expect to have full access to real-time information at a moment's notice. Thus, challenging companies, and organizations to keep their employees well-connected and informed.⁴³

Inside and outside of work, mobile technology exists at the intersection of information, communication, and convenience. By leveraging the right mobile platform, organizations can easily share important information and connect employees, administrators, and management with one another. Mobile apps can facilitate just that, help colleagues stay updated no matter where they are. The communication apps in this section are just a few of those available.

43. "Connect, Communicate, and Engage with Employees Through a Mobile App," Modo Labs, accessed January 22, 2021, <https://www.modolabs.com/uploads/2020/07/eB-Employee-Communication.pdf>.

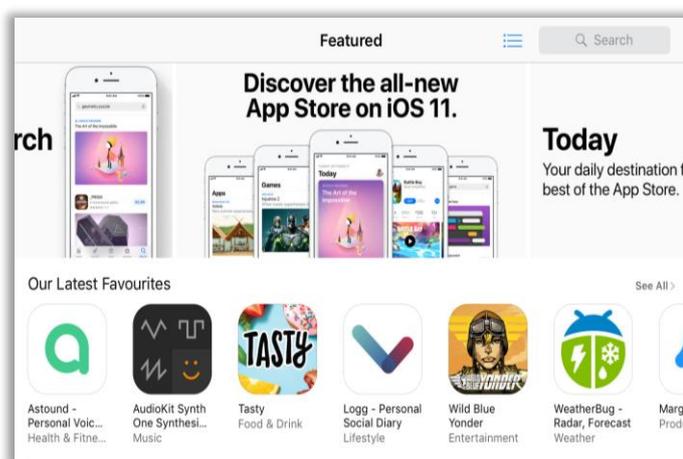
3.3.1 Skype

How to Create a Skype Account

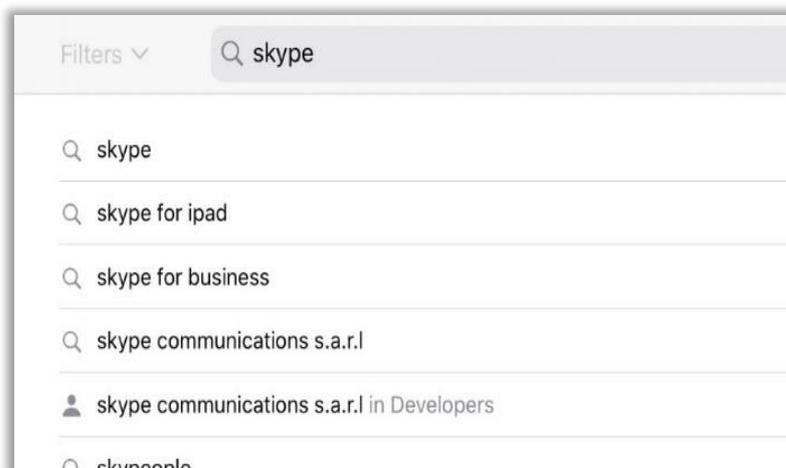
Skype  is for doing things together, whenever you are apart. Its text, voice, and video features make it simple to share experiences with the people that matter to you, wherever they are. With it, you can share a story, celebrate a birthday, learn a language, hold a meeting, work with colleagues—just about anything you need to do together every day. You can use it on different devices—on your smartphone, PC, or smart television (TV). It is free to use—so you can speak, see, and instant-message other people, for example. You can even try group video.⁴⁴

To install  Skype, follow the step-by-step guide below.

1. Tap the  **App Store** to open it. This will take you to the **Featured** page.

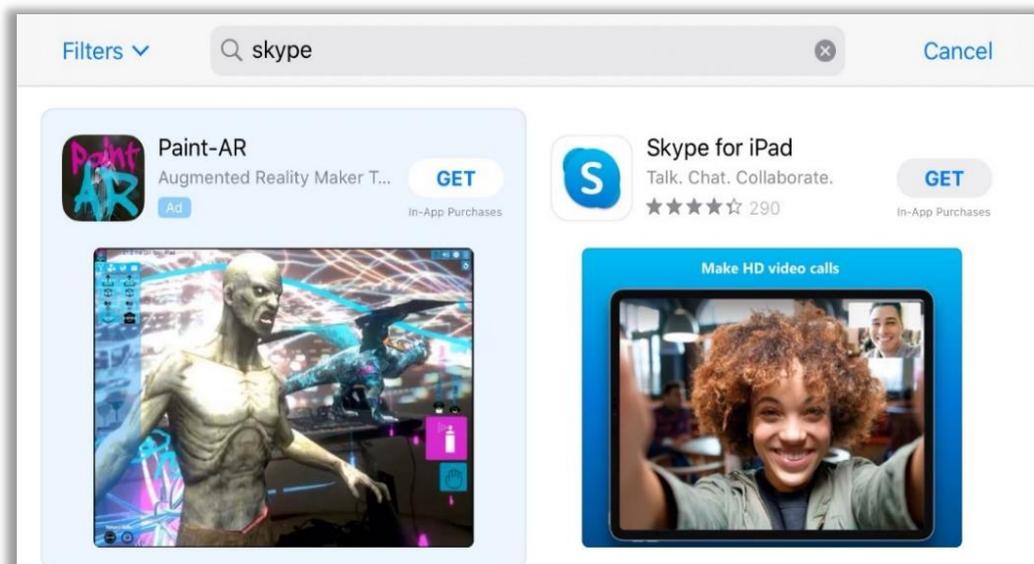


2. Tap the  **Search**. Type "skype" into the  **Search** field. Note that suggestions will appear as you type.



44. "About Skype," Skype, accessed January 22, 2021, <https://www.skype.com/en/about/>.

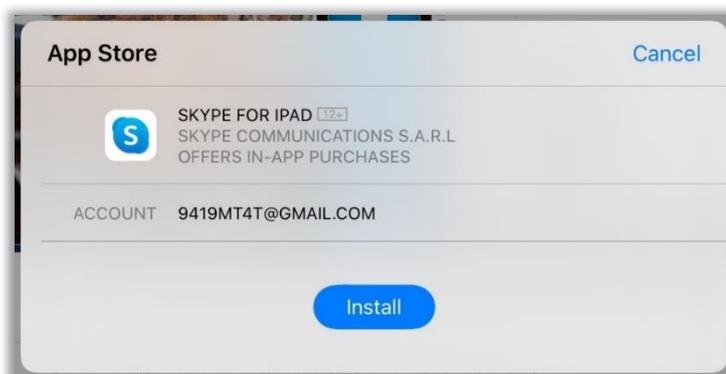
3. Tap the **skype** button to search for the app.



4. Then, tap on the app you want to get to open the **download** page. Tap **GET** to download the app onto your device.



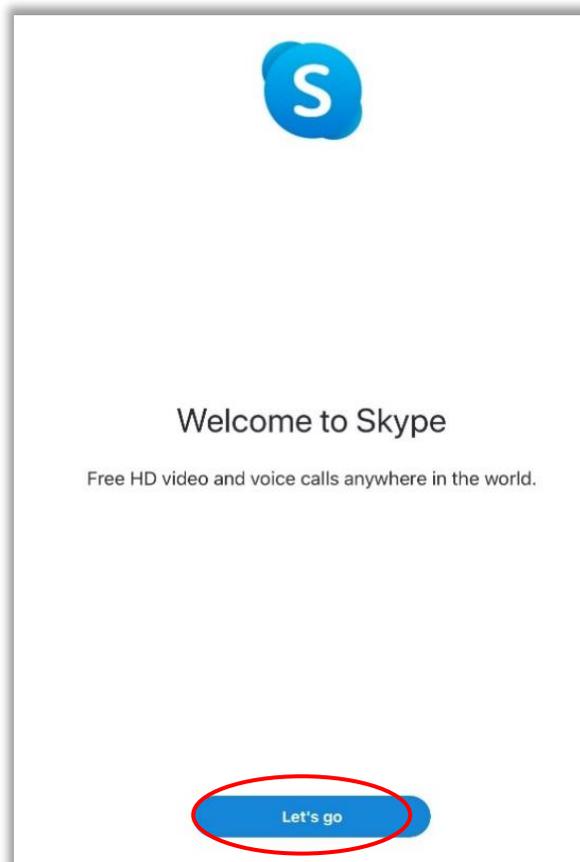
5. You may be prompted to sign in into the **iTunes Store**; just type your password into the **Password** field then tap **OK** or use your **TouchID**. This will start the download process, which may take a while, depending on the speed of your Internet access. You can track the download progress.



6. You will know when downloading is completed once you see the **OPEN** button.

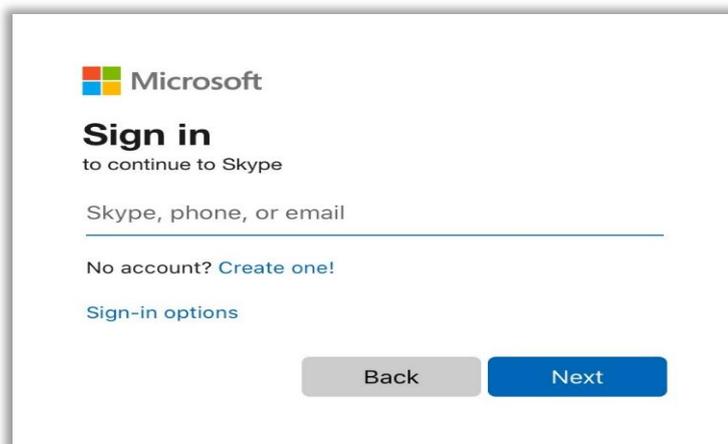
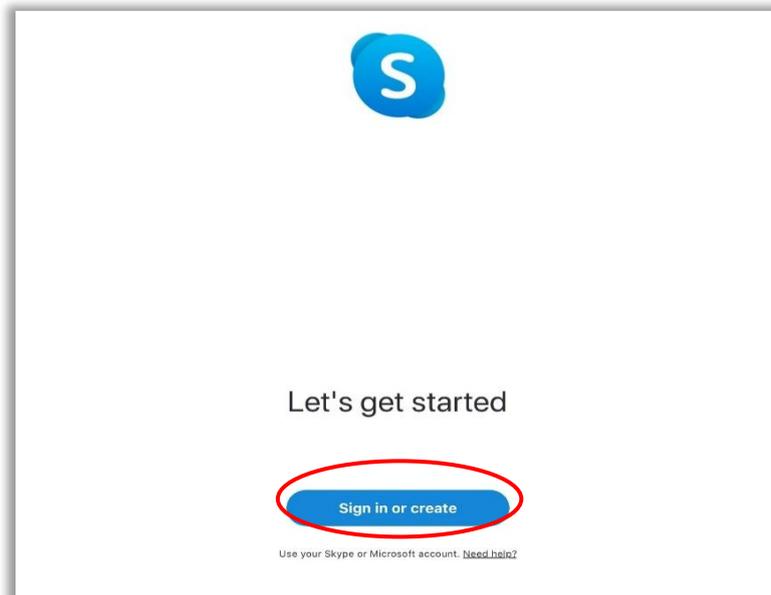


7. Tap the **OPEN** button to launch the app. You will be welcomed to Skype. Then, tap the **Let's go** button to continue.

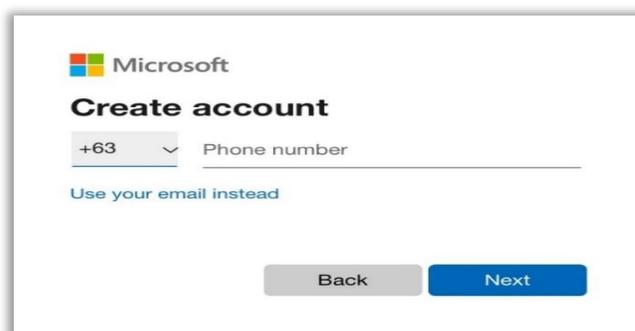


How to Create a Skype Account

1. You can sign in with your Outlook account. If you do not have one, you can create one by tapping in **Create one!** or tap **Sign-in options** to see the alternative options.



2. If you tap on the **Create one!** you will be prompted to introduce your phone number.



3. Type your password into the **Password** field then tap the **Next** button.

Microsoft

← +63

Create a password

Enter the password you would like to use with your account.

Create password

Show password

By providing your phone number, you agree to receive service notifications to your mobile phone. Text messaging rates may apply.

Next

4. Then, type your **First name** and **Last name**, and tap **Next**.
5. Enter the verification code that has been sent to your mobile phone and tap **Next**.

Microsoft

← +63

Verify phone number

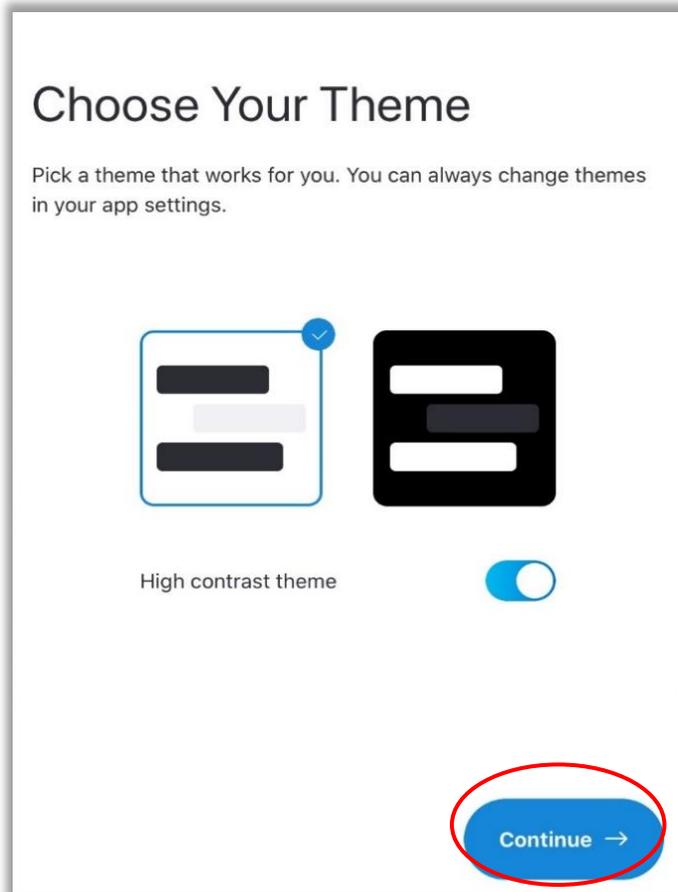
We just sent a code to +63

Enter code

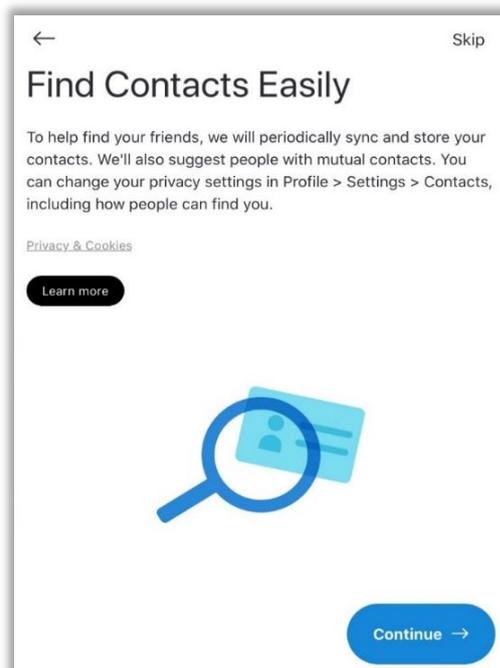
Choosing **Next** means that you agree to the [Privacy Statement](#) and [Microsoft Services Agreement](#).

Next

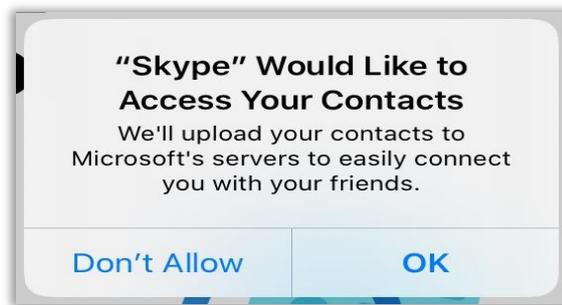
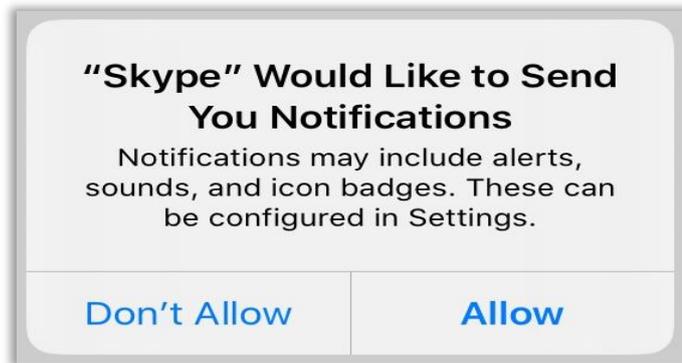
6. Choose your theme and switch on or off the high contrast. Then, tap **Continue**.



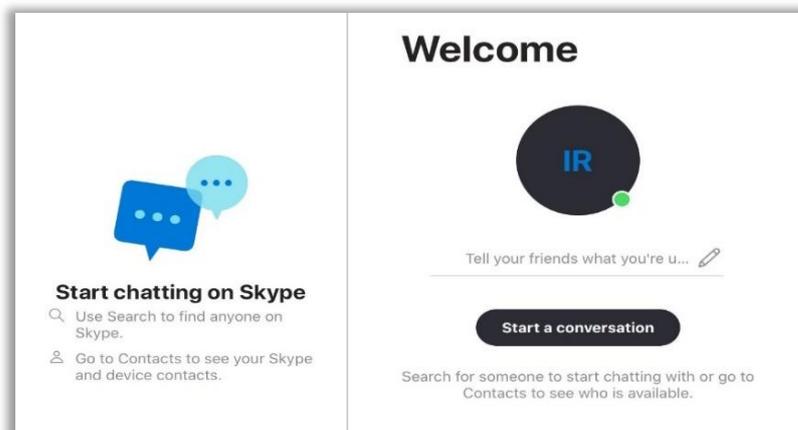
7. Skype will provide you with some explanations about how the app works. Tap **Continue**. You can also tap **Skip** and directly access the app.

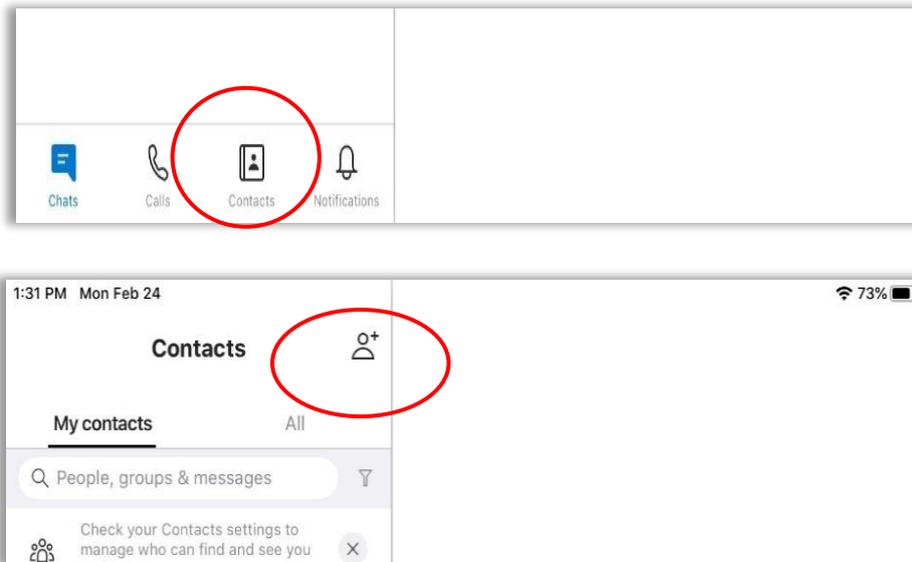


8. You will be asked if you would like to receive notifications via a pop-up message. Tap **OK**.  **Skype** will also ask for your permission to access your contacts, microphone and camera, tap **Allow** and **OK**.



9. After that you will access the  **Skype's** contact page. If you have contacts with  **Skype** they will be added automatically, but you can also add new contacts by tapping **Contacts** at the bottom, and by tapping .





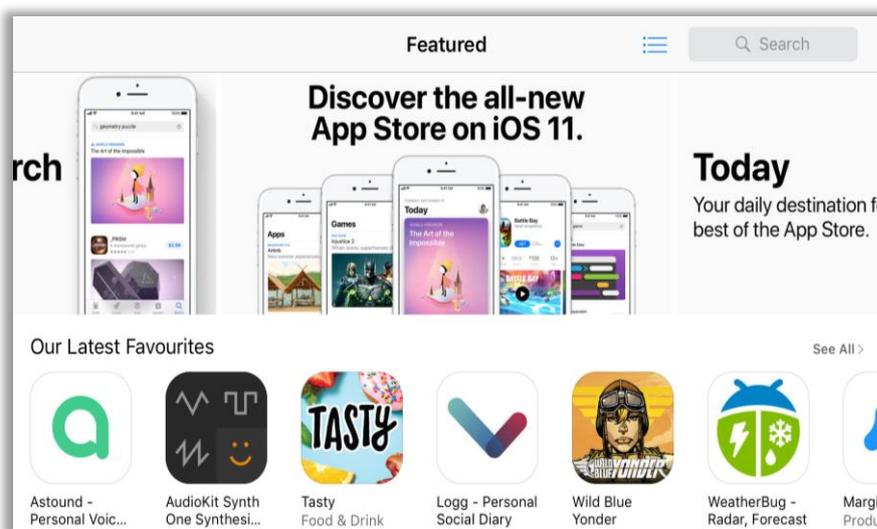
10. Congratulations! You successfully installed and logged in to  **Skype** on your Apple mobile device.

3.3.2 LINE

How to Install LINE

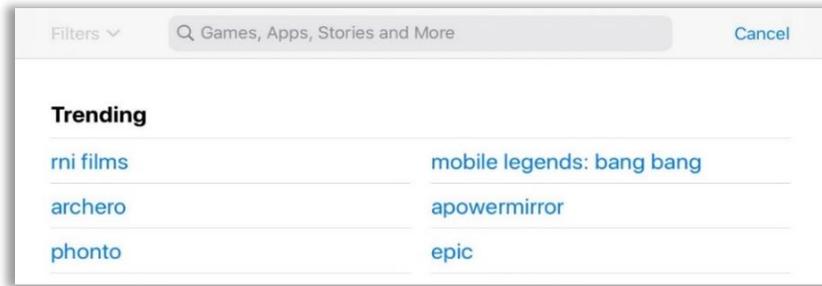
LINE is similar to **Whatsapp** as they both offer the possibility of communicating via text-messaging using the Internet; however **LINE** is more widespread in some Asian countries, such as Thailand, than Whatsapp.⁴⁵ To install  **LINE** on your Apple mobile device, follow the step-by-step guide bellow.

1. Tap the  **App Store** to open it. This will take you to the **Featured** page.

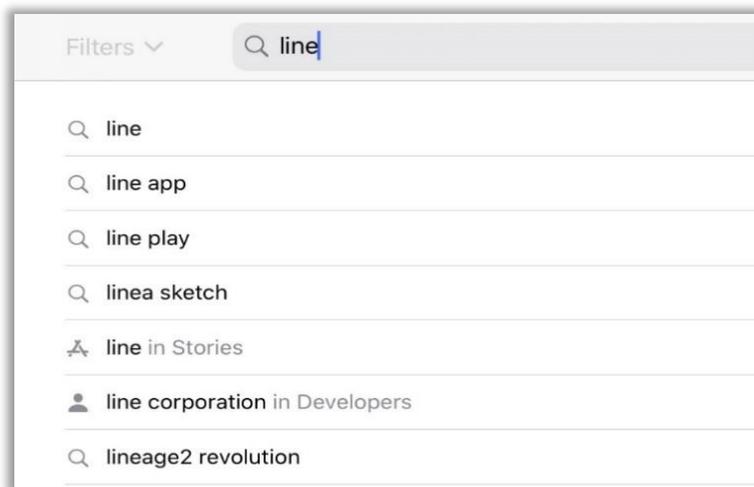


45. Birgit Bucher, "WhatsApp, WeChat and Facebook Messenger Apps – Global Messenger Usage of Messaging Apps, Penetration and Statistics," Messenger People, last modified on October 30, 2020, <https://www.messengerpeople.com/global-messenger-usage-statistics/>.

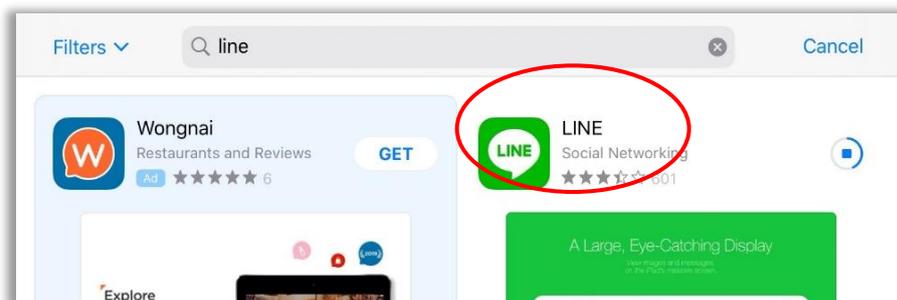
2. Tap **Search**. Note that trending searches will appear.



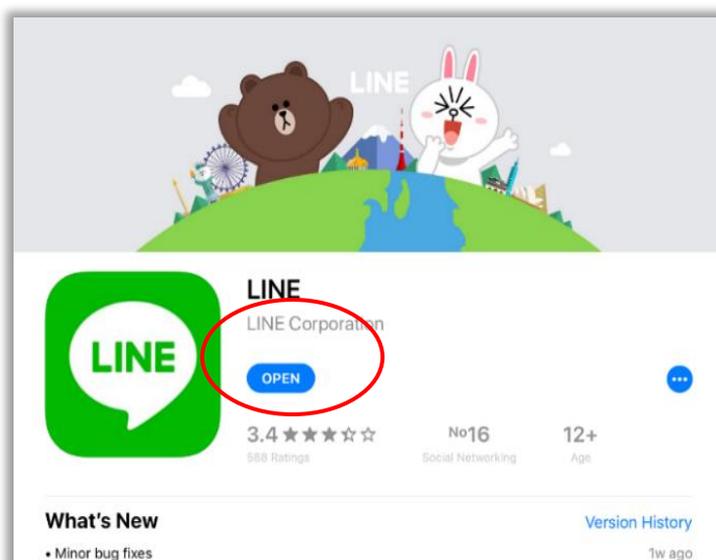
3. Type "line" into the **Search** field. Note that suggestions will appear as you write.



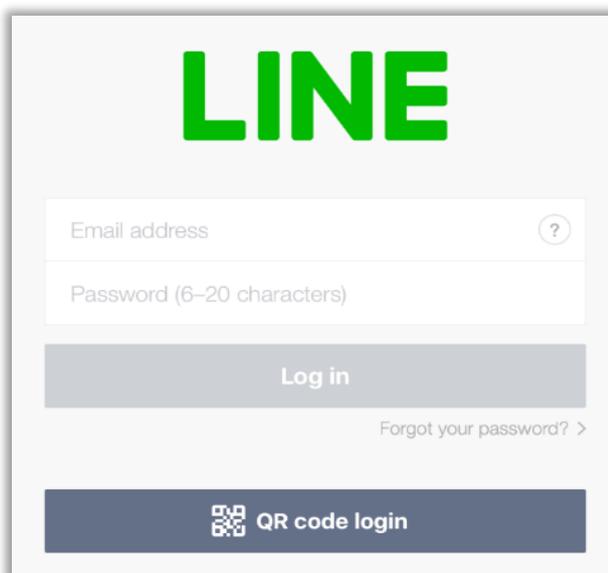
4. Tap the **Line** app to search for the app.



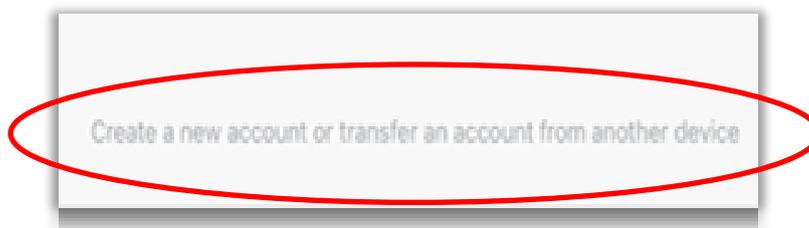
5. Tap **GET** to download the app onto your device. You may be prompted to sign in to **iTunes Store**; just type your password into the **Password** field then tap **OK** or use your **TouchID**. This will start the download process, which may take a while, depending on the speed of your Internet access. You can track the download progress.
You will know when downloading is completed once you see the **OPEN** button.



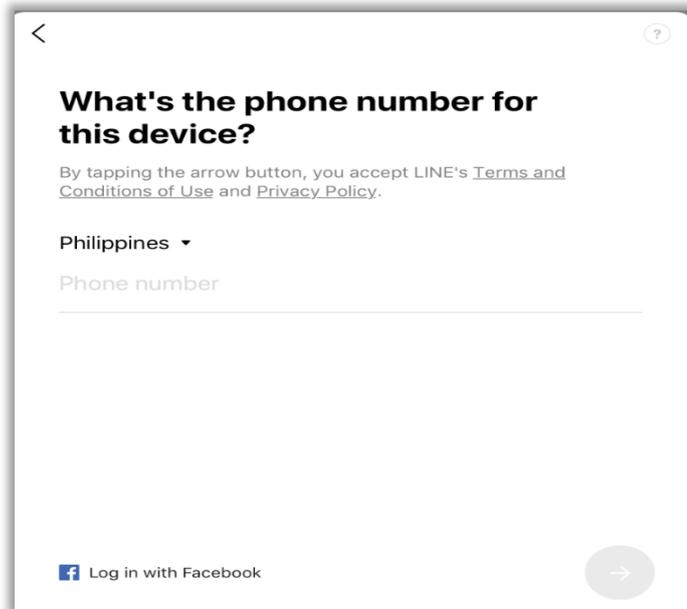
6. Tap the **OPEN** button to launch the app. The app will ask you to log in.



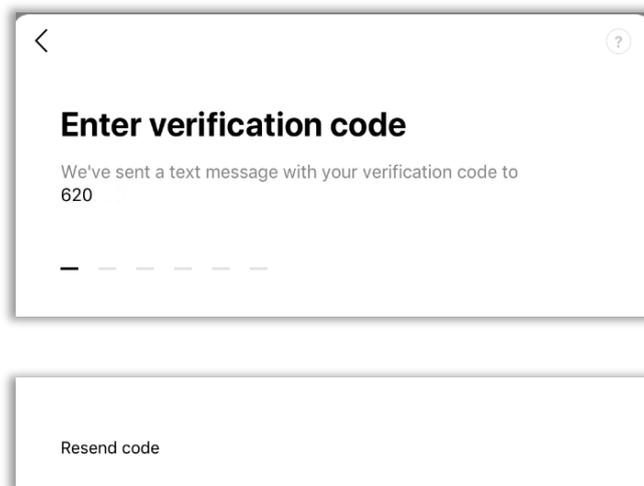
If you do not have an account, you can tap **Create a new account or transfer an account from another device** on the bottom of the page. You will be welcomed to **LINE**. Then, tap the **Start** button.



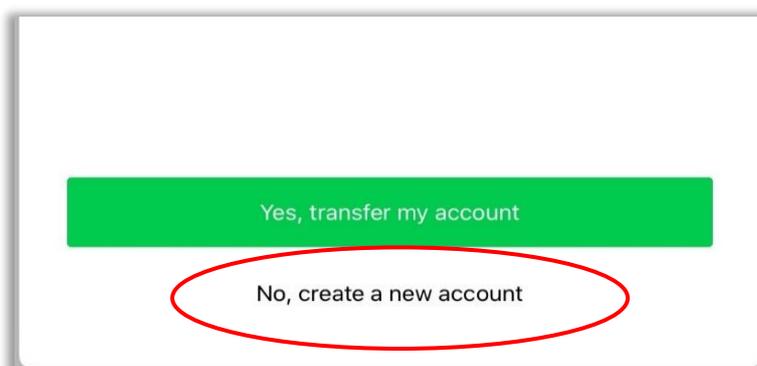
7. Tap **Create New Account** and provide a phone number. Make sure you tap on **Agree Terms & Conditions**.



8. You will have to verify your phone number. Enter the code sent to you via SMS.



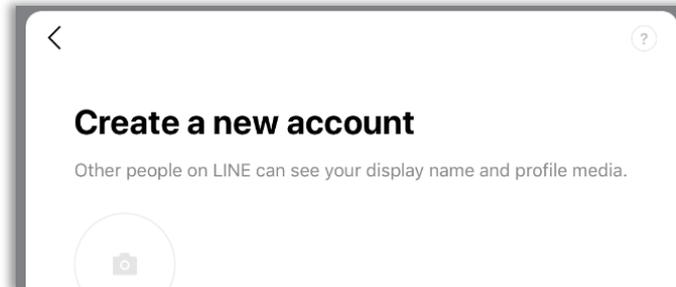
9. You will be asked if you already have an account. If you have an account, tap **Yes, Transfer my account** to get all your contacts' information in your new device. If you do not have an account, tap **No, create a new account**.



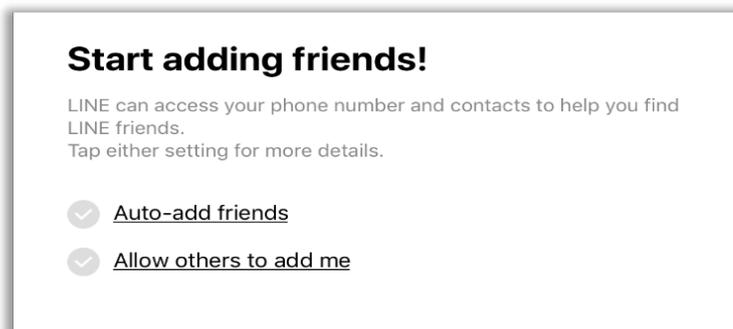
How to Create a LINE Account

To create a new account, follow the step-by-step guide below.

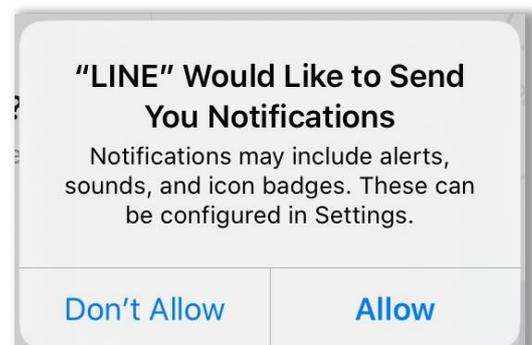
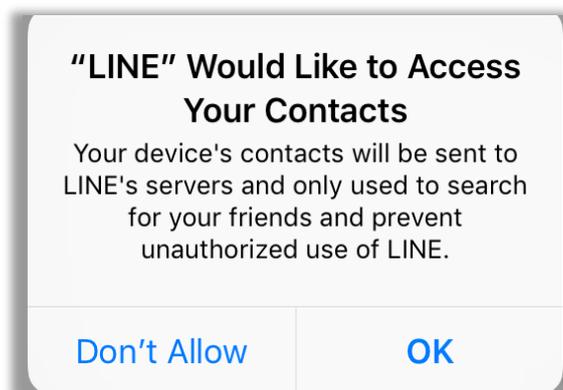
1. To create a **Line** Account you have to provide your name, your name, and create a password.



2. Tap **Auto-add friends** and **Allow others to add me**, in order to expand your contact list automatically. If you do not want, you can always add contacts manually when the app is fully installed.



3.  **LINE** will ask your permission to access your contacts and send you notifications. Tap **OK**.



4. Congratulations! You have successfully installed and logged into  **LINE** on your Apple mobile device.

3.3.3 Facebook Messenger

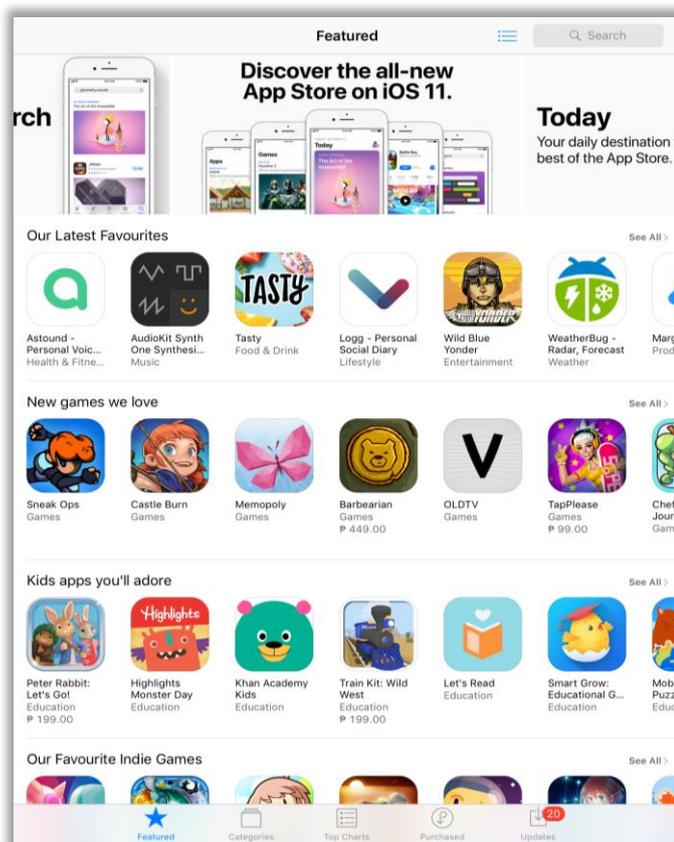
How to Install Facebook Messenger

Facebook Messenger is an instant messaging app that offers the same services as **LINE** and **Whatsapp**. It is the second most used messaging app,⁴⁶ and its usage has spread worldwide. In some countries, such as the Philippines, telecommunication companies permit Facebook Messenger to be accessed for free or without data charges. In this context, Facebook Messenger is very accessible to students from poorer economic backgrounds.

Teachers may take advantage of this accessibility to use Facebook messenger for organizing study circles, facilitating student discussions, and promoting after-class communication with and between students. Having a **Facebook** profile is not necessary to use **Facebook Messenger**.

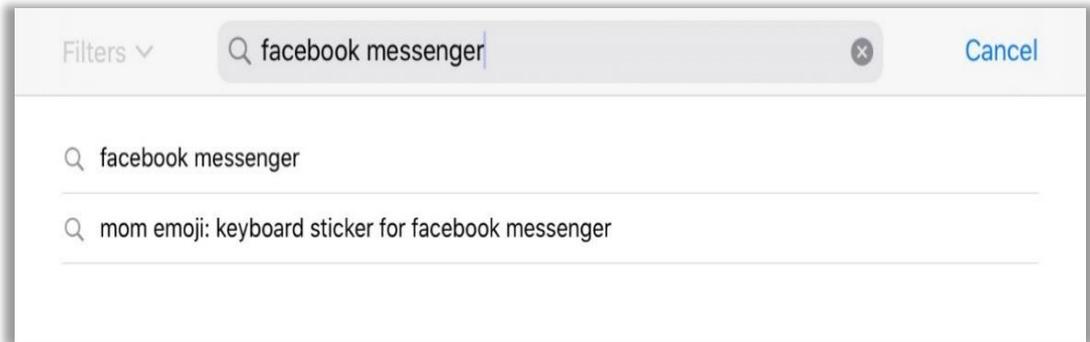
To install the  **Facebook Messenger**, follow the step-by-step guide below.

1. Tap the  **App Store** icon to open the apps. This will take you to the **Featured** page.

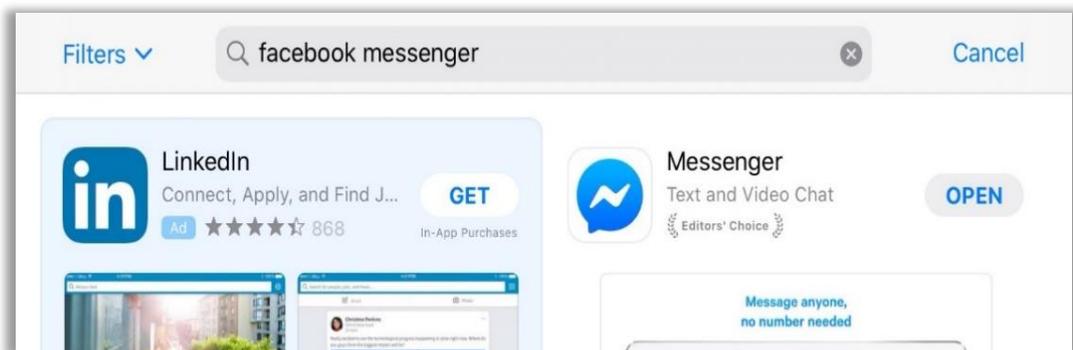


46. Birgit Bucher, 2019. *Messenger People*. "WhatsApp, WeChat and Facebook Messenger Apps – Global Messenger Usage of Messaging Apps, Penetration and Statistics," accessed January 22, 2021, <https://www.messengerpeople.com/global-messenger-usage-statistics/>.

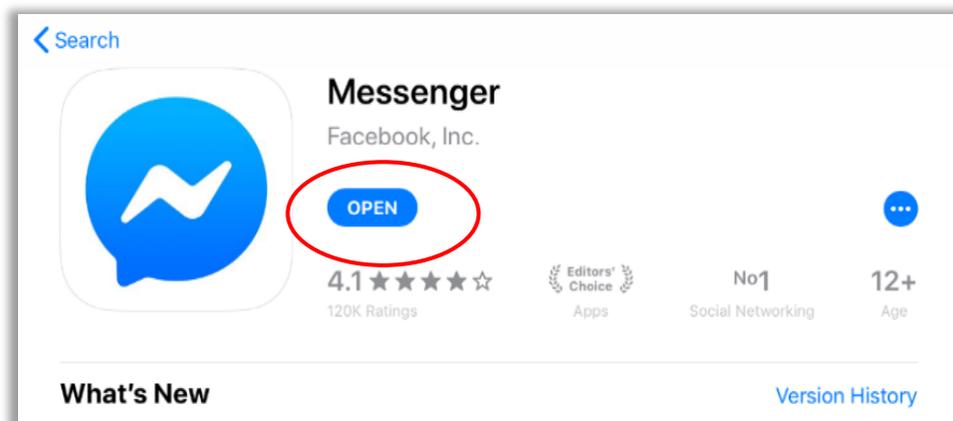
2. Tap the **Q Search** icon and type "Facebook Messenger" into the **Search** field. Note that suggestions will appear as you write.



3. Tap the **GET** button to download the Facebook Messenger app onto your Apple mobile device.

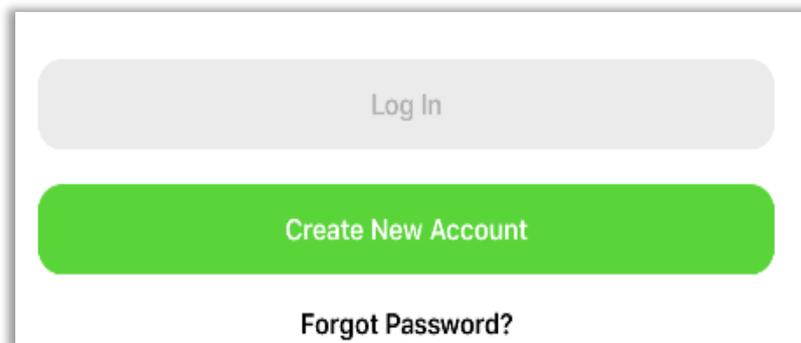


4. You may be prompted to sign-in to **iTunes Store**; just type your password into the **Password** field then tap **OK** or use your **TouchID**. This will start the download process, which may take a while, depending on the speed of your Internet access. You can track the download progress. You will know once you see the **Open** button.



How to Create Facebook Messenger Account

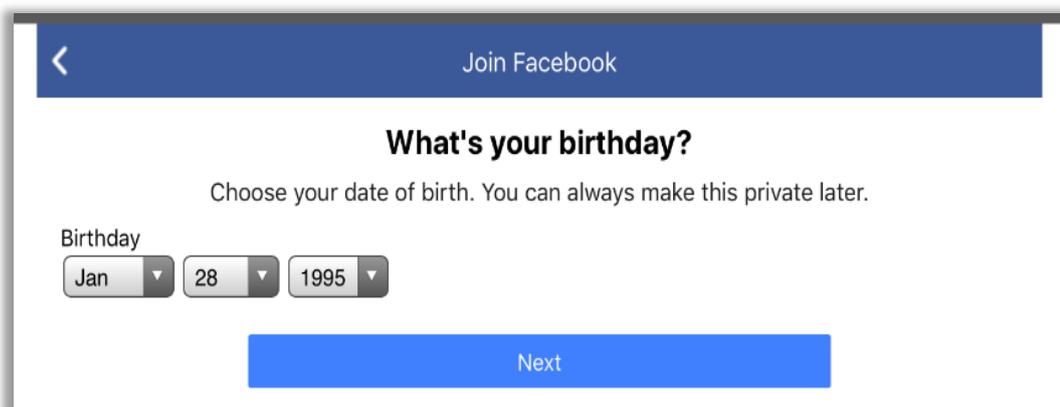
1. Tap the **OPEN** button to launch the Facebook Messenger app. The app will ask you to log in or to create a new account.



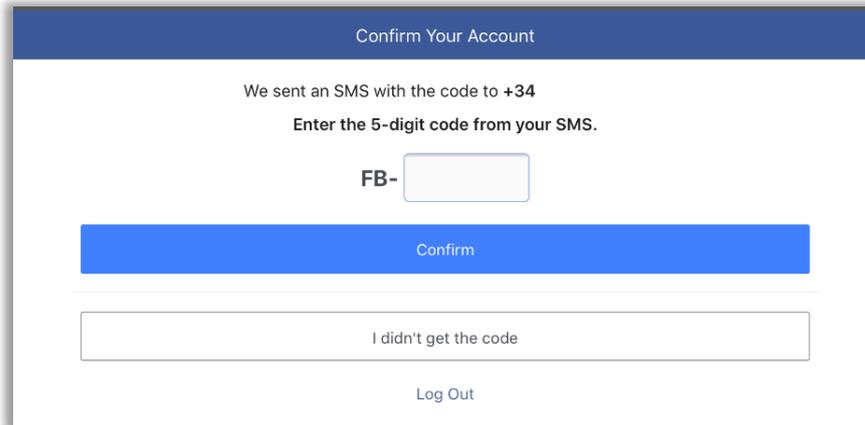
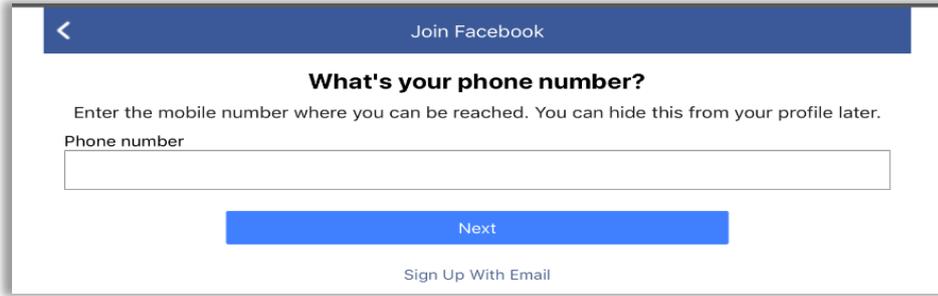
2. Tap **Create New Account** and enter your first name and last name. Then, tap the **Next** button.

A screenshot of the Facebook "What's your name?" form. The title "Join Facebook" is at the top. Below it, the heading "What's your name?" is followed by the instruction "Enter the name you use in real life." There are two input fields: "First name" and "Last name". A blue "Next" button is at the bottom.

3. Enter your birthdate and phone number in order to continue.

A screenshot of the Facebook "What's your birthday?" form. The title "Join Facebook" is at the top. Below it, the heading "What's your birthday?" is followed by the instruction "Choose your date of birth. You can always make this private later." There are three dropdown menus for the birthday: "Jan", "28", and "1995". A blue "Next" button is at the bottom.

4. You will get an SMS with the confirmation code. Enter this code.



5. Congratulations! You have successfully installed and logged in to  **Facebook Messenger** on your Apple mobile device.

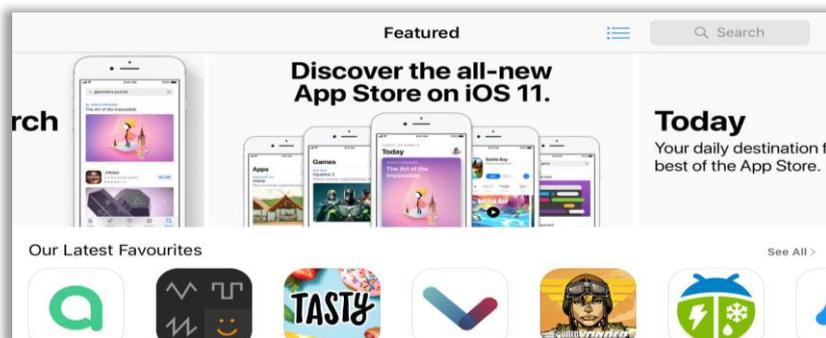
3.3.4 Viber

How to Install Viber

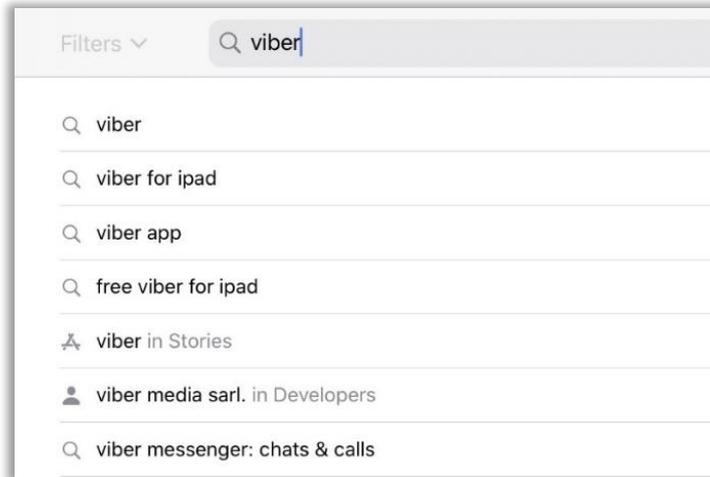
Viber also offers the same instant messaging services, as well as free calls among **Viber** users as Facebook Messenger, and it is the fourth most used free messaging app.

To install the  **Viber** on your Apple mobile device, follow the step-by-step guide below.

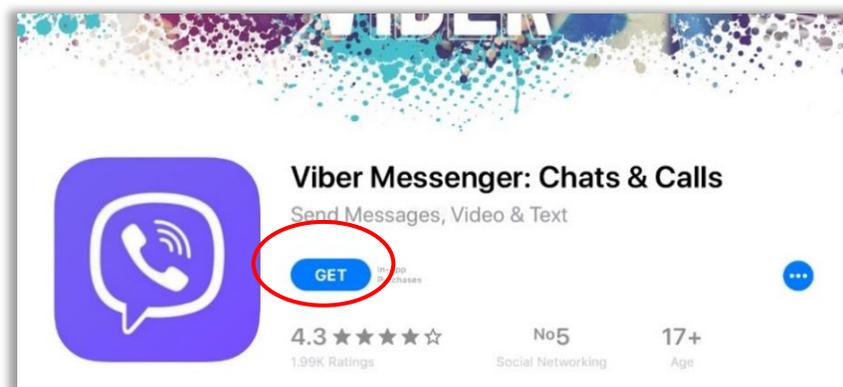
1. Tap the  **App Store** to search the apps. This will take you to the **Featured** page.



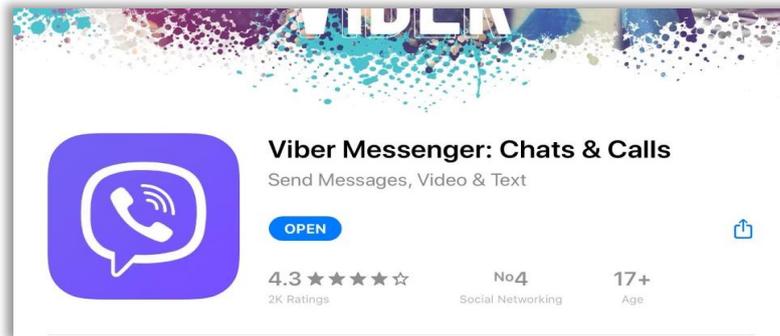
2. Tap **Search** and type "Viber" into the Search field. Note that suggestions will appear as you write.



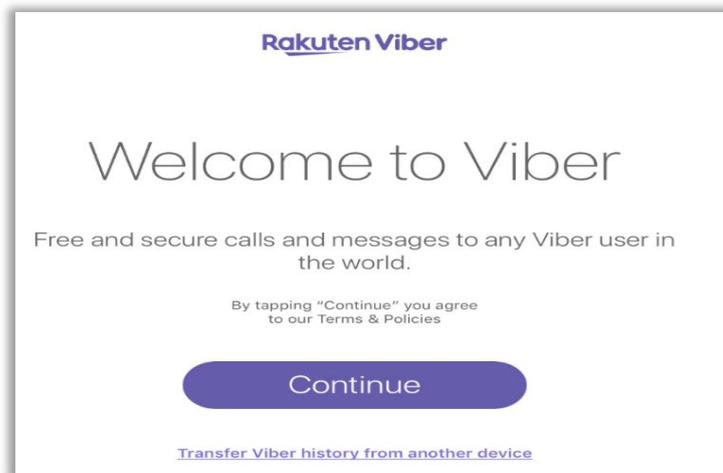
3. Tap **Viber** to search for the app. Then, tap the **GET** button to download the Viber app onto your device.



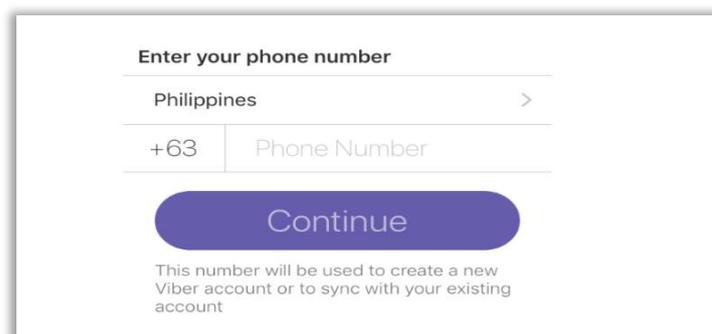
4. You may be prompted to sign-in to **iTunes Store**; just type your password into the **Password** field then tap **OK** or use your **TouchID**. This will start the download process, which may take a while, depending on the speed of your Internet access. You can track the download progress. You will know when downloading is completed once you see the **OPEN** button.



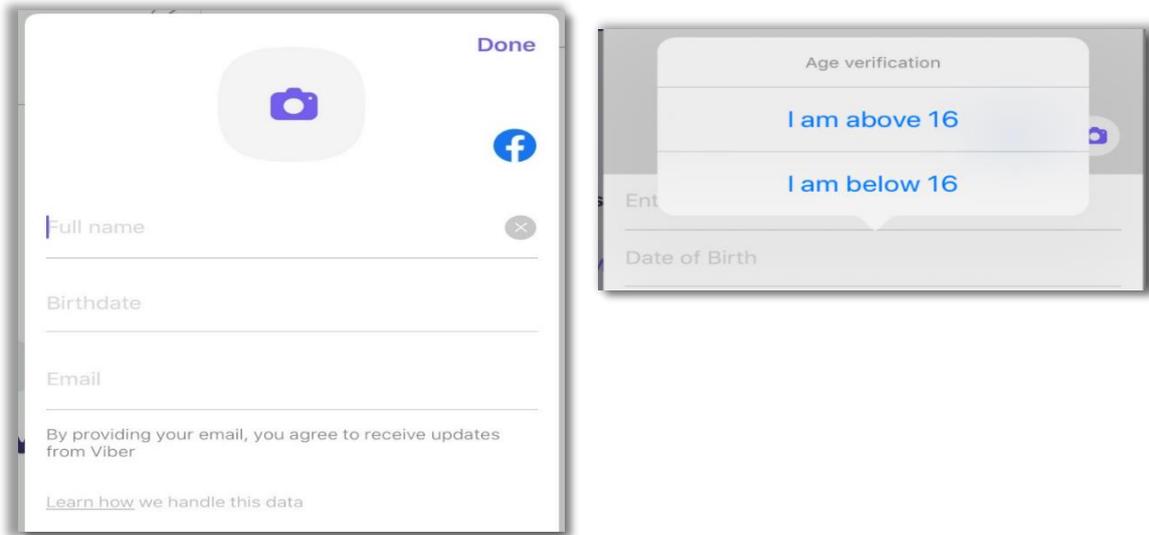
5. Tap the **Open** button to launch the Viber app. The app will ask you to tap **Continue** to agree to the Terms & Policies.



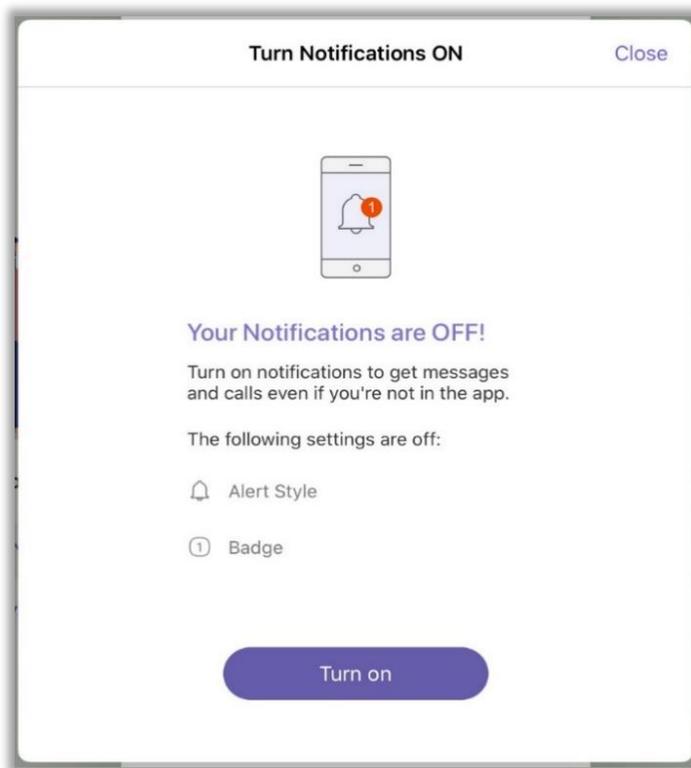
6. You will have to enter a phone number and a verification code will be sent to you via SMS. Once you enter the verification code, the next page will load automatically.



7. You may now enter your personal details to create a Viber profile and to verify that you are above 16 years old.



8. You can also allow notifications and manage the period for doing a back-up of the messaging information contained in the app.



9. Congratulations! You have successfully installed and logged in to  **Viber** on your Apple mobile device.

3.4 What Are Some of the Most Popular Mobile Device Peripherals?

A peripheral is any computer device that is not part of the essential computer (the processor, memory, and data paths) but is situated relatively close by. A near synonym is “input/output (I/O) device.” Some peripherals are mounted in the same case as the main part of the computer such as the hard disk drive, a compact disc read-only memory (CD-ROM) drive, and a network interface controller (NIC). Other peripherals are outside the PC case such as the printer and an image scanner, attached by a wired or wireless connection.⁴⁷

Mobile devices can be connected to various, usually wireless, peripherals such as foldable keyboards, gamepads, and others. You can connect your Apple mobile device to various peripherals including:

- **Health and fitness bands or trackers.**

Health and fitness are two areas where different companies have produced many advanced mobile device peripherals for. Several wearable electronic products that can monitor your physical activities, heart rate, and other stuff are now available in the market. These peripherals share information with mobile apps to help you plan your health and fitness regimen. These are usually connected to mobile devices via Bluetooth.⁴⁸



Fitbit Charge 3. Image source: <https://www.wearable.com/fitness-trackers/the->

- **Medical peripherals.** Firms like iBGStar create medical peripherals that help diabetics, for instance, track their blood glucose levels.⁴⁹ These peripherals can be plugged into devices so their apps can gather information and guide you to stay healthy.



Dexcom G6. Image source: <https://www.dexcom.com/insulin-pumps>

47. Margaret Rouse, “Definition: Peripheral,” WhatIs.com, TechTarget, accessed January 22, 2021, <http://searchmobilecomputing.techtarget.com/definition/peripheral>.

48. Luke Johnson, “Nike+ FuelBand Review,” Trusted Reviews, TrustedReviews Limited, October 21, 2013, <http://www.trustedreviews.com/nike-fuelband-review>.

49. MyStar, accessed January 22, 2021, <https://www.mystarsanofi.com/web/>.

- **Miscellaneous.** With the upgrade of smartphone software and hardware, multiple gadgets and peripherals have been developed to enhance users' experience in diverse areas. Nowadays, peripherals range from wireless chargers to camera accessories.



Logitech Ultrathin Keyboard Cover.

Image source: <https://www.cnet.com/reviews/logitech-ultrathin-keyboard-cover-for-ipad-air-review/>

For more information on Apple mobile device peripherals, read "From keyboards to fast charging, 10 iPad accessories you need to check out."⁵⁰

50. Jason Cipriani, 2020. "From keyboards to fast charging, 10 iPad accessories you need to check out," CNN Underscored. accessed January 22, 2021, <https://us.cnn.com/2020/01/29/cnn-underscored/best-ipad-accessories/index.html>.

Chapter 4: Advanced Users

Advanced users refer to those who have been actively using mobile devices for personal and professional growth. In this level of competence, you will learn more about cloud storage and its various providers such as Google Drive, iCloud, OneDrive, and Dropbox. Proper etiquette will also be introduced to facilitate the promotion of acceptable values when using Apple mobile devices.

4.1 What Is Cloud Storage?

To some, finding enough storage to hold all data that they have acquired from their mobile devices and computers is a real challenge. Mobile devices generally have much less storage capacity than desktop or laptop computers. If you use your mobile device for taking large numbers of photographs or downloading music and videos, you can quickly fill up its memory storage capacity. Others prefer external storage devices such as thumb drives or CDs while some delete entire folders' worth of old files to make space for new ones. And some choose to rely on so-called "cloud storage."

Cloud storage may sound like it has something to do with the weather, but it really refers to saving data on an Internet-connected server. Instead of storing information on your device's hard drive or external drives, you can save it in the cloud. You can easily access your data over the Internet. Note, however, that cloud service providers only offer limited space free of charge. On average, you can only store up to 5 Gigabytes (GB) worth of data for free. Some, however, like Google Drive lets your store up to 15GB of data for free. If you want bigger storage space, you need to pay US\$5–10 a month for 50GB.

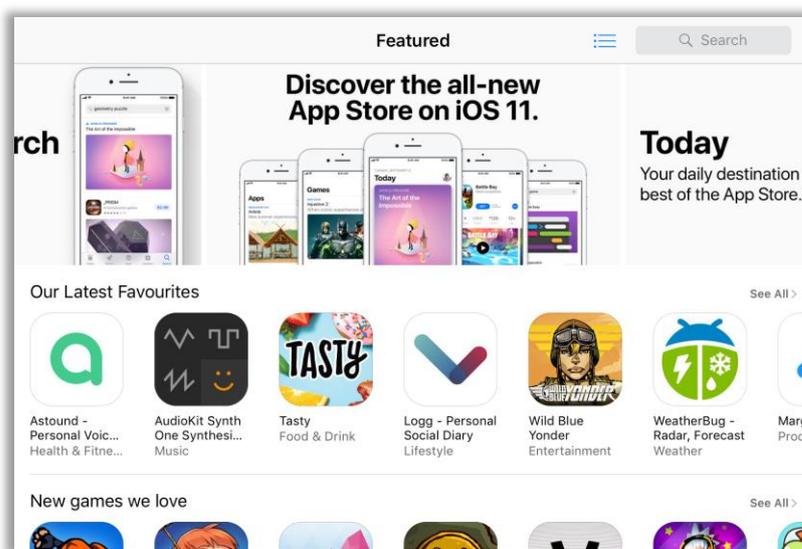
While cloud storage offers a lot of conveniences, bear in mind that you are storing files on a service provider's servers. As such, your information's safety is in your chosen provider's hands. Reputable providers such as Google, Apple, Microsoft, and Dropbox claim that they protect users' data. However, just to make sure, be careful when choosing the files you store on their servers. Make sure the information they contain is not sensitive or confidential. Carefully read their Terms of Service before availing of their services.

4.1.1 Google Drive

How to Install Google Drive

Google Drive lets you securely store your files and access them from any device.⁵¹ You can also open and edit your files from any device. You automatically get 15GB of storage for free, but you can buy more data storage. Your 15GB of storage includes  **Google Drive**,  **Google Photos**, and  **Gmail**. To install  **Google Drive** on your Apple mobile device, follow the step-by-step guide below.

1. Tap the  **App Store** to open the app. This will take you to the **Featured** page.

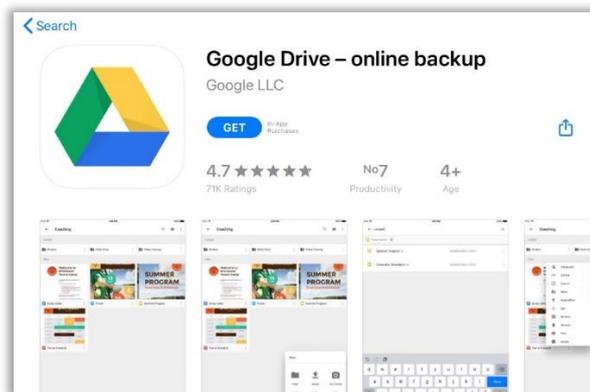


2. Tap  **Search** and type "Google Drive" into the **Search** field. Note that suggestions will appear as you write.

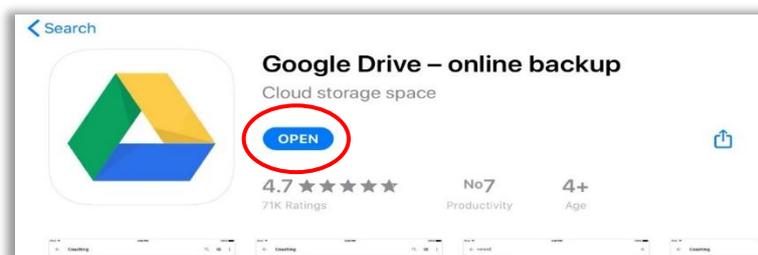


51. "How to Use Google Drive," Google Drive Help, Google, accessed January 22, 2021, <https://support.google.com/drive/answer/2424384?hl=en>.

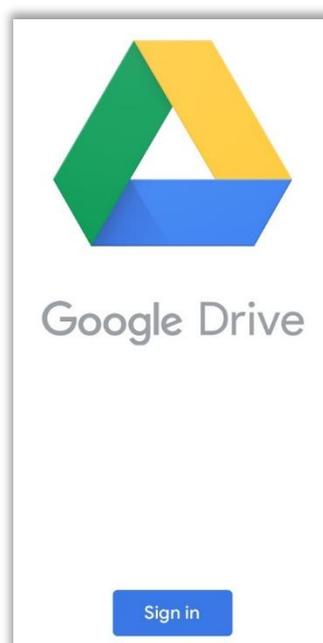
3. Tap the **GET** button to download the Google Drive app onto your device.



4. You may be prompted to sign into **iTunes Store**; just type your password into the **Password** field then tap **OK** or use your **TouchID**. This will start the download process, which may take a while, depending on the speed of your Internet access. You can track the download progress. You will know once you see the **Open** button.

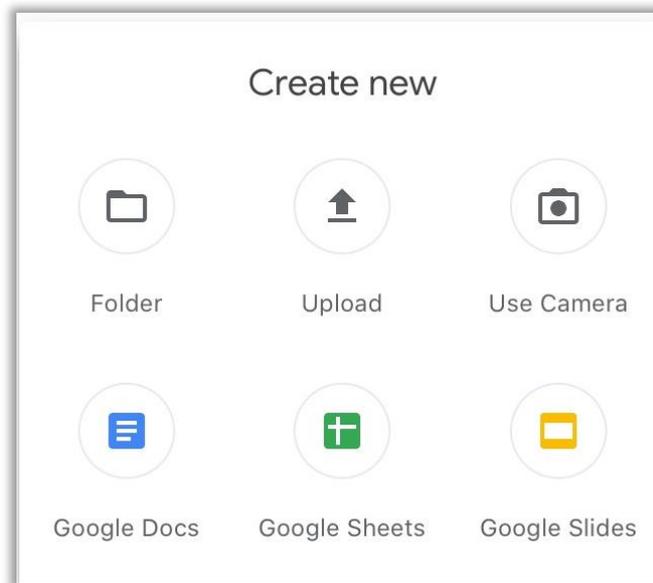


5. You will be asked to sign in. Tap **SIGN IN**. Note that you will automatically be signed in if you are online in Gmail. Congratulations! You have successfully installed  **Google Drive** on your Apple mobile device.



How to Upload a File in Google Drive

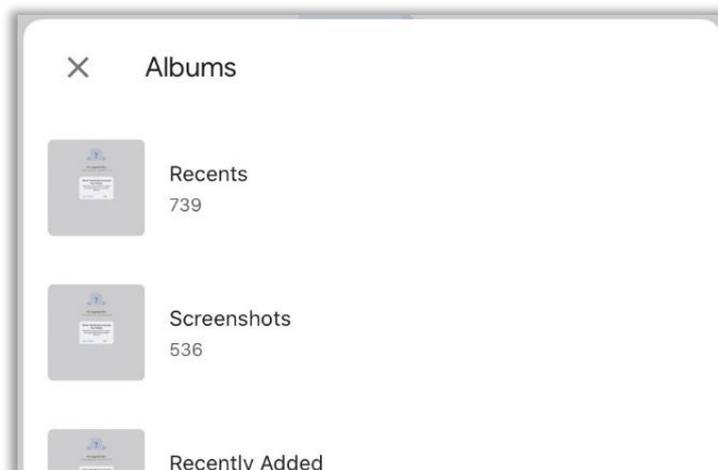
1. Once you are logged in to  **Google Drive**, tap . This will make a list of options appear.



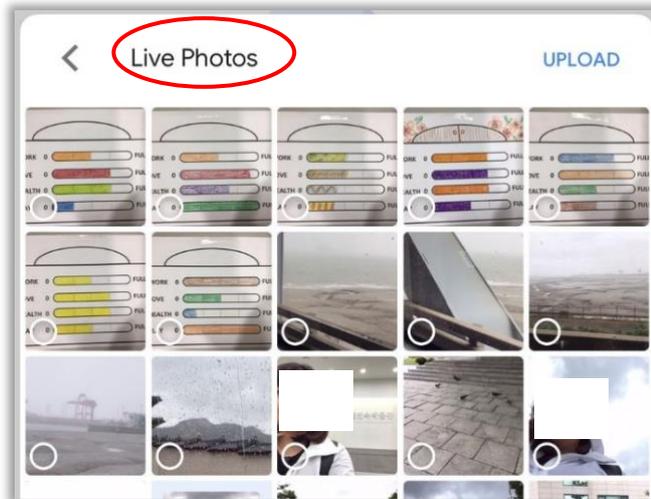
2. Tap  **Upload**. This will make another list of options appear.



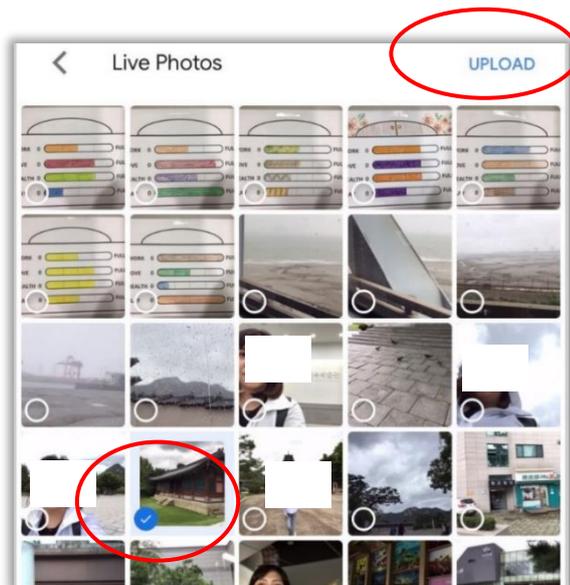
3. Tap the name of the source where you would like to get a file to upload from (in this case, **Photos and Videos** ). This will open the **Albums** page.



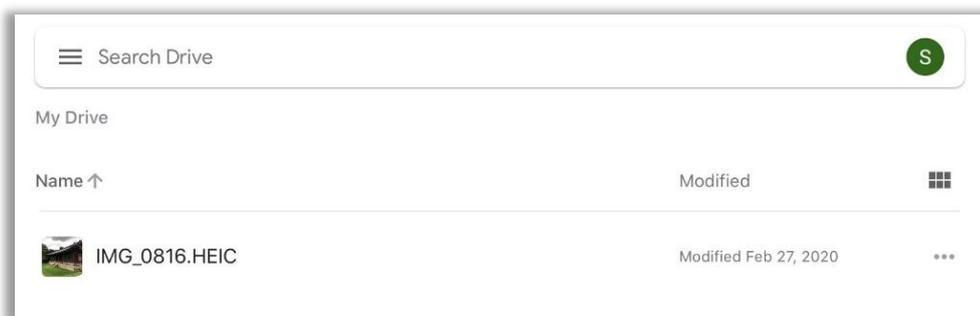
4. Tap the name of the album where you wish to get a file from (in this case, a photo). This will open your chosen album.



5. Tap the photo you would like to upload. It will then be checked. Then tap **Upload**.



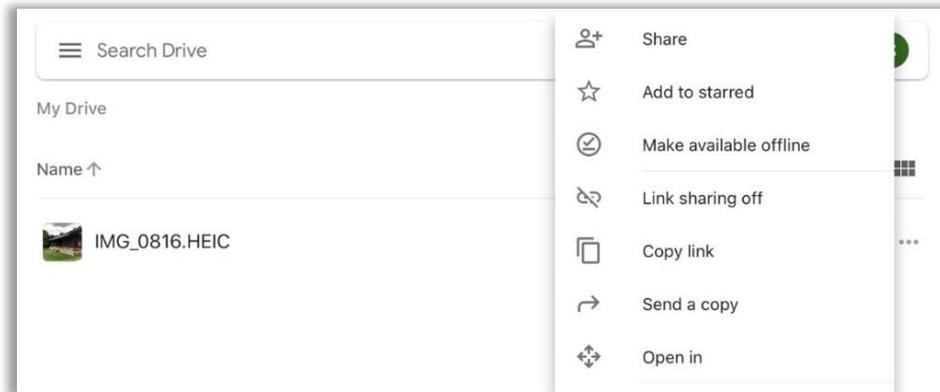
6. Wait until the upload is done. You should see the photo you uploaded on  **Google Drive**.



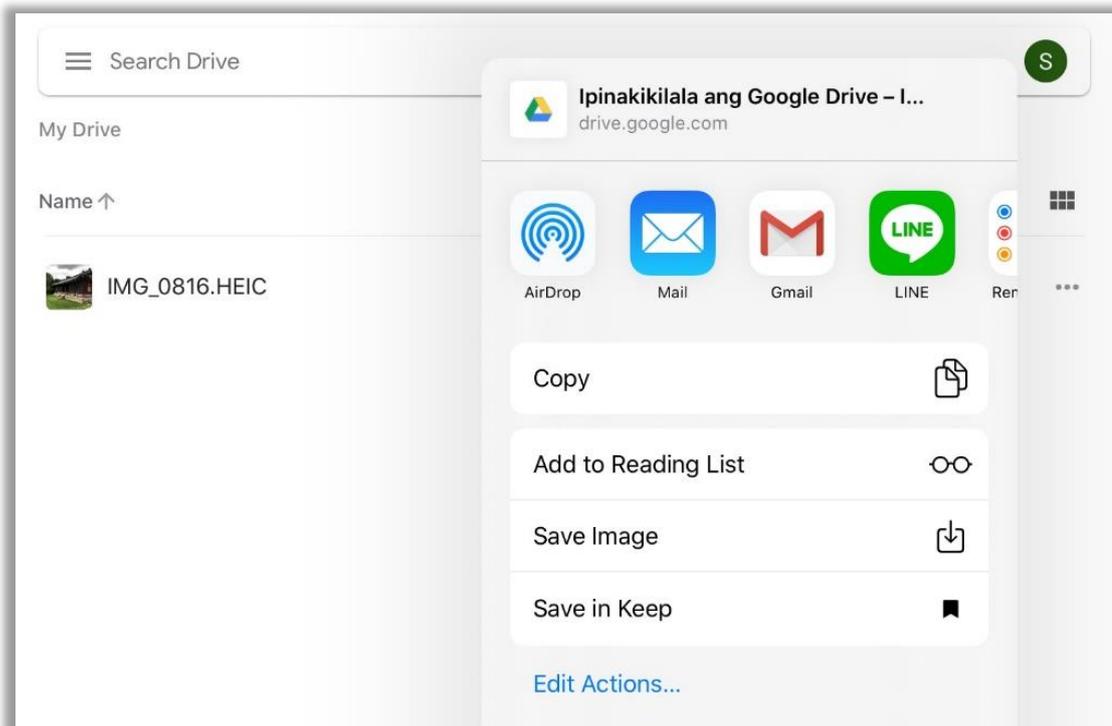
How to Download a file from Google Drive

To download a file from  Google Drive, follow the step-by-step guide below:

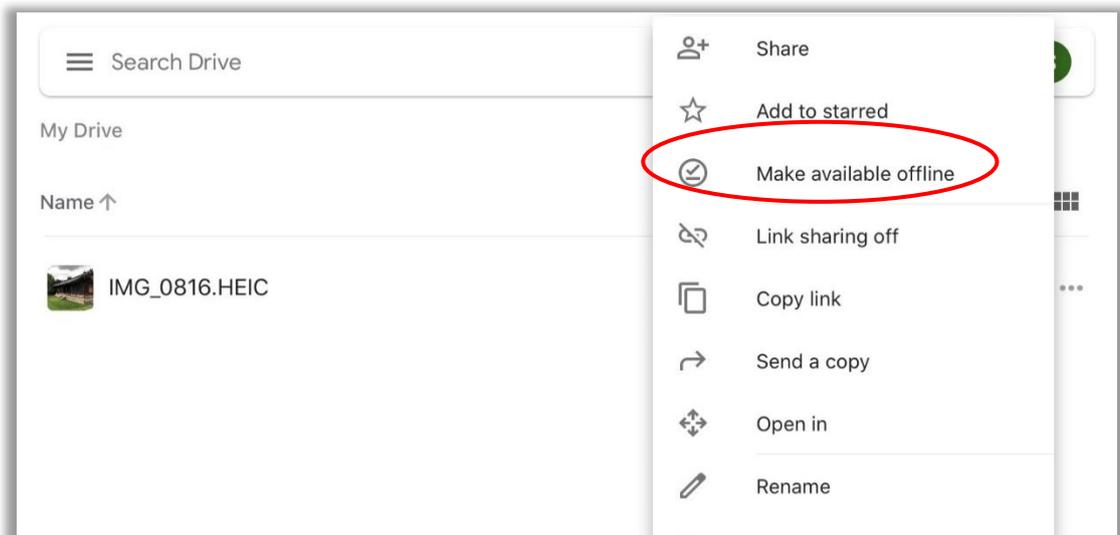
1. Log in to  **Google Drive**, then tap  beside the name of the file you wish to download. This will make a list of options appear.



2. Tap  **Send a copy**. This will open a list of options.



3. Tap  **Save Image**. This will download the file to your Apple mobile device. If you do not want to save the content in your phone, you can tap **Make available offline**. In this way, you will be able to access the content on  **Google Drive** even without an Internet connection.



4. Congratulations! You have successfully installed and used  **Google Drive** on your Apple mobile device.

4.1.2 iCloud

How to Sign Up for an iCloud Account

iCloud is Apple's own cloud-based data storage service especially designed for Apple mobile devices. It makes sure you always have the latest versions of your important information—documents, photos, notes, and contacts—on whatever Apple mobile device you are using. It lets you easily share photos, calendars, locations, and more with friends and family. It even helps you find your device if you lose it.⁵²

Unlike  **Google Drive**, however, you can only get web access to  **iCloud** if you are using an iOS, iPadOS or a Mac OS X device. On the bright side, **iCloud** is automatically included if you own an Apple mobile device and can be easily accessed on it.

To sign up for an **iCloud account**, follow the step-by-step guide below.

1. When you create an Apple ID, you can already access the  **iCloud** features, but you must turn its features on. Make sure that your device is running the latest OS version.
2. Tap the  **Settings** and  **General** then **Software Update**. This will tell your Apple mobile device to check for new updates. If your device does not need updating, you should see the following page.

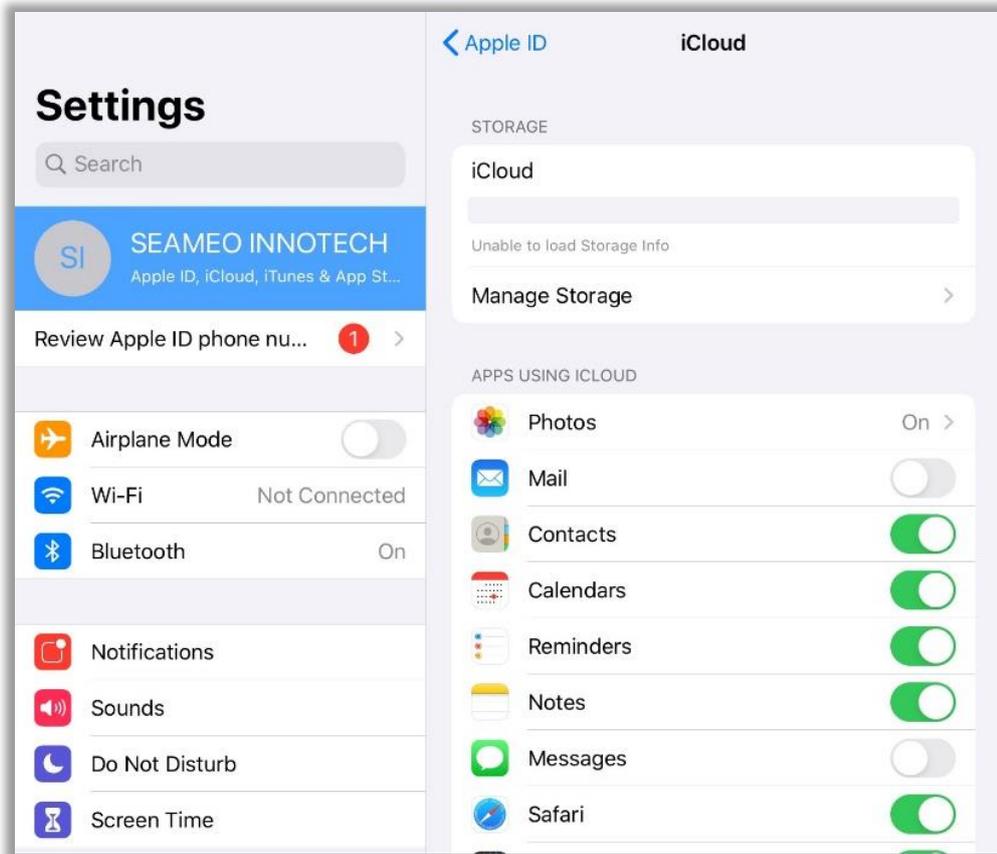
52. Apple Support. "iCloud user guide," accessed on January 22, 2021, https://support.apple.com/kb/PH2608?locale=en_US.



3. Tap the  **Settings**, then tap on your **Apple ID** name on the top corner. Then tap on the  **iCloud** to access the featured page.



4. Choose which features you would like to use **iCloud** for. Toggle their corresponding buttons on then tap **Save**. Note that syncing from one device to another automatically happens when the respective features are turned on. That means you do not have to move a file from one device to another.



5. Congratulations! You have just created your own **iCloud** account on your Apple mobile device.

4.1.3 OneDrive

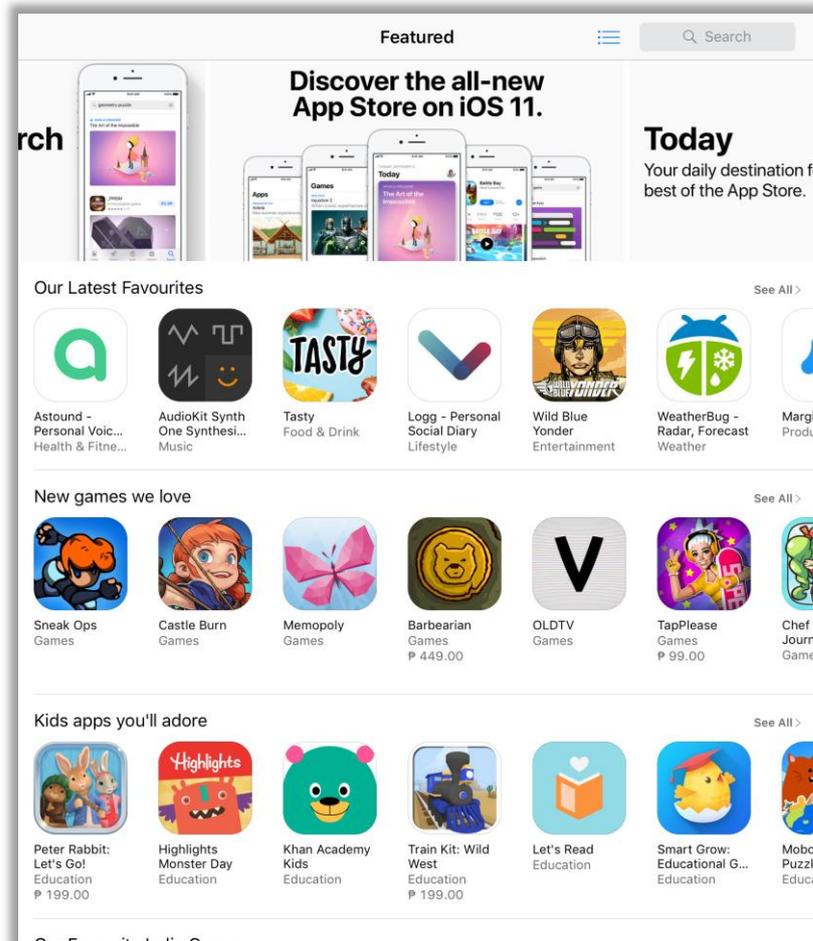
How to Install OneDrive

OneDrive is Microsoft's service for hosting files in the cloud, which is available for free to all owners of a Microsoft account. It offers users a simple way to store, sync, and share all kinds of files with other people and devices on the Web. The **OneDrive** app lets you to automatically back up your phone's photos and videos up to 5GB for free, or upgrade this to get 1TB of cloud storage through paid subscription. Here's how to download the Microsoft OneDrive app to your iPad device. Note that the app is compatible only with Apple mobile devices running iOS 12.⁵³

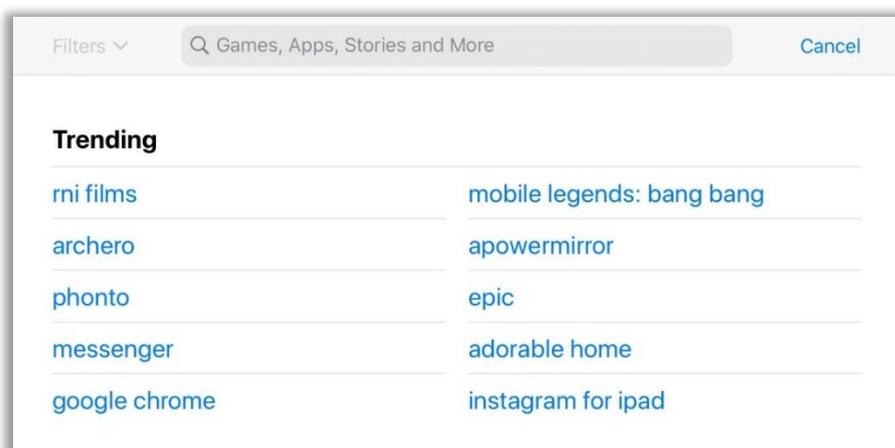
53. App Store Preview. "Microsoft OneDrive," accessed January 22, 2021, <https://apps.apple.com/us/app/microsoft-onedrive/id477537958>.

To install  **OneDrive** on your Apple mobile device, follow the step-by-step guide below.

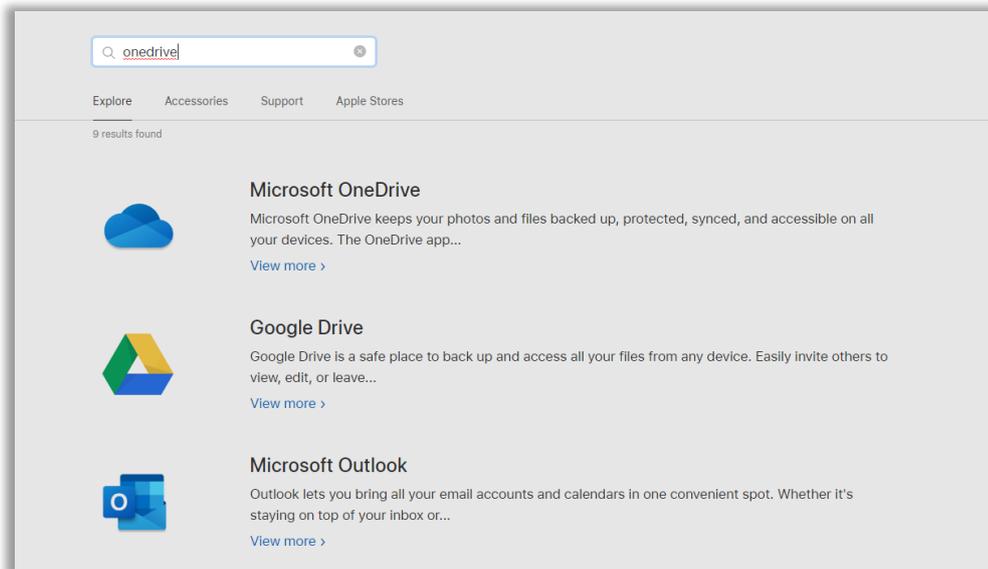
1. Tap the  **App Store** to open the app. This will take you to the **Featured** page.'



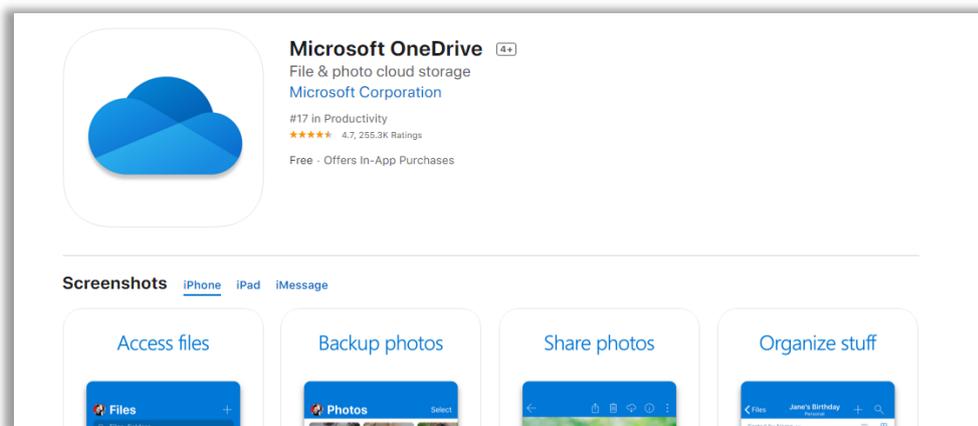
2. Tap  **Search**. Note that trending searches will appear.



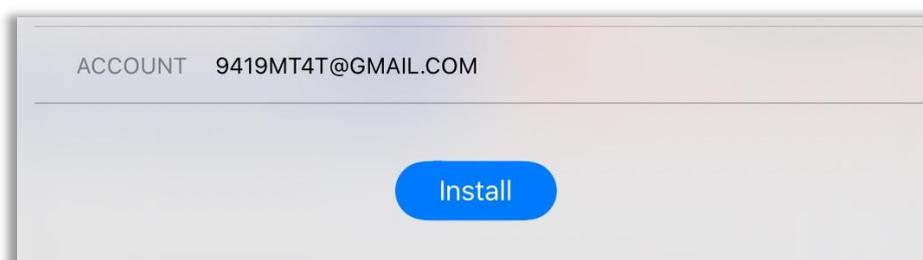
3. Type **“onedrive”** into the **Search** field. Note that suggestions will appear as you type.



4. Then, tap on the app you want to get to open the **download** page. Tap **GET** to download the app onto your Apple mobile device.



5. You may be prompted to sign-in to **iTunes Store**; just type your password into the **Password** field, then tap **OK** or use your **TouchID**. This will start the download process, which may take a while, depending on the speed of your Internet access. You can track the download progress. You will know once you see the **Open** button.

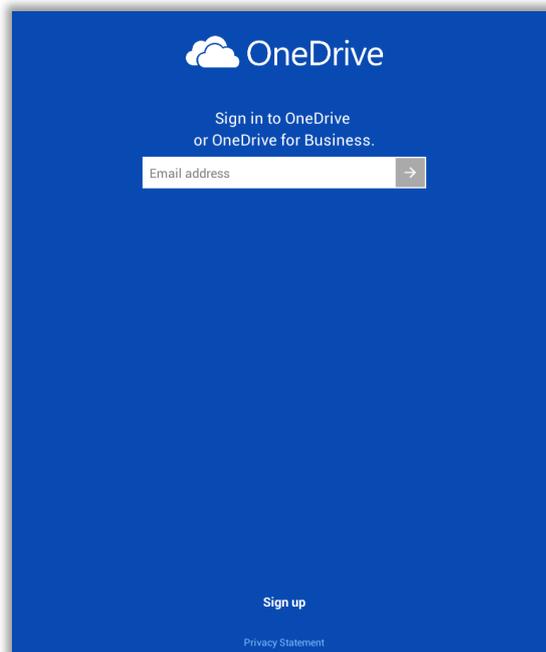


7. Tap the **OPEN** button to launch the app. Congratulations! You have successfully installed  **OneDrive** on your Apple mobile device.

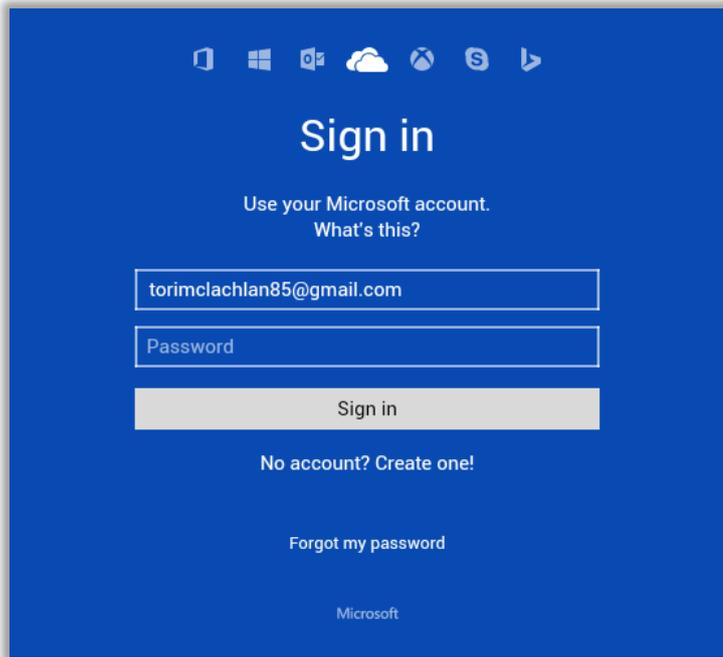


To sign in on  **OneDrive** using your Apple mobile device, follow the step-by-step guide below.

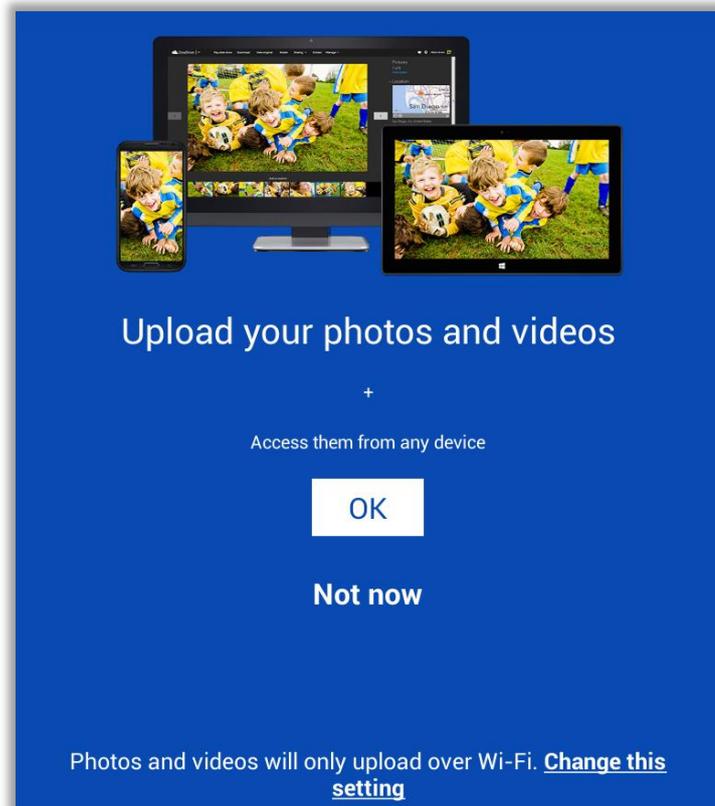
1. To open the **Sign In** page, just tap [sign in](#).



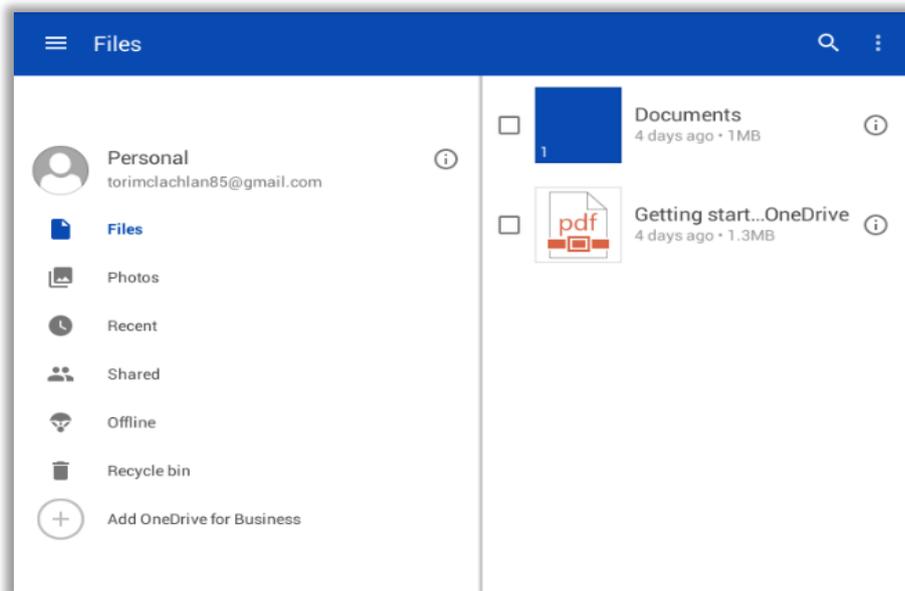
2. Type your e-mail address then tap . You will be prompted for your password.



3. You will be prompted if you want to automatically back up photos taken with your device on  **OneDrive**.



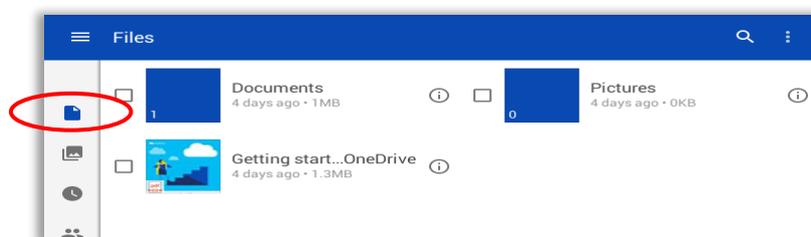
4. Tap Not now. This will open your drive OneDrive.



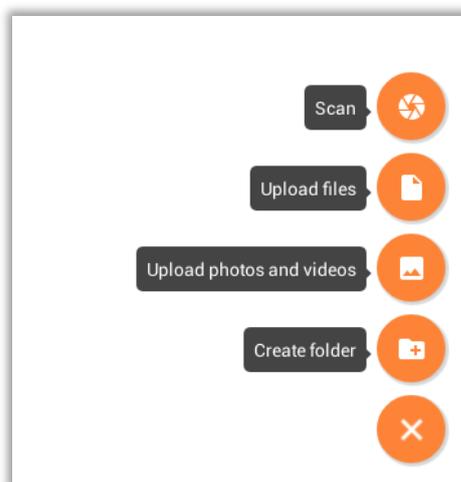
How to Upload a File in OneDrive

To upload a file, follow the step-by-step guide below.

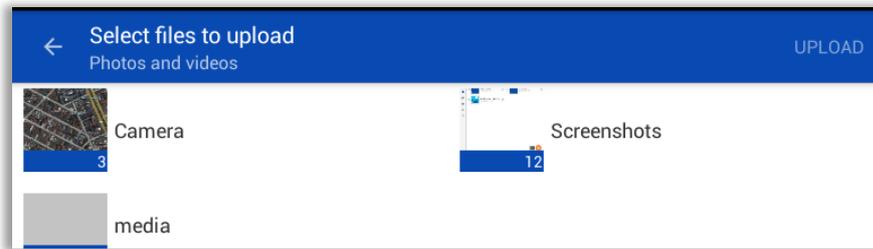
1. To upload a file, tap . This will open the **Files** page.



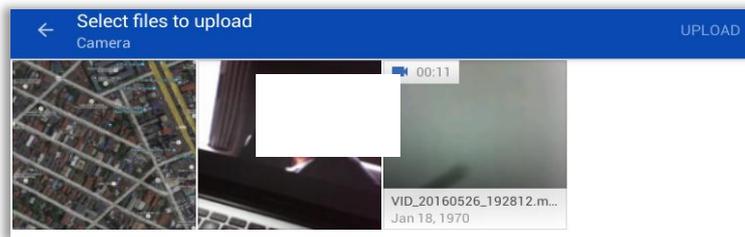
2. Tap this icon . This will make a list of options appear.



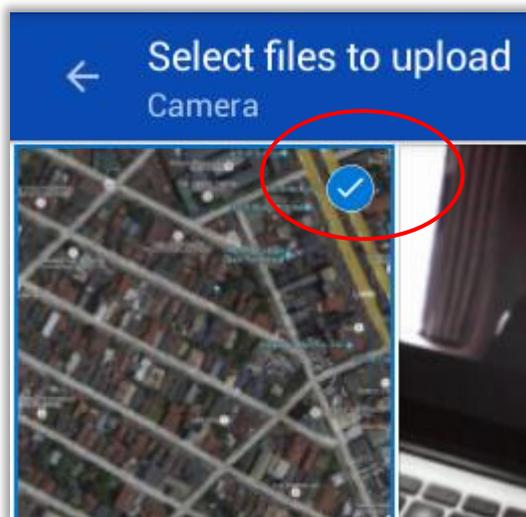
3. Tap **Upload photos and videos** . You will be asked to choose where you would like to get the file (in this case, a photo) that you want to upload.



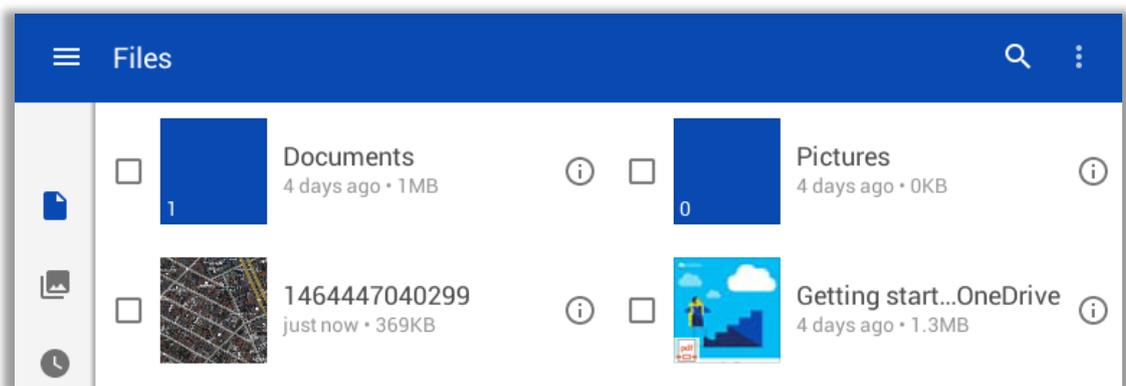
4. Tap the photo you would like to upload.



5. Note that your chosen photo will be marked with  on the top-right corner.



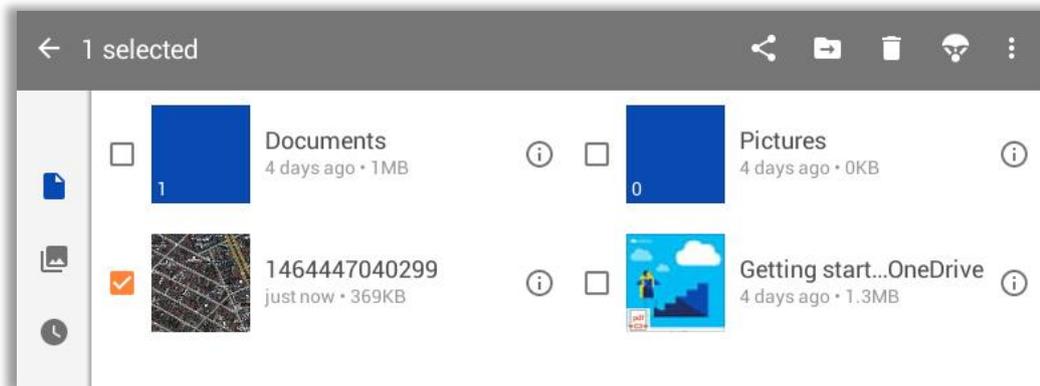
6. This will upload your chosen photo to  **OneDrive**.



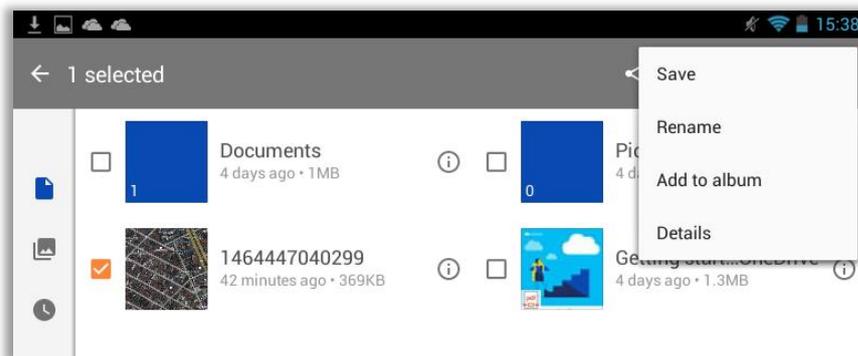
How to Download a File from OneDrive

To download a file from  **OneDrive**, follow the step-by-step guide below:

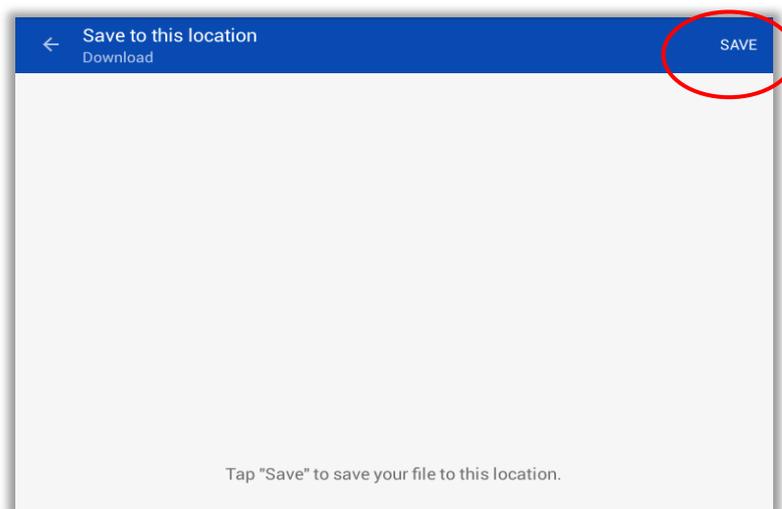
1. Tap the file you wish to download. This will be marked with on the left.



2. Tap . This will make a list of options appear.



3. Tap **Save**. This will save the file to your default photo folder.



4. Congratulations! You now know how to use  **OneDrive** on an Apple mobile device.

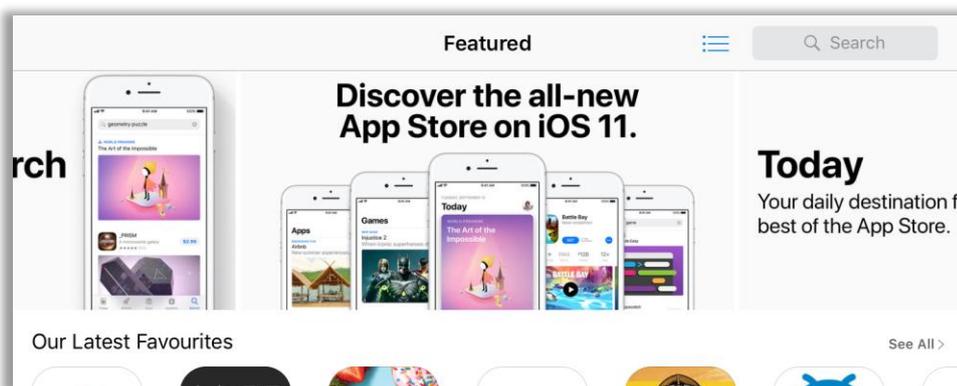
4.1.3 Dropbox

How to Install Dropbox

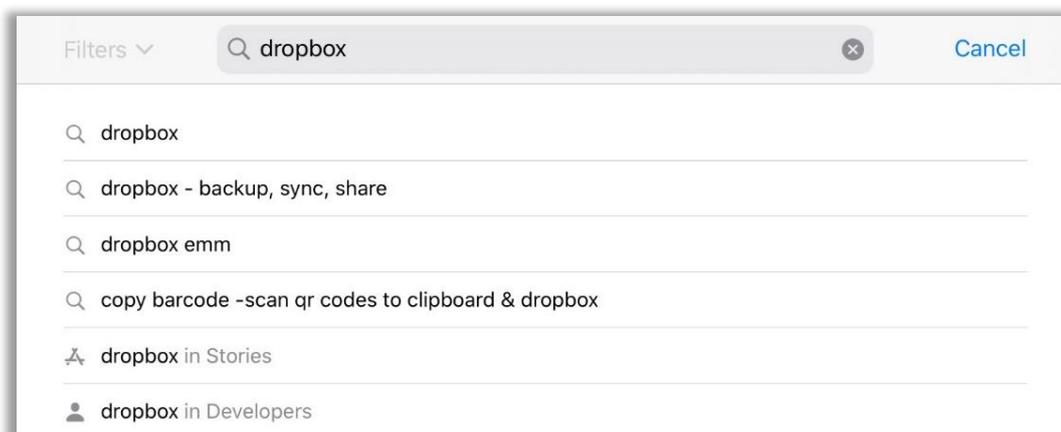
 **Dropbox** is a commercially available cloud-based data storage site that can store photos, documents, videos, and other files. Anything you add to it will automatically show up on all your PCs and mobile devices, where the  **Dropbox** app is downloaded. Using the Dropbox website, you can access your digital files from anywhere. **Dropbox** makes it very easy for you to share files with your fellow teachers and your students.⁵⁴ While there is a free version of Dropbox available, it is limited to just 2 GB of data storage. If you require more data storage, you may subscribe to a premium account for a certain fee depending on the amount of additional storage you will be needing. To install  **Dropbox**, follow the step-by-step guide below.

To install the  **Dropbox** in your Apple mobile device, follow the step-by-step guide below.

1. Tap the  **App Store** to open it. This will take you to the **Featured** page.

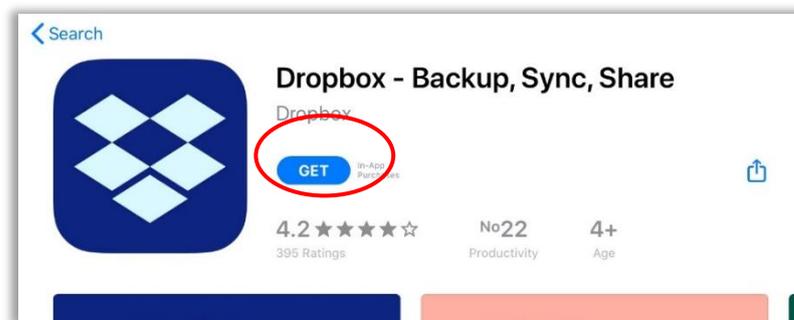
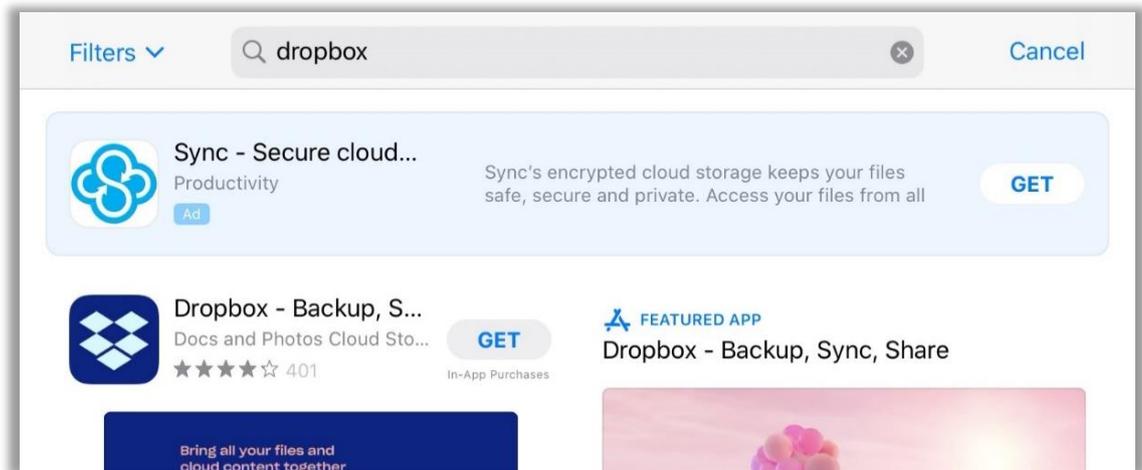


2. Tap  **Search** and type "Dropbox" into the **Search** field. Note that suggestions will appear as you write.

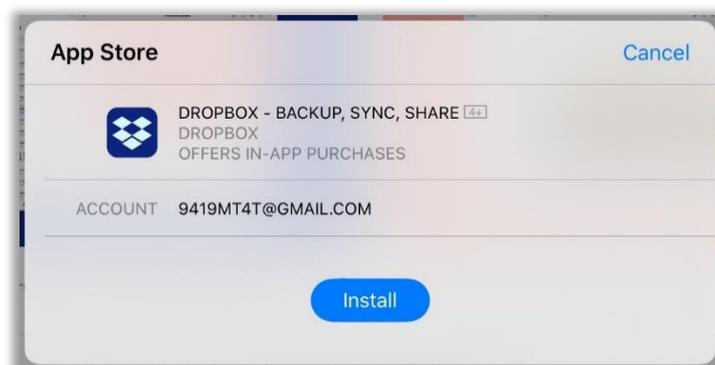


54. "What is Dropbox?," Dropbox, accessed January 22, 2021, <https://www.dropbox.com/features>.

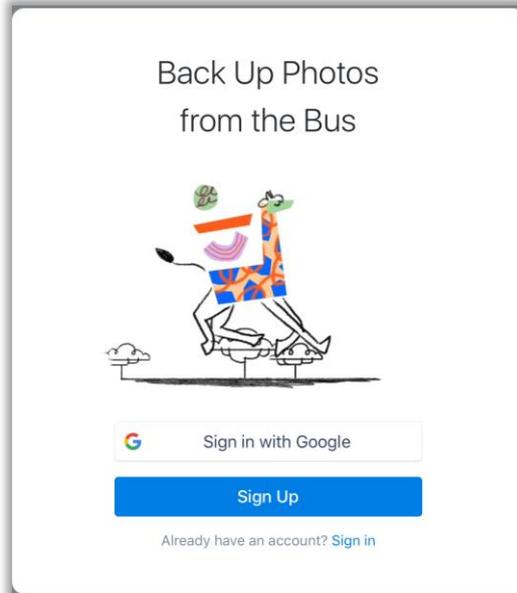
3. Tap the Dropbox app to open the download page. Then, tap GET to download the app onto your Apple mobile device.



4. You may be prompted to sign-in to **iTunes Store**; just type your password into the **Password** field, then tap **OK** or use your **TouchID**. This will start the download process, which may take a while, depending on the speed of your Internet access. You can track the download progress. You will know once you see the **Open** button.

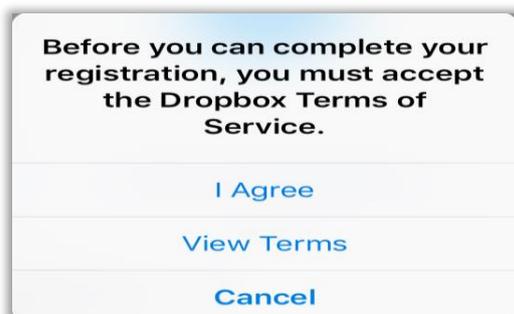


5. Tap the **OPEN** button to launch the app. Congratulations! You have successfully installed **Dropbox** on your Apple mobile device.

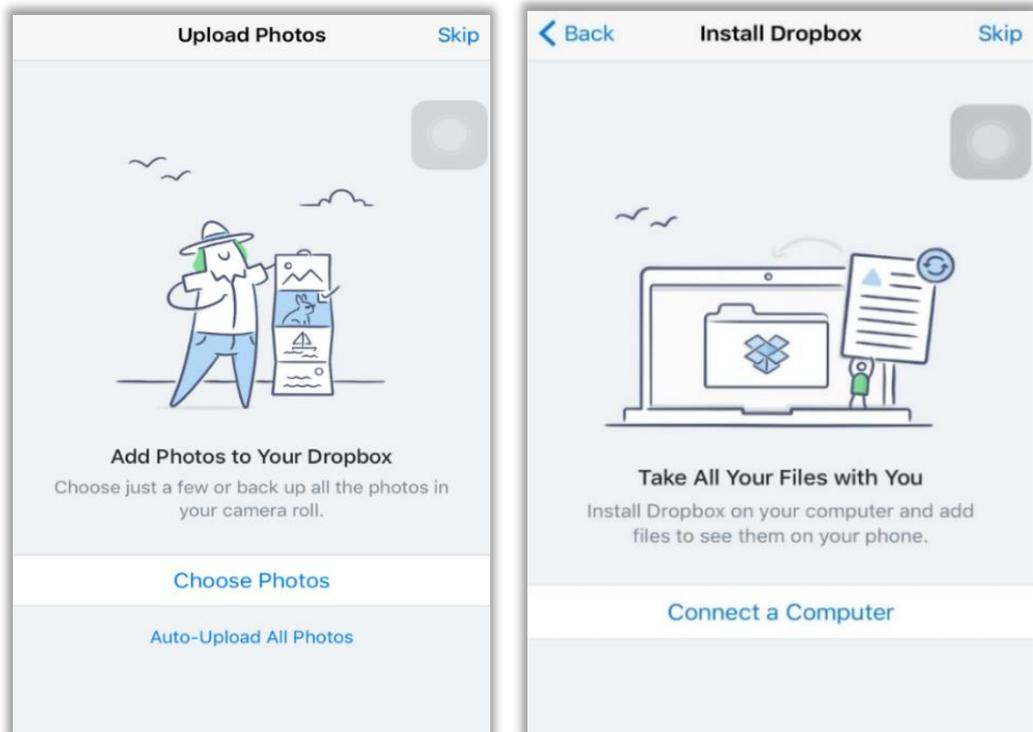


- To continue with the installation process, you may choose to **Sign in with Google** if you want to link your existing Google account to  **Dropbox** or tap the **Sign Up**. The following steps details how to create a  **Dropbox** account independent of an existing Google account. Tap **Sign Up**, then fill in the details required. Aside from a valid email address, you also need to create a password. Once done, tap **Create Account**.

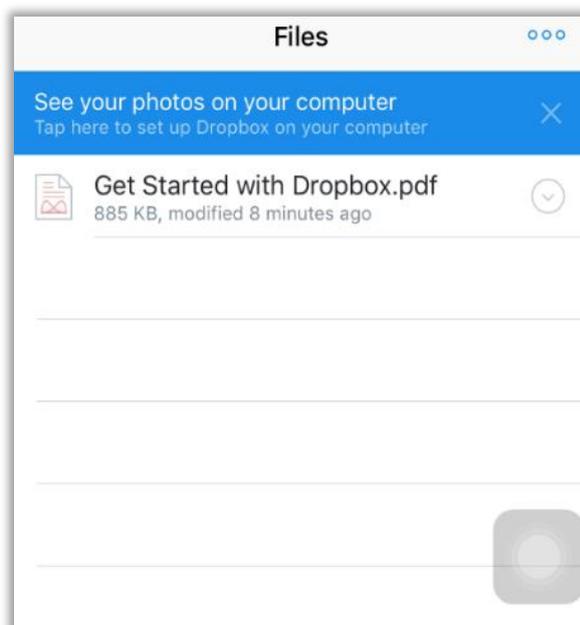
- You will be asked to accept the  **Dropbox Terms of Service**. Tap **I Agree** after you have read the **Dropbox Terms of Service**.



8. This will open the app.  **Dropbox** will ask you to personalize the settings of your account. You can go back to these later. For now, choose **Skip**. The **Dropbox** will also ask for permission to send you notifications; tap **Allow**.



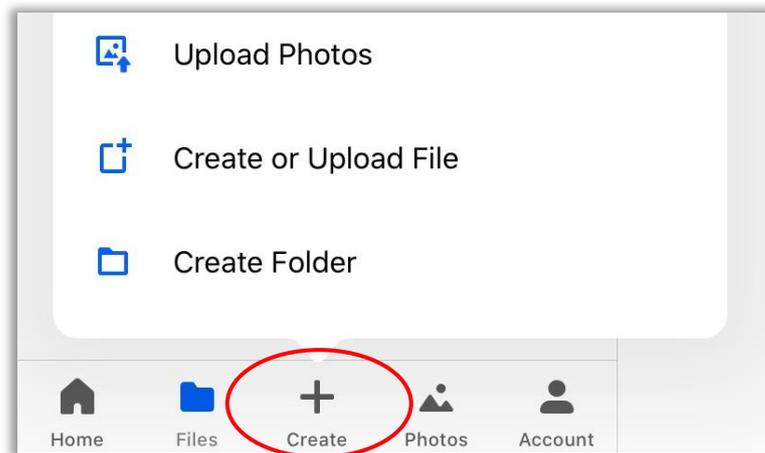
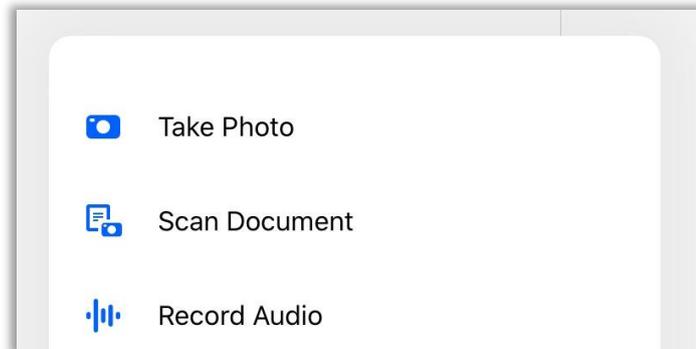
9. Congratulations! You are now ready to use  **Dropbox** on your Apple mobile device.



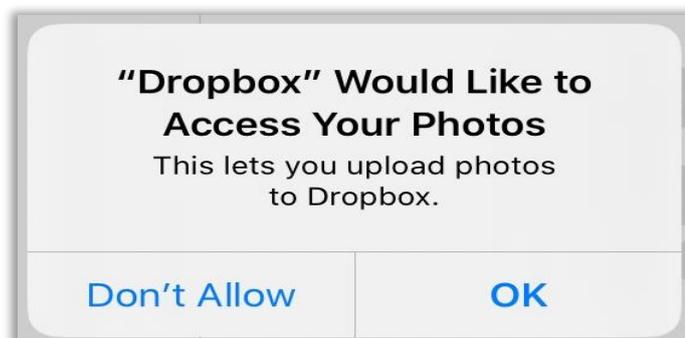
How to Upload a File in Dropbox

To upload a file in the  **Dropbox**, follow the step-by-step guide below:

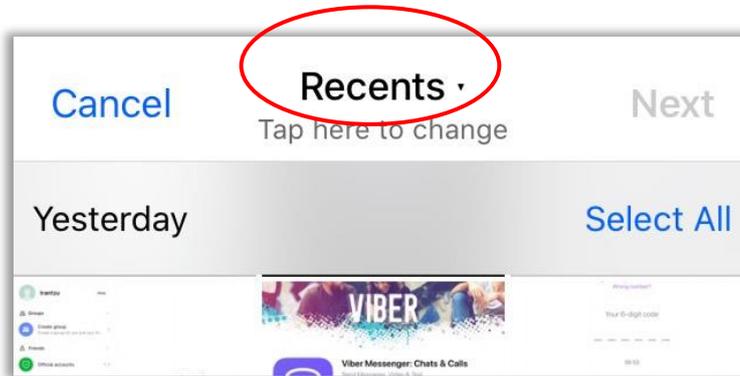
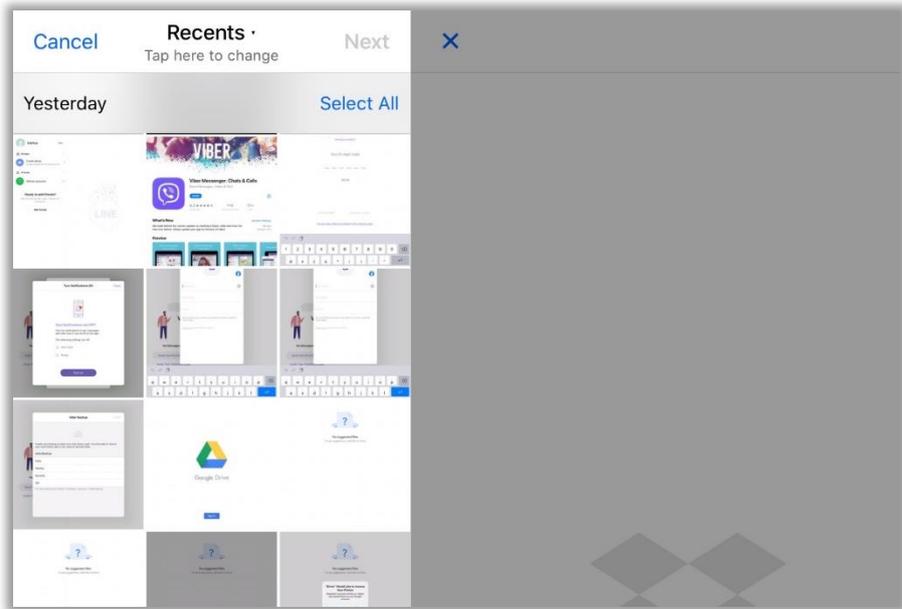
1. To upload a file, tap this icon  at the bottom. This will make a list of options appear.



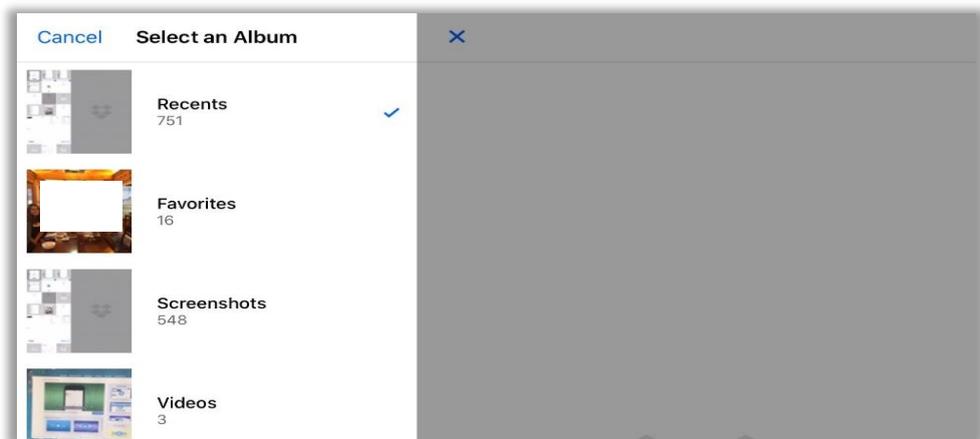
2. Tap **Upload Photos**. You will be prompted to give  **Dropbox** access to your photos, tap **OK**.



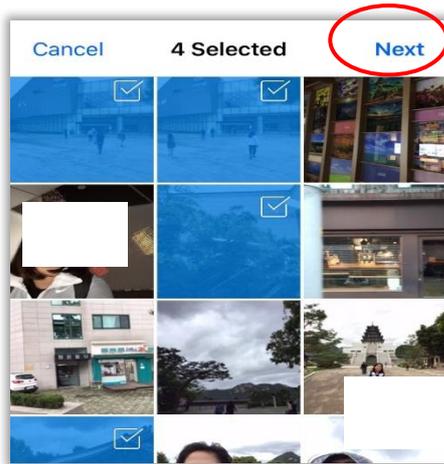
3. Your recent photos will appear. You can choose a photo among them, or you can tap on the name of the album to browse all the albums on your Apple mobile device.



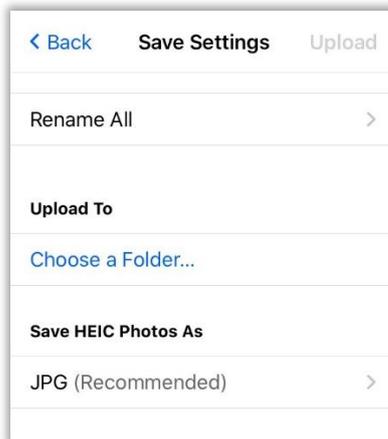
4. Tap the name of the album where the photo you want to upload is saved. This will open the album.



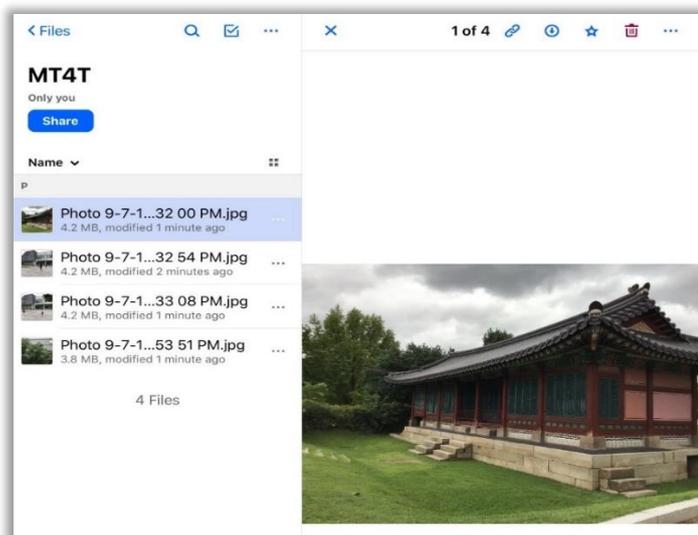
5. Tap the photo(s) you would like to upload. Note that a check mark will appear on each photo that you select. Once done, tap **Next**.



6. A list of settings will appear. From here, you can change the name of the photos, upload them to a specific album, or select the file type. Once you have chosen a folder, tap **Upload**.



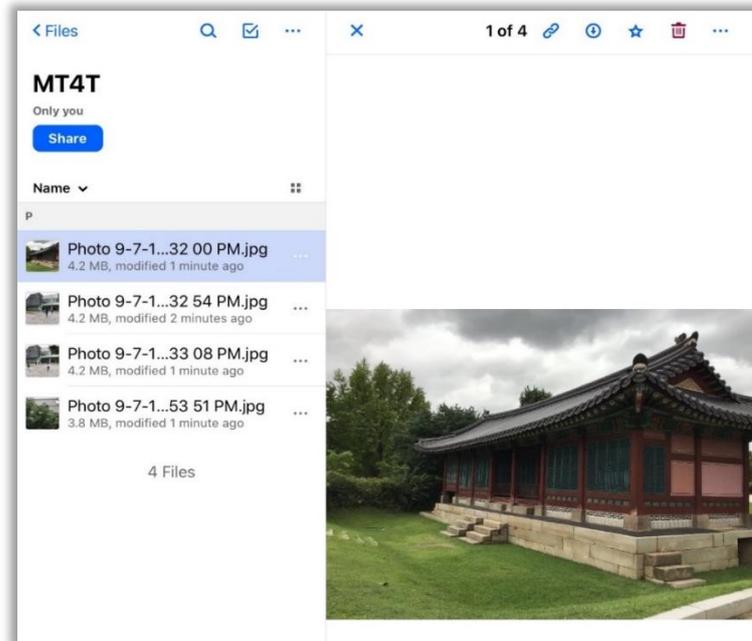
7. The photos will be uploaded to the folder, you can tap on one of them to view it.



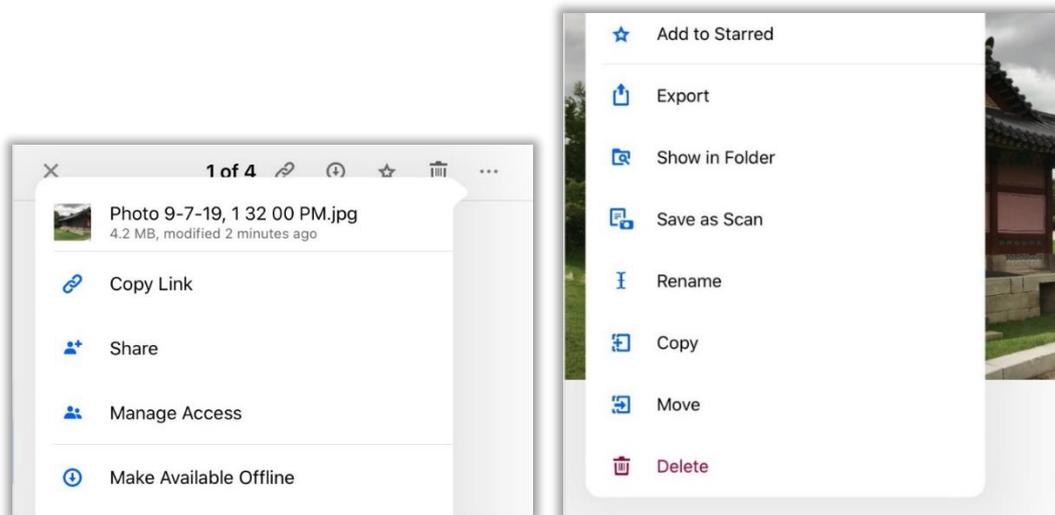
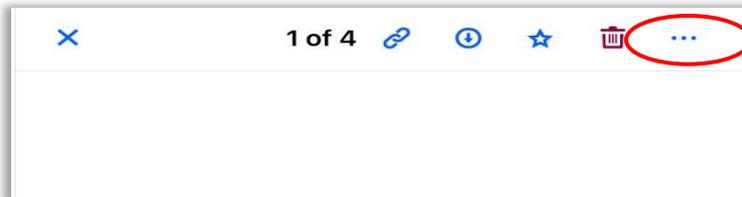
How to Download a File from Dropbox

To download a file from  **Dropbox**, follow the step-by-step guide below.

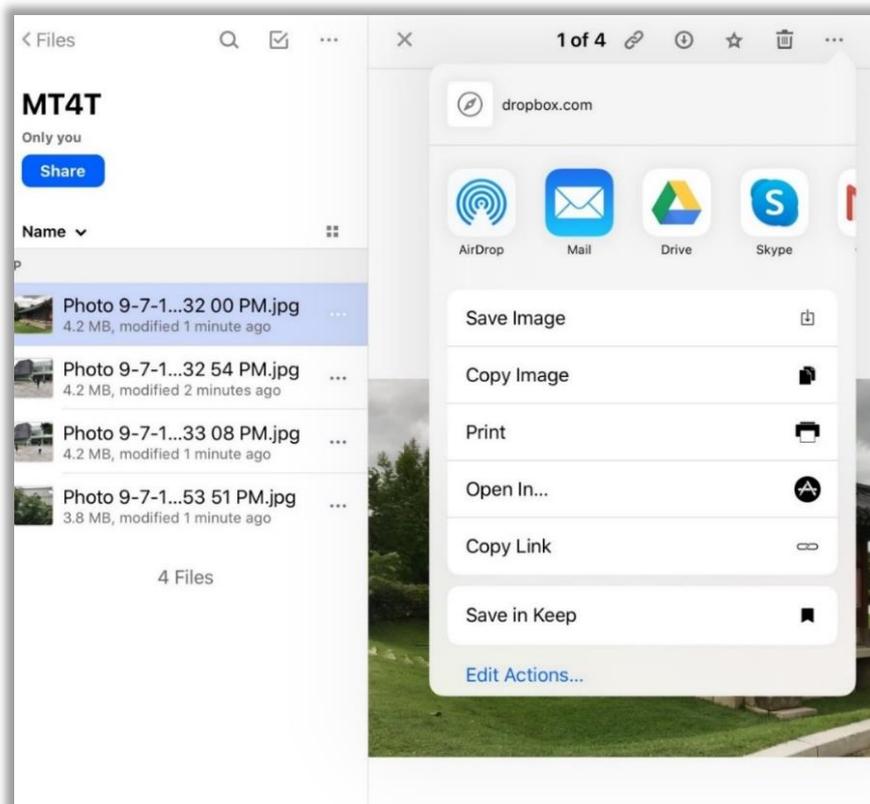
1. Log in to  **Dropbox**, then tap the filename of the file you want to download (in this case, it's the photo you uploaded earlier). This will open the photo.



2. Tap \dots on the top right. This will make a list of options appear.



3. Tap  **Export** the file. This will make another list of options appear.



4. Tap  **Save Image**. This will export the photo to your default photo folder. Congratulations! You now know how to use  **Dropbox** on your Apple mobile device.

4.2 What Is the Proper Etiquette when using a Mobile Device?

From phone calls and text messages to e-mails and social media websites, technology has given us countless ways to connect with one another. However, along with convenience comes a whole new set of etiquette rules. Technology users are faced with the responsibility of knowing how to properly communicate, as not every medium is suitable for all situations.

On your own time, you can choose to use your mobile device however you want. At work, however, you should be mindful of the people around you when using your mobile device. Using it should not get in the way of your job, too. The following are some pointers on proper **mobile phone etiquette** from "How to Practice Cell Phone Etiquette" that can also be applied to **iPad** users:⁵⁵

55. "How to Practice Cell Phone Etiquette," WikiHow, last modified December 05 2020, <http://www.wikihow.com/Practice-Cell-Phone-Etiquette>.

- It is not other people's responsibility to cope with your mobile device use. **It is your responsibility to inoffensively use your mobile device.** Note that offending someone is not defined by what you expect others to tolerate, but by what others find offensive.
- **Assume that someone who asks you to turn your mobile device down or off is in good faith and you should comply in the same manner.** They have a reason for asking, and it is probably not that they are trying to dominate or hassle you or restrict your right to free expression. Certain sounds, for instance, may trigger temporal lobe epilepsy seizures. People who have neurosensory issues may find extraneous noise a severe difficulty rather than a mild annoyance.
- **Do not use your mobile device when eating with someone.** If possible, turn it off. Never text at the dinner table even if the face-to-face conversations die down. It is disrespectful.
- **Turn your mobile device off when watching a movie.** Even if it is on vibrate, people may hear it during quiet parts of the movie. The light from your device's screen can also be very distracting. Do not check the time or read text messages until the movie is over.
- **Learn to text.** When you are in an enclosed space or cannot stay 10 feet away from others, it is inappropriate to talk through call, but it is potentially acceptable to receive and send text messages. In such cases, keep the following texting etiquette in mind:
 1. Only text when you are standing still or sitting down and out of anyone's way. Do not text while walking or driving.
 2. Do not text while doing anything that requires your attention such as waiting at an intersection for the traffic light to change.
 3. Do not text while in a meeting or a conference. Give the speaker your undivided attention.
 4. Limit phone use during gatherings with your friends. Some friends (with or without mobile phones) will find it annoying and inconsiderate.
 5. Avoid sending others text messages containing anything that you would not say in real life. It is very hard to convey tone when texting or e-mailing so some things may come across as unusual or even offensive. Never send a message with sexual overtones or that can be construed as a threat.

Regarding the use of **iPads** specifically, CNN Business published “iPad Etiquette: How to Behave with Your Tablet” with some tips on how to use these devices in public, together with “iPad and Tablet Etiquette”:⁵⁶

- Do not put anything embarrassing on your tablet, as an iPad can be considered an open e-book. For instance, while many people know mobile phones are a private device, at work, it is possible to end up sharing your tablet with other workmates. Therefore, keeping your iPad suitable for a working environment is highly recommendable. Otherwise, modify the privacy settings of your iPad so that your private photos and files will not be easily accessible to anyone in case somebody borrows it.
- In the same way, it is acceptable to watch videos or movies on your tablet in public. However, you must always use headphones so as not to disturb anyone. You must be mindful of your environment and playing inappropriate or adult content on your iPad in public must be avoided.

Use your iPad with caution and common sense when bringing it to a meeting. You must consider your office’s work culture, as sometimes iPad are considered personal devices rather than work tools.

- Use it with caution and common sense when bringing it to a meeting. You should consider your office’s work culture, as sometimes tablets are considered personal devices rather than work tools. Usually, pecking at the screen while someone else is talking looks rude. However, if the rest of your co-workers are using digital devices to take notes, it is acceptable to use your tablet to take notes.

4.3 How to Use Apps for Personal and Professional Development

The advancement in technology for the past years has resulted in new ways of teaching and learning. Apps have a multitude of uses with many great ones focusing on education. Educational apps allow teachers and educators to deliver invaluable resources and learning materials to their students using mobile devices. Teachers are opting for personal and professional development by way of adopting these new-age platforms and tools to enhance the way education is delivered to students.

There is a host of applications that teachers can use to improve their capacities and facilitate learning even outside the classroom. Here are some of the best applications for teachers and educators to enhance digital interactive learning from the article ***“20 Best Apps For Teachers and Educators.”***⁵⁷

56. Andrea Bartz and Brenna Ehrlich, “iPad Etiquette: How to Behave With Your Tablet?,” CNN Business, Cable News Network, last modified October 26, 2011, <https://edition.cnn.com/2011/10/26/tech/mobile/netiquette-tablet-etiquette/index.html>; “iPad and Tablet Etiquette,” The Emily Post Institute, accessed January 22, 2021, <https://emilypost.com/advice/ipad-and-tablet-etiquette/>

57. “20 Best Apps For Teachers and Educators,” Redbytes. 2020, last modified January 7, 2021, <https://www.redbytes.in/best-apps-for-teachers-and-educators/>.

- 
TED serves as a perfect companion for both teachers and educators. Thousands of intriguing sessions by experts can help students to get knowledge and topics to discuss in classrooms. New educators can plan innovative teaching strategies from the TED contents. TED helps teachers bring out an enriched classroom with active students and prepare unique lecture presentations.
- 
QUIZZZ: PLAN TO LEARN is one of the popular apps for learning at home and in classrooms. There are millions of teacher-created quizzes on the app and children can compete with friends online. Teachers can make the whole class play together and assign individual homework.
- 
edX includes lectures taught by educational experts of top universities. With this app, you can join real-time online classrooms teaching computer science, mathematics, science and engineering, language, and others. Edx serves as a bonus tool for teachers.
- 
STUDY BLUE FLASHCARDS & QUIZZES allows teachers to create flashcards, study materials, and interactive sessions on StudyBlue. It can store up to 400+ million flashcards for 10+ million students. Students can also create digital flashcards for free with images and audio contents. Teachers and learners can view study materials on multiple devices.
- 
EXTRAMARKS - The Learning App is a popular learning app in India that assists students in learning holistically through extensive content that is mapped according to students curriculum. It offers animated lessons that make learning exciting and engaging.
- 
EPIC ensures unlimited reading and learning for children from home and at school. With over 40,000+ high-quality books, Epic helps children to engage in immersive reading habits. The app is 100% free to teachers and librarians worldwide.
- 
DIKSHA is popular for its enjoyable classroom experience for students, teachers, and parents. Teachers can create engaging materials based on the prescribed school curriculum. Parents can also follow classroom activities. The app provides tutors to join other courses to increase their professional abilities and get certificates.

-  **TRELLO** enables educators and teachers to manage learning projects. They can make students follow the instructions and mark progress on each project stage. It can be customized for your needs and reduce tensions from project details.
-  **REMIND** is an app assuring better communication among teachers and students. Teachers can efficiently manage communication between and within the school community.
-  **TICK TICK** is a popular to-do list and planner app. Teachers can rely on this app for easy scheduling and reminding about individual sessions. Tick Tick makes the whole classroom stay organized and conscious of each activity. The app allows customizable profiles so that tutors can make events up-to-date and easy teaching.
-  **NOON ACADEMY** offers excellent classes from the world's best teachers. Students can attend live classes of their teachers and get real-time feedback from them. Noon Academy includes teacher-created contents for grades 4-12 and the university level. Students can collaborate with their friends and work on homework, and activities together.
-  **CLASSDOJO** is a simple communication app for students, teachers, and parents. One can recreate a beautiful classroom through the app. Students can get more activities in their digital portfolios. Teachers can encourage parents' engagement through announcements and videos. Parents can track the child's progress and talk with teachers whenever they wish to.
-  **KAHOOT** is a popular app for interactive learning. Kahoot contains thousands of engaging quizzes for teachers, students, and all other learners. Teachers can create quizzes and learn new things.
-  **SLACK** is the most preferred solution for team communication. Teachers can use slack for assigning group projects and facilitating the exchange of ideas. You can set a to-do list for assessing each stage of the project and learners' performance. Students get instant feedback and edited documents from teachers.

- 
POCKET is an interactive solution to learn lectures on the go. You can instantly save articles or video content for enhancing your classroom studies. Teachers can also communicate with students and parents virtually. The latest version provides an offline listening feature where you can hear saved articles without the Internet.
- 
DROPBOX lets teachers upload files such as photos, documents, videos, and other files. Files that are uploaded to a **DropBox** are safely backed up and you can get these files from all your devices. **DropBox** allows teachers to create and edit Microsoft Office files on mobile devices and share file links with students.
- 
EVERNOTE is a place where all your notes, important website links, and creative ideas can be stored across multiple devices. Teachers can replace those lengthy printed notes with notes in various formats including audio, videos, PDFs, and more. Students can create separate notebooks for organizing each subject. Parents can also view students' activities. This transparency of **Evernote** makes it one of the best apps for teachers and educators.
- 
SEESAW is an ideal app for teachers by saving their time. Educators and teachers can translate notes to 50+ languages and integrate with a hundred other apps. Seesaw allows teachers to easily assess learners' current understanding of topics.
- 
Google Classroom is a free web service developed by Google for schools that aims to simplify the creation, distribution, and grading of assignments. Within Google Classroom, it is possible to use Google Forms to create and share quizzes that are automatically graded as students turn them in.
- 
Edmodo is a convenient app to have multiple communications. Teachers can speak with their students, parents, and other fellow teachers. Edmodo comprises quality tools for teachers to create exciting study materials, make parents updated about a child's progress, thus an interactive classroom ambiance. Using Edmodo, teachers discover useful content and reach out to individual students.

There are endless ways to help students learn new concepts and express their creativity. Here are some of the Apple applications that teachers can use to complement different learning styles. Likewise, these applications can support teachers' personal and professional development. These applications can be downloaded from the App Store.⁵⁸

-  **iTunes U** is an ever-growing collection of educational content from institutions around the world with over 750, 000 resources on every topic. Teachers and educators can explore and discover how other teachers are teaching. You can browse their syllabi, lessons, and course materials to get ideas. There are so many resources that teachers can get from **iTunes U** to help students gain a deeper understanding of the lesson.
-  **iBooks** has a massive selection of books that teachers can use in class. Discover textbooks and reference guides from major education publishers, which many of them are free. **iBooks** contained materials that can help teachers to teach practically any subject.

In the next chapter, we will give examples of other apps that can be helpful for teachers in using their mobile devices for professional networking, promoting learning, and developing higher-order thinking skills (HOTS).

58. Apple and Education, accessed January 22, 2021, <https://www.apple.com/ca/education/ipad/apps-books-and-more/>.

Chapter 5: Expert Users

Expert users refer to those who use mobile devices for teaching and learning activities or as instructional tools. Users at this level should be able to use their mobile devices to collaborate with others in their field of expertise and in the classroom.

5.1 What Apps Can You Use to Create E-books?

An electronic book (e-book) is an electronic version of a printed book that you read on a personal computer, mobile device, or e-reader. An e-reader, meanwhile, can be an app or a separate device that lets you read e-books. Almost all mobile devices have built-in e-reader apps. Even organizations such as SEAMEO INNOTECH has its own e-reader app that lets users access and read the Mobile Technology for Teachers (MT4T) e-books.

Unlike printed books, e-books can contain not only text and pictures but even video and audio clips, along with other interactive features. More than one person can read an e-book at the same time, too, unlike a printed book. All you need to do is plug it into a liquid crystal display (LCD) projector or digital TV. Also, if you ever feel the urge to create your own e-book using just your mobile device, all you need to do is use an e-book-creator app.

The following Apple apps can help you create e-books:

-  **Book Creator** lets you create your own beautiful e-books, right on your tablet. It is ideal for making children’s picture books, photo books, art books, cookbooks, manuals, textbooks, and more.⁵⁹
-  **Book Writer** helps you make a magnificent book that can be read via  **Books**. It has a fixed-layout format though, which is not ideal for long texts such as novels. But you can include photos, videos, and music in books. You can even record your voice.⁶⁰

For more e-book-creator apps for iPadOS devices, read “15 Literacy Apps to Create Books on the iPad.”⁶¹

59. Book Creator, “Book Creator.” accessed January 22, 2021, <https://bookcreator.com/>.

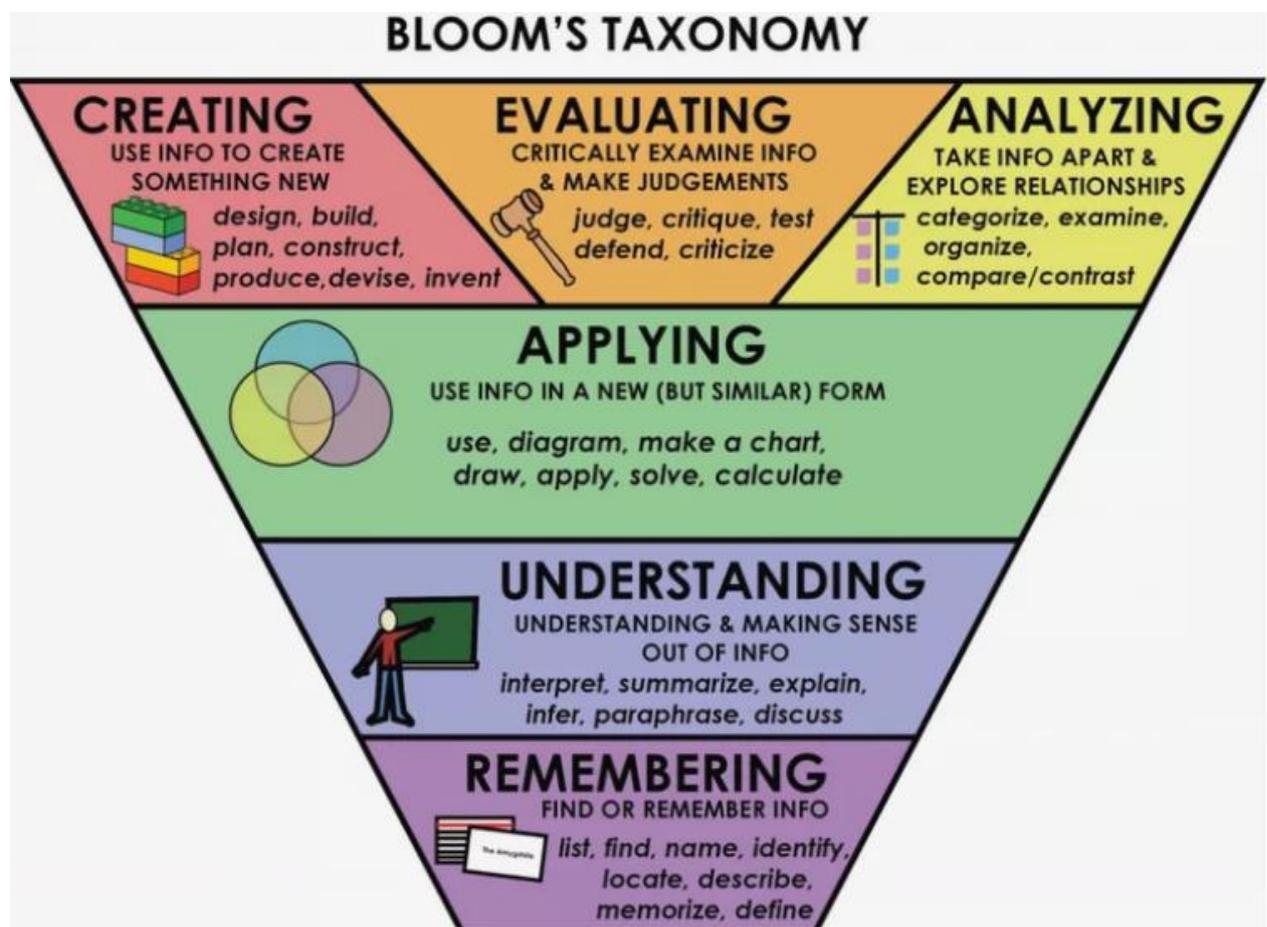
60. “Book Writer.” App Store, accessed January 22, 2021, <https://apps.apple.com/us/app/book-writer/id481160195>.

61. TechThought Staff, *TechThought*, “15 Literacy Apps To Create Books On The iPad,” updated on August 28, 2017, <https://www.teachthought.com/literacy/15-literacy-apps-to-create-books-on-the-ipad/>.

5.2 What Apps Promote Higher-Order Thinking Skills?

MT4T was developed to enhance Southeast Asian teachers' knowledge, skills, and values in using mobile technologies for personal and professional development with a special focus on developing higher-order thinking skills (HOTS). We hope that as a teacher, you can use the MT4T Resource Kit to inspire you to continuously explore opportunities to utilize mobile technologies to promote active learning as part of your own personal and professional development while promoting HOTS to students.⁶²

Bloom's Taxonomy is a widely accepted framework that teachers may use in helping develop the higher-order thinking skills of their students.



Rawia Inaim / Kwantlen Polytechnic University

Image sourced from <https://www.thoughtco.com/blooms-taxonomy-the-incredible-teaching-tool-2081869>

62. TechThought Staff, "Bloom's Digital Taxonomy Verbs For 21st Century Students," TeachThought, last modified August 28, 2017, <https://www.teachthought.com/critical-thinking/blooms-digital-taxonomy-verbs-21st-century-students/>.

The following are some Apple apps that can be used to promote certain HOTS domains.

To promote **remembering**, you can use the following:

-  **Flashcards Deluxe** is an easy-to-use yet powerful flashcard app that can help you study just about anything you want. You can create flashcards either on your PC or within the app. If you do not want to make your own flashcards, you can browse and download from Quizlet.com and Cram.com.

Creating cards on your PC is easy. You just need to make a two-column list of questions and answers in a text editor or spreadsheet then copy and paste items into the app's website for downloading to your device later.⁶³

-  **Diigo** is a free social bookmarking, research, and knowledge-sharing tool created to ease note-taking while providing a network for sharing and discovering new information. It lets you take personal notes and highlight text on Web pages just as you would on a piece of paper.

You can bookmark and save information for further review and add tags to keep everything organized. When bookmarking information, you can choose to share with colleagues and friends so they can add their notes, highlights, and annotations. All this information can be saved online and accessed via any device or browser.⁶⁴

To promote **understanding**, you can use the following:

-  **Twitter** is a social networking and microblogging service that lets you send and read Tweets or text messages limited to 140 characters. Parts of the understanding HOTS domain include Tweeting, tagging, and commenting. You can use this app to remind learners about assignments and collaborate with colleagues on a project.⁶⁵ For more information on using Twitter, read the MT4T eBook on ***Twitter for Teachers***.

63. *Flashcards Deluxe*, accessed January 22, 2021, <http://flashcardsdeluxe.com/flashcards/>.

64. *Diigo*, accessed January 22, 2021, <https://www.diigo.com/>.

65. "How to... Use Twitter for Academic Research," Emerald Publishing, Emerald Publishing Limited, accessed January 22, 2021, <https://www.emeraldgrouppublishing.com/archived/research/guides/management/twitter.htm>; Winner Dominic Chawinga, "Teaching and Learning 24/7 Using Twitter in a University Classroom: Experiences from a Developing Country," *E-learning and Digital Media* 13, no.1-2 (Spring 2016): 45-61, <https://doi.org/10.1177%2F2042753016672381>.

-  **WordPress** makes it easy to share photos, write posts, and edit content. You can create and edit posts with photos. Part of the understanding HOTS domain includes blogging and explaining. You can use this app to create blogs and explain your thoughts to learners and even colleagues.⁶⁶

For more information on using  **WordPress**, read the MT4T eBook on *“Blogging for Teachers.”*

-  **Wakelet** is a curating app that lets teachers handpick digital resources. On the app, teachers can add notes and images to saved materials. These features can help promote students’ understanding and comprehension of topics in any area. The collections can be shared on social media, allowing learners to access the resources and contribute to the online discussion.⁶⁷

To promote **applying**, you can use the following:

-  **Educreations** turns your iPad into a recordable whiteboard. Creating a video tutorial is as simple as touching, tapping, and talking. You can explain a math formula, create an animated lesson, add commentary to your photos, diagram a sports play with voice recording using realistic digital ink, photos, and text that you can share via e-mail, Facebook, or Twitter.

Part of the application of HOTS domain includes presenting, sharing, and editing. You can use this app to present and share lessons you created and edited to colleagues and learners.⁶⁸

-  **Drawing Box** is recommended by schools for its creativity tools and recreational features. It is a suitable app for learning and practicing how to draw and paint. With responsive smooth pencil and brush strokes, a graphical and intuitive interface, you can use it to make a quick sketch or a detailed study.⁶⁹

To promote **collaboration**, you can use the following:

-  **Facebook Group** is a great way to connect with educators and share your ideas with them. It also serves as a platform where teachers and students can become partners in learning, not only for a given moment but also for longer times.⁷⁰

66. ArchPAPERS. “Wordpress App for iPhone and iPad, Wordpress App for iOS,” accessed January 22, 2021, <http://archpapers.com/wordpress-app-for-iphone-ipad/>

67. “Wakelet.” <https://learn.wakelet.com/>

68. Edshelf. “Educreations,” accessed January 22, 2021, <https://edshelf.com/tool/educreations/>

69. App Store. “Drawing Box,” accessed January 22, 2021, <https://apps.apple.com/us/app/drawing-box/id417852564>

70. Monica Burns, “4 Ways Facebook Groups Can Transform Your Teaching,” Class Tech Tips, ClassTechTips.com, March 3, 2018, <https://classtehtips.com/2018/03/03/facebook-groups-teachers/>

-  **Backchannel Chat** is a classroom discussion tool that helps teachers and students build communication skills and provides a way for teachers to extend those discussions beyond the class period. Backchannel chat can be used to collaborate on a project and share research outputs and resources.⁷¹

To promote *analyzing*, you can use the following:

-  **Card Sorting** is an excellent brainstorming tool that helps you visually and quickly organize ideas. Whether you are working on a school project or trying to decide where you should spend your vacation, you simply place each option on a card. The app lets you group, order, and explore possibilities. Then, when you are ready, you can share your decision with everyone involved. The app lets you manage and create as many decks as you like.
-  **The popplet** lets you visualize ideas. You and your learners can create graphic organizers, timelines, and many other forms of visual organizational tools. Its strength as a collaborative brainstorming tool, however, should not lead you to overlook its usefulness as an effective presentation tool.⁷²

To promote *evaluating*, you can use the following:

-  **Edmodo** makes it easy for teachers, students, and parents to stay connected and share information. You can send notes, submit assignments, post replies, check messages, and upcoming events even if you are away from your classroom. You can post messages, keep tabs on assignment submissions, and grade assignments on it. Students can view and turn in assignments and check their grades. Class discussions can be securely conducted in and outside of school. Edmodo is a learning management platform for teachers to connect and collaborate with parents and students. For more information on using Edmodo, read ***Edmodo for Teachers.***
-  **WhatsApp Messenger** is an American freeware, cross-platform messaging and Voice over IP service owned by Facebook. It can facilitate collaborative work and exchange of content between teachers and students. Presentations, word documents, and videos are some of the materials that teachers can share with students using the app.

71. Rachelle Dene Poth. February, "6 Collaboration Tools That Take Learning Beyond the Classroom," Getting Smart, GettingSmart.com, February 25, 2020, <https://www.gettingsmart.com/2020/02/6-collaboration-tools-that-take-learning-beyond-the-classroom/>.

72. *Teaching History*. "Popplet," accessed January 22, 2021, <http://teachinghistory.org/digital-classroom/tech-for-teachers/25107>.

To promote **creating**, you can use the following:

-  **Animoto** can help you turn photos into stunning, professional-quality videos, complete with music and text. You can choose your photos, video clips, music, and video style. Within minutes, you will have an amazing video slideshow you can save and easily share with everyone.⁷³
-  **Flipbook** easily makes your pictures come to life and share them with family, friends, and colleagues. It has everything you need to get started with animation, from an eraser to onion skinning (which lets you see a faint image of the previous and next frames) to layered drawings. You can load images from your photo library, including images taken with your device's camera, and draw on top of them. You can then share your movies by uploading them to Flipbook.tv for everyone to see.

5.3 How to Use Mobile Devices for Teaching and Learning

Mobile technologies are increasingly affecting the education sector, facilitating a completely new dimension in the learning process.⁷⁴ Learning that was traditionally construed as an activity that takes place in a predetermined location has been transformed into one that can be done anywhere, thanks to technologies and devices that aid mobility.

Mobile learning is considered the ability to use mobile devices to support teaching and learning. The mobile aspect of mobile learning makes it stand apart from other types of learning, specifically in designing experiences that exploit opportunities that mobility can offer.

Alice Martin gave reasons to try using mobile devices in class in "6 Reasons to Try Mobile Devices in the Classroom".⁷⁵

1. **Mobility.** Smartphones and tablets are compact gadgets that can be used for learning on the go. Inside a classroom, you can use them to demonstrate points, present information through projectors, or even conduct lectures through video conferences. This eventually facilitates the learning process among students, as they can attend lessons, participate in activities, or even take notes without the constraints of space and time. Similarly, these tools can help students communicate about lessons even if they are away from class. A student who cannot come to school, for instance, can use a smartphone who wants to participate in classroom activities through  **Skype, Viber, or FB Messenger.**

73. Animoto. "Do-It-Yourself," accessed January 22, 2021, <https://animoto.com/>.

74. Brian Ferry, "Using Mobile Phones to Enhance Teacher Learning in Environmental Education," University of Wollongong, 2009, accessed January 22, 2021, <https://ro.uow.edu.au/cgi/viewcontent.cgi?article=1081&context=edupapers>.

75. Alice Martin, "6 Reasons to Try Mobile Devices in the Classroom," Educational Technology, last modified October 26, 2013, <http://people.uis.edu/rschr1/et/?p=8156>.

2. **Versatility.** Mobile devices are handy for studying online, taking notes, and even attending real-time classroom activities. They let you multitask, too. Learning tools such as a dictionary, a calculator, and more also provide handy support for various learning activities. Some devices have built-in educational apps that further enhance the learning experience. For instance, you can use  Google for research, promoting efficient learning. Similarly,  **Loop – Learn through feedback** helps build better learning environments, as it gives students a voice in the classroom—granting them the possibility of providing real-time feedback to their teachers—and it allows teachers to adapt the class to the student’s level of understanding and mood.
3. **Noise-free.** Unlike a personal computer, a mobile device provides a noise-free learning environment. Since they have touch screens, you do not need to connect a keyboard or a mouse. This results in a learning environment without noise and thus increases focus. In fact, apps like  **Forest-Stay Focused** are a useful tool for students, as it is designed to improve productivity and concentration. Using this app, students can plant a seed and set a timer. If the mobile phone was not used during that time, a tree will grow in the apps garden; and if the mobile phone is used, the tree will wither. Thanks to this app, it is easy to keep track of the time spent to do diverse activities and stay motivated.
4. **Interactivity.** Learning through audio and video improves the overall learning experience. Multimedia technologies also help students learn in an interactive way. Mobile devices are effective audiovisual tools (for use with charts, graphs, and images). With these visual elements, learning becomes more engaging and fun, ultimately promoting growth.

Mobile devices are effective for learning different activities or tasks. You can share how-to videos. You can use three-dimensional (3D) simulations to demonstrate dead areas under the sea for a marine biology class, for instance. Students can visit an archaeological site through a video-sharing website for an ancient civilization class. Similarly, you can do a live laboratory experiment for science students to watch in class.

Moreover, to promote active interaction in the classroom, teachers can install  **Sli.do** and  **Kahoot!** in their devices. The innovative aspect of these apps is their easy access, as the audience do not have to install the app on their devices to be able to interact with the materials. They can simply access the website of these platforms and introduce the event code to participate in the activities. They can be used to create additional content by both teachers, using a lecture— and students, using a project presentation.

On the one hand, ^{slido} **Sli.do** allows students to submit questions to the teacher while the lecture is still going on, and the teacher can prepare polls and quizzes to promote the active involvement of the students. Teachers can also create interactive mind maps, gathering the words submitted by the students in a visual image.

 **Kahoot**, on the other hand, can be used to create quizzes and live game competitions in class to test the students' understanding of the topics covered in a lecture. Teachers can also assign Kahoot quizzes as homework, challenging the students' knowledge, and promoting a fun way of learning.

5. **Augmented reality (AR).** This is a type of virtual reality (VR) that aims to duplicate the world's environment on a computing device. An AR system generates a composite view that combines real with virtual scenes that augment the former with additional information. Virtual scenes generated by a computer are designed to enhance one's sensory perception of the virtual world they are seeing or interacting with.

AR's goal is to create a system where the user cannot tell the difference between what is real and augmented. AR is used in entertainment, military training, engineering design, robotics, manufacturing, and other industries.

A great example of mobile learning is "School in the Park" where third graders explored Balboa Park, the San Diego History Center, and the San Diego Zoo with the help of AR via their smartphones.⁷⁶ They were exposed to numerous educational digital media resources and were also trained to create their AR videos.

For more information on Augmented Reality (AR), read the following:



Web Resources

Tap the links to access the linked resources

Web Articles

"Top 10 Augmented Reality Tools for the Classroom"
Ebsco (2019)
<https://www.ebsco.com/blog/article/top-10-augmented-reality-tools-for-the-classroom>

"10 Best Augmented Reality Apps for iPhone and Android in 2020, according to Catchar"
Dan Zaitsev (2020) for *Catchar*
<https://medium.com/catchar/10-best-augmented-reality-apps-for-iphone-and-android-in-2020-according-to-catchar-e879bbae111>

"Hands-on with Augmented Reality in Remote Classrooms"
Purdue University (2020)
<https://www.purdue.edu/newsroom/releases/2020/Q2/hands-on-with-augmented-reality-in-remote-classrooms.html>

76. School in the Park, accessed January 22, 2021, <http://schoolinthepark.net/>.

6. **Flexibility.** Using various apps lets students learn in an adaptable environment. Students can learn chemistry using apps like  **iChemistry**⁷⁷ and  **The Elements in Action**.⁷⁸ It is a chemical-equation-balancer app for both chemical professionals and learners. Given a list of formulas for reactants and products, it displays the balanced equation after calculating all coefficients.

 **Star Walk**, meanwhile, is a stargazing app that acts as an interactive astronomy guide to the night sky.⁷⁹ It uses your every movement to produce real-time views of over 200,000 celestial bodies with extensive information about stars and constellations.

7. **Social networking.** Mobile devices are effective tools to communicate through social media. They allow students to interact with peers and share knowledge, news, and videos for, say, a project. Using social media also allows them to instantly get answers or feedback from you and senior or fellow students on any issue. Popular social media such as Facebook, Twitter, and Pinterest expose students to a more diverse form of knowledge.

Sam Goundar in “What Is the Potential Impact of Using Mobile Devices in Education?” discussed the immediate future of mobile devices in education and noted that the mobile app market will mature and we will move from single-task, short-session apps to more sophisticated offerings.⁸⁰

The release of  **iMovie (Kinemaster)** and  **GarageBand** is a first step toward that direction.  **iMovie (Kinemaster)** is Apple’s basic video-editing app while  **GarageBand** is a music app that helps you create music by tapping instrument keys or strings. The latter has recording functionalities and uses multitouch gestures for playing musical instruments.

“6 Ways to Enhance Students’ Learning Using iMovie” identified ways to use  **iMovie** in the classroom—including.⁸¹

77. “iChemistry,” App Store, accessed January 22, 2021, <https://apps.apple.com/us/app/ichemistry/id927336536>.

78. “The Elements in Action,” App Store, accessed January 22, 2021, <https://apps.apple.com/us/app/the-elements-in-action/id739281034>.

79. “Star Walk: Stargazing Guide,” Vito Technology, Vito Technology, Inc., accessed by November 09, 2020, <http://vitotechnology.com/star-walk.html>.

80. Sam Goundar, “What is the Potential Impact of Using Mobile Devices in Education” (paper, SIG GlobDev Fourth Annual Workshop, Shanghai, China, December 3, 2011), <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1015&context=globdev2011>.

81. “6 Ways to Enhance Students Learning Using iMovie,” Educational Technology and Mobile Learning, last modified February 28, 2013, <http://www.educatorstechnology.com/2013/02/6-way-to-enhance-students-learning.html>.

- **Create engaging presentations.** This is probably the primary function of  **iMovie**. The presentations created in it are highly distinguishable and ideal for classroom teaching. Show your students how to create presentations using pictures, text, and sound and let them experiment.
- **Create how-to videos.** You can create tutorials and guides for students. You can create a how-to iMovie about a concept taught in class for students to burn onto a disc or save on a mobile device for home study and practice. You can also upload it to a class blog for everyone to access anytime they want. This is also a great way to help students who were unable to attend class when the concept was taught.
- **Create video reports.** Students can use  **iMovie** to create high-quality video reports to demonstrate their comprehension of abstract concepts.
- **Provide out of school experiences.** You and your students can use  **iMovie** to document and record events outside school that are relevant to what are taught in class. These iMovies can be brought to and shared with the class.
- **Use iMovie for classroom projects.** Using  **iMovie** in classroom projects is a great way to promote a culture of collaboration and cooperation among students. They can work in groups to create  **iMovies** that include texts, photos, and sounds. While watching others' work, they can give feedback to peers.
- **Digital storytelling.** Students can use  **iMovie** to tell stories using digital media, including pictures, images, and music. This can improve their verbal fluency and communicative skills.
- **Create book trailers or reports.** Students can use  **iMovie** to create engaging book trailers by following these steps:
 1. Read a book.
 2. Create a summary of the book.
 3. Plot the summary on a storyboard.
 4. Select images to match the written work.
 5. Use  **iMovie** to create a book trailer.
 6. Enhance the trailer with music and transitions.

“Garageband in the Classroom” provides ways to use  **GarageBand** or its equivalent in Apple— **BandLab** in class such as:⁸²

82. Patty Tzortzis, “GarageBand in the Classroom,” *garagebandintheclassroom65*, Pb Works, accessed January 22, 2021, <http://garagebandintheclassroom65.pbworks.com/w/page/11422435/GarageBand%20in%20the%20Classroom>.

- **Introducing a unit.** 🎧 **GarageBand** would be a useful tool for creating a unit introduction. A podcast can be the perfect presentation to grab students' attention and give them a quick overview of what they should expect in the upcoming unit. In the introduction, you can include pictures and music clips to engage the students in the future discipline. Making the introduction available online can also give them a tool for self-assessment. They can review the introduction to see if the objectives and goals were met.
- **Reading fluency.** In an elementary classroom, you can use 🎧 **GarageBand** to help strengthen students' reading fluency. Students can record themselves reading text with a voice recorder then edit the content in **GarageBand**. This lets them listen to themselves later for self-evaluation. Also, by recording and saving readings, they can go back and listen to them later. This can help with time constraints in the classroom since it can be difficult to see all your students in a timely fashion. You can also use the readings to show their growth in reading fluency throughout the year. "Guided Reading: Using Garage Band to Work on Fluency" is a good example of using 🎧 **GarageBand** to assist with reading fluency.⁸³
- **Creative writing.** Students can present their creative writing projects as podcasts using 🎧 **GarageBand**. Their writing can be accompanied by jingles, sound effects, or music to help them express their creativity. They can also take original pictures or draw illustrations to add to their podcasts through 🎧 **GarageBand**.
- **Presentations.** Students can use 🎧 **GarageBand** to create presentations. They can include models, tables, or diagrams throughout the presentation to support their information. This can give them a chance to give more life to their reports. They can reference pictures or documents in their presentation and show these in their podcasts. The presentations can be a personal narrative or a report for history. Podcasts allow them to provide pictorial support alongside their oral presentations.
- **Using raps as a study tool.** 🎧 **GarageBand** can also be used to record raps or songs the students created. It can be a very useful study tool. Creating a rap or a song can assist them in retaining information. By recording the rap or song onto a podcast through 🎧 **GarageBand**, students can review it later if they forget.

83. "Guided Reading: Using GarageBand to Work on Fluency," Exemplary Digital Teaching Archive Project, The Pennsylvania State University, accessed January 22, 2021, 2021, <https://ed.psu.edu/edtap/reading>.

- **Improved access to information.** Students do not need to go to a physical library anymore, instead, they can go online to access vast amounts of updated information through e-books, which can be stored in the cloud without needing a printed copy. Also, there are large digital collections on the Internet, and this allows students to develop new skills—such as critical thinking and analysis.
- **Increased mobility.** E-books are easy to carry around, and students have instant access to course materials and notes anytime they want. In fact, mobile devices offer **offline services**, allowing students to download any content and view it when the Internet connection is unstable.
- **More student engagement.** Multimedia content appeals to visual learners and catches the attention of students, increasing their motivation. Furthermore, e-books have many interactive features that improve the efficiency of time-consuming tasks, making them quick. They also have text-to-speak functions that help students with impairments—such as students with dyslexia or blindness—access the information gathered in e-books.

All these features increase student engagement, and they allow them to optimize and enrich the learning experience by, for instance, getting instant feedback from quizzes and exercises, and actively interacting with the learning materials.

- **Taking online classes.** Students can access important documents and take quizzes online. Thanks to this, education has been made more accessible, as many students can enroll in online courses despite their busy schedules, and institutions do not have to worry about physical (printed) resources.

In the same way, computer technology can facilitate access to materials by geographically isolated and underprivileged students—in many countries, for instance, students attend “blended classes”, a mix between online and face-to-face instruction, to connect to other learning communities.

Remote learning during the COVID-19 pandemic has also relied on online means of learning delivery. Students in areas badly affected by an emergency or a crisis can continue learning if there is access to learning materials such as e-books through the Internet.

Read more about related resources on remote learning, distance education, online learning, and the use of educational technologies from "[Remote Learning, EdTech & COVID-19](#)" by the World Bank Group.

- **Potential drawbacks.** Not all effects are beneficial, as students who text in class will have difficulty staying focused, and computers have limitations that only human interaction can surpass.

Social reading is an imminent phenomenon that combines e-book reading with social networking. While reading e-books, users can connect with friends and other readers, ask questions, and share notes or opinions. One of such apps is  **Inkling**, which promotes social collaboration.

Victoria Boobyer, in "How English Teachers Can Use e-Books in the Classroom," suggested the following:⁸⁴

- **Practical exercises.** As with short text from a book, pre-reading tasks are vital to motivate learners. When motivating them to read an entire book, this phase is even more important. Even before a learner sees the book, he or she can carry out research and tasks that will motivate him or her.

One way to do this is through WebQuests, which features classroom-based lessons involving Internet research.⁸⁵ A Portable Document Format (PDF) file containing a WebQuest can be e-mailed to students. Members of a class can have the same or different tasks that can later be shared.

For example, before reading an e-book of Mary Shelley's *Frankenstein*, learners are sent a copy of the "Digital Frankenstein" WebQuest that raises awareness about Mary Shelley and *Frankenstein* and focuses on learner's exam-preparation needs. Read the sample web quest below:⁸⁶

A new e-book for iPads tablets aimed at English language learners all around the world is being developed. The book is based on Mary Shelley's 'Frankenstein'. Because developing the e-book is very expensive and you are a perfect example of the target market, they have come to you for advice. You will get a free iPad tablet with a copy of the e-book on it as a reward for your hard work!

84. Victoria Boobyer, "How English Teachers Can Use E-books in the Classroom," British Council, accessed January 22, 2021, <https://www.britishcouncil.org/voices-magazine/how-english-teachers-use-ebooks-in-classroom>.

85. "Webquest Discoveries Archive," Education World, Education World Inc., accessed January 22, 2021, http://www.educationworld.com/a_tech/archives/webquest.shtml.

86. Adapted from Victoria Boobyer, "How English Teachers Can Use E-books in the Classroom." British Council, October 28, 2013, <https://www.britishcouncil.org/voices-magazine/how-english-teachers-use-ebooks-in-classroom>.

The e-book needs extra content based on 'Frankenstein'. The publishers have three areas of extra content that they think might be interesting to learners but can only afford to develop two. You are asked to research all three areas then provide feedback to the publishers on your choice of two that you believe should be added to the e-book.

The areas of research are: 1) Mary Shelley's life; 2) the writing of 'Frankenstein;' and 3) 'Frankenstein' in film. The research involves watching videos or reading articles about the subject then completing a written task for each area.

For example, you want to start researching 'Frankenstein' films. You decided on one of the films and you would like to get a copy of it from the library. Write an e-mail to your local library to see if they have a copy of the film that you could borrow. Tell the librarian in 120–180 words about your research for the 'Frankenstein' e-book project, which formats of the film you are looking for, and why you have chosen this movie to watch.

Learners then send the completed tasks to their teacher. Having completed the tasks, they gain sound background knowledge about the subject and will be keen to read the book.

A similar web quest or series of tasks can be created around the author or themes or settings of the e-book. Although they take time to create, they can easily be adapted and reused once the framework is set up. These tasks can be completed in class or at home as homework, or as part of a blended learning context. You can download the complete web quest for your use.

- **Listening tasks.** A whole week of lessons focused on reading can be a little difficult to manage sometimes, especially if your learners are with you for a relatively short time. With e-books, reading can be substituted with listening for part or the whole lesson. Some e-books even have built-in listening comprehension exercises.
- **Pronunciation tasks.** After reading and/or listening to a section that addresses students' particular pronunciation needs (it may contain problematic sounds or question forms, etc.), you ensure that all of them see the section of writing by, for example, projecting the relevant e-book page onto the board. The students can then open a speech recognition app such as  **Dragon Anywhere: Dictate Now.**⁸⁷ It is very simple to use and requires only a tap to start, and another, to stop. The latest dictation can be deleted and rerecorded as needed.

87. "Dragon Anywhere: Dictate Now," App Store, accessed January 22, 2021, <https://apps.apple.com/us/app/dragon-anywhere-dictate-now/id1024652126>

Learners can focus on specific words or try to dictate whole passages after hearing the e-book audio. This can be done one sentence at a time, with a time limit of 1 minute to try and perfect each sentence. The tablet can be passed around from one student to the next until a passage is complete. You can then hide certain passages of text for the students to fill in. This can highlight the problem areas as well as point out links between the spoken and written word.

While mobile browsers are adequate, they still lag behind desktop offerings. As mobile devices continue to develop, we can expect better mobile Web editing, more collaboration tools, and increased support for a wider range of Web technologies that support the use of mobile devices in education. This is supported by "Handheld Devices in the 21st-Century Classroom," which indicated the following benefits of using mobile devices in class:⁸⁸

- **Flexible and convenient.** Handheld devices allow students to access information anywhere, anytime.
- **Portable.** Students can use mobile devices in and outside the classroom.
- **Fosters a sense of community.** They allow students to connect with one another and reinforce the integration of different curricula.
- **Communication.** Students, teachers, and parents can instantaneously connect with one another.
- **Support.** Handheld devices can enable and support students who have learning difficulties.
- **Lots of features.** Features such as GPS have various practical uses

However, mobile devices also present various challenges such as:

- **Culture.** While the culture of schools changes, in some classrooms, mobile devices are still not allowed.
- **Control.** Mobile devices in the classroom mean giving up control, which is worrisome for some teachers.
- **Access.** Equal access to devices will always be a challenge in schools, especially if students are asked to bring their own.
- **Connectivity.** To effectively use mobile devices in the classroom, wireless connectivity in schools will be required.
- **Engagement.** While mobile devices can help engage students in the class, they can also serve as distractions to some.

88. Graham Attwell, "25 Practical Ideas for Using Mobile Phones in the Classroom," Pontydysgu: Bridge to Learning, November 20, 2009, <http://www.pontydysgu.org/2009/11/25-practical-ideas-for-using-mobile-phones-in-the-classroom/>.

Read more about using mobile devices for teaching and learning in the following:



Web Resources

Tap the links to access the linked resources

Web articles

"ECAR Study of Undergraduate Students and Information Technology, 2019"

Dana C. Gierdowski (2019) for *Educause*

<https://www.educause.edu/ecar/research-publications/ecar-study-of-undergraduate-students-and-information-technology/2019/executive-summary-and-introduction>

"6 Pros & Cons of Technology in the Classroom in 2021"

(2021) for *Top Hat*

<https://tophat.com/blog/6-pros-cons-technology-classroom/>

"Begin Workforce Development Early to Better Prepare Students for Future Careers"

AT&T (2020) for *Center for Digital Education*

<https://www.govtech.com/education/k-12/Begin-Workforce-Development-Early-to-Better-Prepare-Students-for-Future-Careers.html>

"What is the Impact of Mobile Device on Student Learning?"

(2019) for *Fedena*

<https://fedena.com/blog/2019/02/what-is-the-impact-of-mobile-device-on-student-learning.html>

"Using Mobile Devices to open up the Learning Environment"

Deborah Hobbs (2019) for *Cambridge University Press*

<https://www.cambridge.org/elt/blog/2019/09/20/using-mobile-devices-learning-environment/>

"The Use of Mobile Technology for Teaching and Learning"

Khadija Alhumaid (2020) for *International Journal of Education*

<https://flyccs.com/journals/IJEMS/paper/IJE.Vol.05.No.1.pdf>

"Teaching America's First Course on Mobile Phone Learning"

Dominic Mentor and Nabeel Ahmad (2010) for *Educause Review*

<http://www.educause.edu/ero/article/teaching-americas-first-course-mobile-phone-learning>

"Can Mobile Devices Transform Education?"

Rick Allen (2011) for *ASCD*

<http://www.ascd.org/publications/newsletters/education-update/feb11/vol53/num02/Can-Mobile-Devices-Transform-Education%C2%A2.aspx>

"Using Mobile Phones for Language Teaching and Learning"

Evan Rubin (2012) for *SlideShare*

<http://www.slideshare.net/larcevents/using-mobile-phones-for-language-teaching-and-learning>

"What is the Potential Impact of Using Mobile Devices in Education?"

Sam Goundar (2011) for *Academia*

<http://www.academia.edu/1553463/>

"Using Mobile Phones to Improve Educational Outcomes: An Analysis of Evidence from Asia"

John-Harmen Valk, Ahmed T. Rashid, and Laurent Elder (2010) for *The International Review of Research in Open and Distance Learning*

<http://www.irrodl.org/index.php/irrodl/article/view/794/1487>

"What Do Five Experts Think About Mobile Phones In Schools?"

Sophie Heizer (2018) for *The Guardian*

<https://www.theguardian.com/australia-news/2018/jun/28/what-do-five-experts-think-about-mobile-phones-in-schools>

5.4 How to Use Mobile Devices in the Classroom

Several ideas on using mobile devices can support classroom learning have been put forward. However, most of them are theoretical. Several debates around mobile device technologies on theoretical perspectives, social dimensions, and so on have been raised as well.

Can mobile phones really be used in school? Look at some practical ideas for using mobile devices for education in "25 Practical Ideas for Using Mobile Phones in the Classroom" and "6 Ways to Use Students' Smartphones for Learning"⁸⁹ below.

The following are the arguments against allowing mobile device use in school:

- Loss and theft and potential bullying;
- Distraction and interruption;
- Taking photos of tests and instantly passing them on to other students;
- Texting test answers to other students;
- Taking photos of classmates in changing rooms or toilets;
- Spreading rumors;
- Sexting and cyberbullying;
- Non-filtered web access that can be used to spread content that some parents do not want their children exposed to;
- Recording teachers and students in the classroom, which can be detrimental to their reputation;
- Privacy issues with teachers having students' personal phone numbers and vice versa; and
- Some students cannot afford to buy mobile devices.

The following arguments, meanwhile, support the use of mobile devices for learning:

- Cost-effective for schools;
- Reduces the need for all students to have access to PCs in the classroom;
- Need for less equipment including digital cameras, camcorders, and others;
- Helps overcome distraction-related problems;
- Uses cheap and familiar technology;

89. Graham Attwell, "25 Practical Ideas for Using Mobile Phones in the Classroom," Pontydysgu, November 20, 2009, <https://www.pontydysgu.org/2009/11/25-practical-ideas-for-using-mobile-phones-in-the-classroom/>; Kelsey Ehnle, "6 Ways to Use Students' Smartphones for Learning," ISTE, International Society for Technology in Education (ISTE), accessed January 22, 2021, <https://www.iste.org/explore/toolbox/6-ways-use-students-smartphones-learning>.

- Good teaching vehicles for use;
- Can be used as data collection and recording devices for experiments, fieldwork, voice memos, and others;
- Can be used as a creative tool for making podcasts, picture blogs, tweeting, and so on;
- Allows students to ask questions they may be too embarrassed to ask in public;
- Encourages engagement (e.g., short message service [SMS] polls can ensure that every student's voice is heard);
- SMS polls can be used for formative assessment;
- Can be used for collaborative learning and communication;
- Encourages students to use general reference books (e.g., dictionary, spellchecker, thesaurus, encyclopedia, etc.); and
- Research tools via the Web.

The following practical ideas for using phones for learning have been tried out:

- Make podcasts straight from a mobile device;
- Set up audio tours (e.g., one group works on a guide to places of interest in their town);
- Use their devices to access podcasts;
- Create short videos using their device's built-in cameras to exercise their creativity and promote new learning styles;
- Create mini-documentaries using their device's built-in cameras;
- Record field trips;
- Work on the same project while being in different places and talk via instant messaging (IM);
- Record science experiments using pictures and video instead of written reports;
- Blogging via mobile devices;
- Make slideshows;
- Brainstorm via mobile devices;
- Scan QR codes to get instant access to diverse materials and resources, or for doing scavengers hunts;
- Access online dictionaries and check translations; and
- Collaborate and share with social networks, to get instant feedback from students, and to facilitate the communication of shy students.

For more information on practical uses of mobile devices in the classroom, read the following:



Web Resources

Tap the links to access the linked resources

Web articles

“Mobile Phones in the Classroom: Teachers Share Their Tips”

Emma Drury (2012) for *The Guardian*

<http://www.theguardian.com/teacher-network/2012/sep/10/mobile-phones-classroom-teaching>

“The 21st-Century Classrooms: Technology in Schools”

Study Pug

<https://www.studypug.com/blog/why-teachers-arent-utilizing-tech-in-the-classroom/>

“How to Use Mobile Devices in the Classroom”

Doug Belshaw (2011) for *The Guardian*

<http://www.theguardian.com/teacher-network/2011/oct/26/mobile-devices-classroom>

“Embrace Mobile Technology in the Classroom”

Glen Tullman (2013) for *Chicago Tribune*

http://articles.chicagotribune.com/2013-08-25/business/ct-biz-0825-outside-opinion-20130825_1_struggling-kids-internet-access-mobile-devices

“33 Interesting Ways to Use Mobile Devices in the Classroom”

Brendan Jones (2012) for *SlideShare*

<http://www.slideshare.net/jonesytheteacher/33-interesting-ways-to-use-mobile-devices-in-the-classroom>

“Enhancing Teacher Professional Development Using Mobile Technologies in a Large-Scale Project: A Case Study of Bangladesh”

Prithvi Shrestha (2012) for *SlideShare*

<http://www.slideshare.net/pnshrestha/enhancing-teacher-professional-development-using-mobile-technologies-in-a-largescale-project-a-case-study-of-bangladesh>

“Using Mobile Phones to Augment Teacher Learning in Environmental Education”

Brian Ferry (2008) for *Ascilite 2008 Melbourne*

<https://www.ascilite.org/conferences/melbourne08/procs/ferry-poster.pdf>

“Powering Your Professional Development Journey”

(2013) *Generation Ready*

<https://www.generationready.com/wp-content/uploads/2013/07/ReadyLab-Brochure.pdf>

“Using Smartphones in the Classroom”

Edward Graham (2020) for *National Education Association*

<https://www.nea.org/tools/56274.htm>

“50 Reasons It’s Time For Smartphones in Every Classroom”

Terry Heick (2017) for *Teachthought*

<https://www.teachthought.com/the-future-of-learning/50-reasons-smartphones-belong-classroom/>

“5 Effective Uses of Mobile Technology in The Classroom”

Daniel Adeboye (2016) for *eLearning Industry*

<https://elearningindustry.com/5-uses-mobile-technology-in-the-classroom>

“Using Cell Phones as Learning Tools”

Becton Loveless for *Education Corner*

<https://www.educationcorner.com/cell-phones-learning-tools.html>

“Part 1: 44 Smart Ways to Use Smartphones in Class”

John Hardison (2013) for *Getting Smart*

<https://www.gettingsmart.com/2013/01/part-1-44-smart-ways-to-use-smartphones-in-class/>

This e-book ***“Uses and Functionalities of an Apple Mobile Device”*** has been updated to include the latest features of uses and functionalities of Apple mobile devices like iPhones and iPads. The e-book will guide you to establish and expand your professional learning network, and as a tool to showcase your professional expertise, experience, and accomplishments.

The e-book also suggests many applications that will support work productivity and personal and professional development. Note further that while the screenshots embedded in this e-book were generated using 2018 iPad (6th Generation) or simply iPad 6 running on iPadOS 13.3.1, its uses and functionalities do not have significant differences across Apple mobile devices.

SEAMEO INNOTECH invites you to take part in our initiative to equip teachers like yourself with skills and knowledge on technology relevant to 21st century education. You may contribute by sending in new resources on ***Uses and Functionalities of an Apple Mobile Device*** that you find useful through email at si_mt4t@seameo-innotech.org. Your support will help ensure that this free e-book on ***“Uses and Functionalities of an Apple Mobile Device”*** will continue to grow and expand.



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