Apple Wallet, Apple Pay & Apple Messages

By George Wilde

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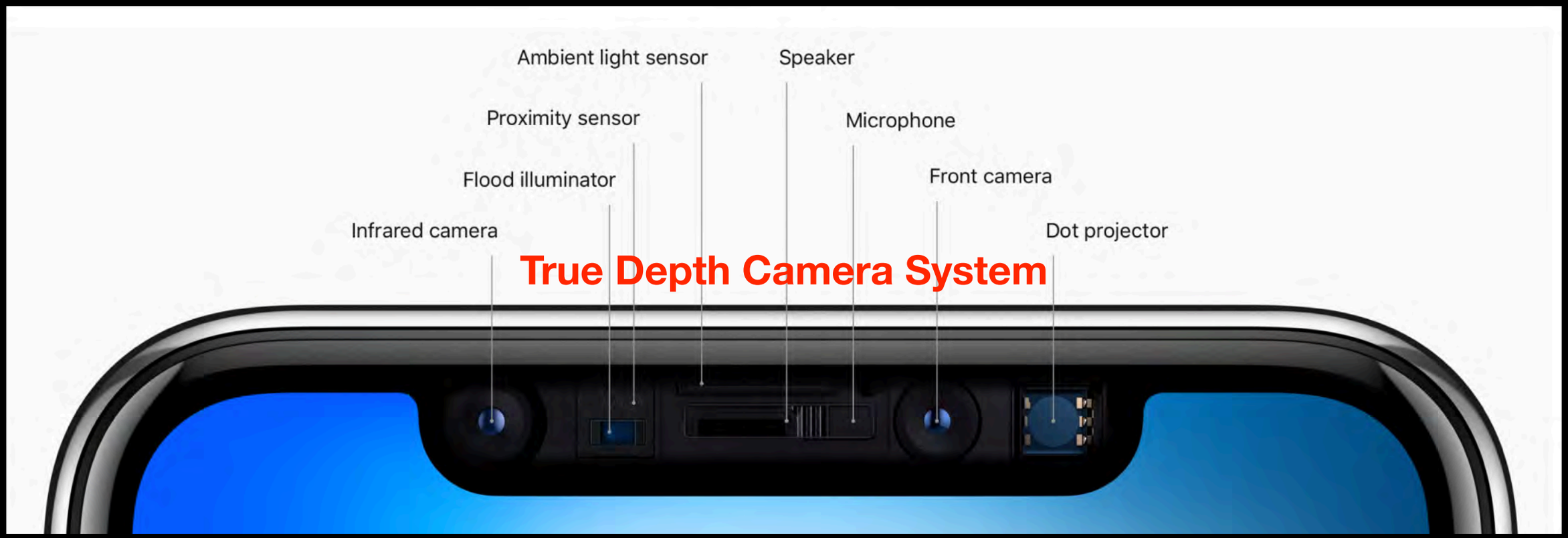


- Animoji Videos use the iPhone X True Depth Camera System - the same system used for Face ID

- Animoji Videos are generated using Apple’s Messages App on the iPhone X

More about this later! But first let’s discuss Apple Wallet and Apple Pay

Apple Wallet

What is Apple Wallet?

- Apple Wallet comes already installed on your iPhone
- Apple Wallet keeps your credit, debit, and prepaid cards, store cards, boarding passes, movie tickets, coupons, reward cards, and more all in one secure place
- With Apple Wallet you can check in for flights, get and redeem rewards, get into movies, redeem coupons, and use it with Apple Pay

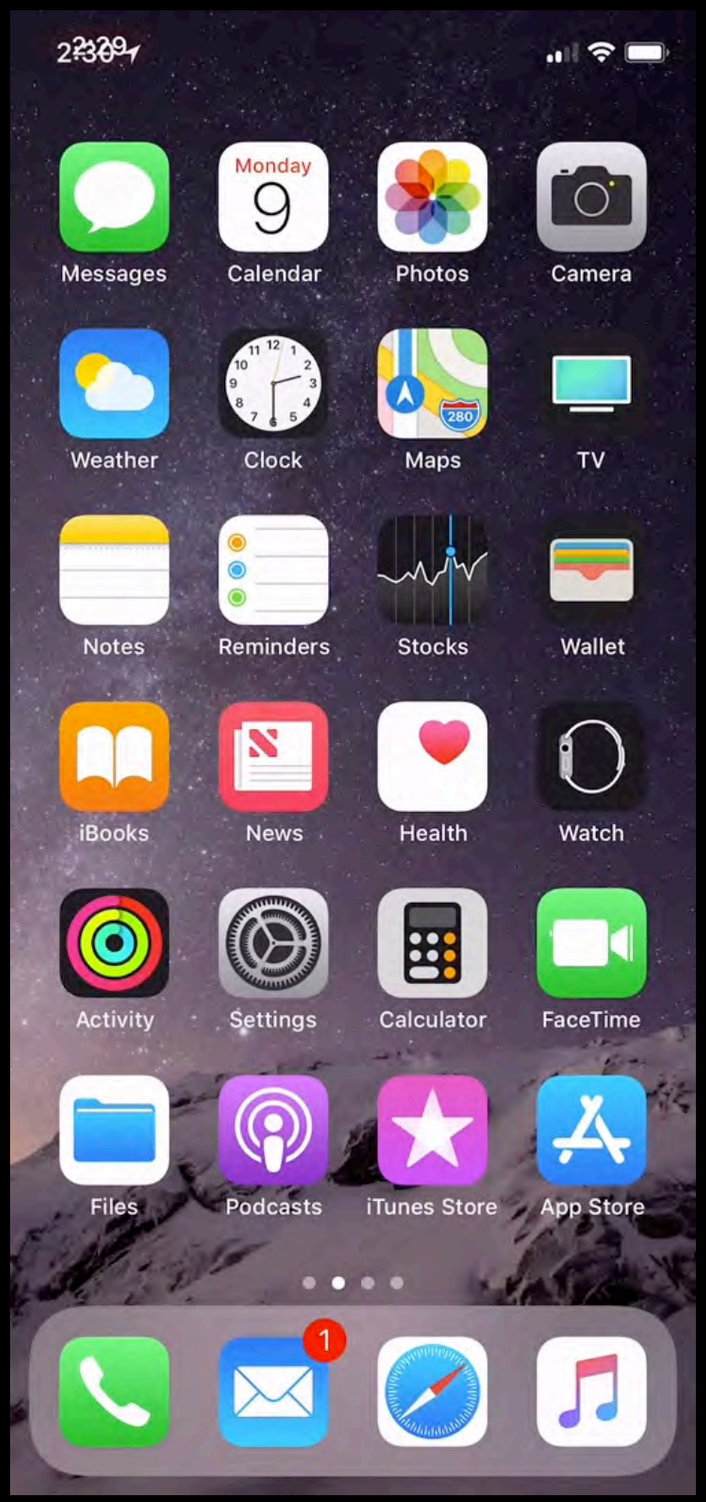
Why Use Apple Wallet?

- Puts all of your cards and passes in one, easily accessible and secure place

- You can of course access your cards or passes from individual merchant apps - but that requires you to find the app, open it, and then find the card or pass

- With Apple Wallet all you have to do is double-click the side button and the Wallet will open - just select the card you want to use

Using Apple Wallet



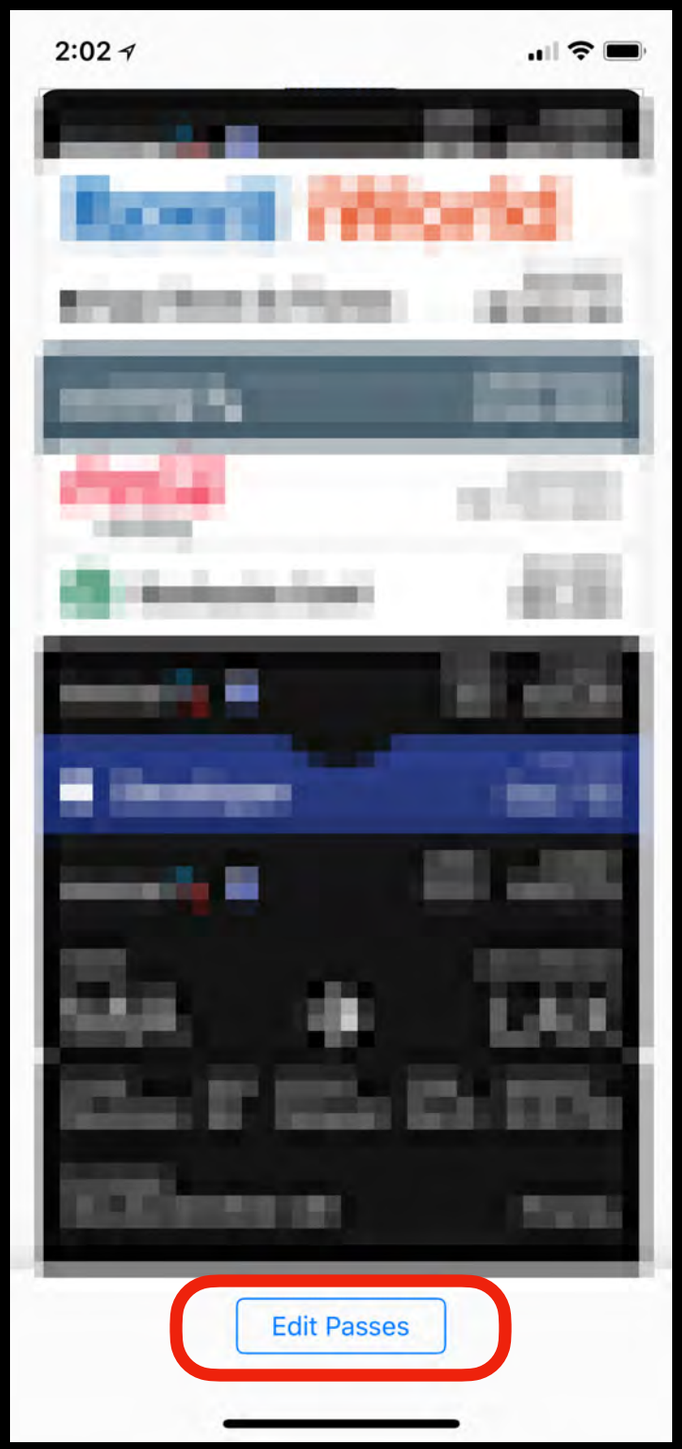
Double-click Side Button

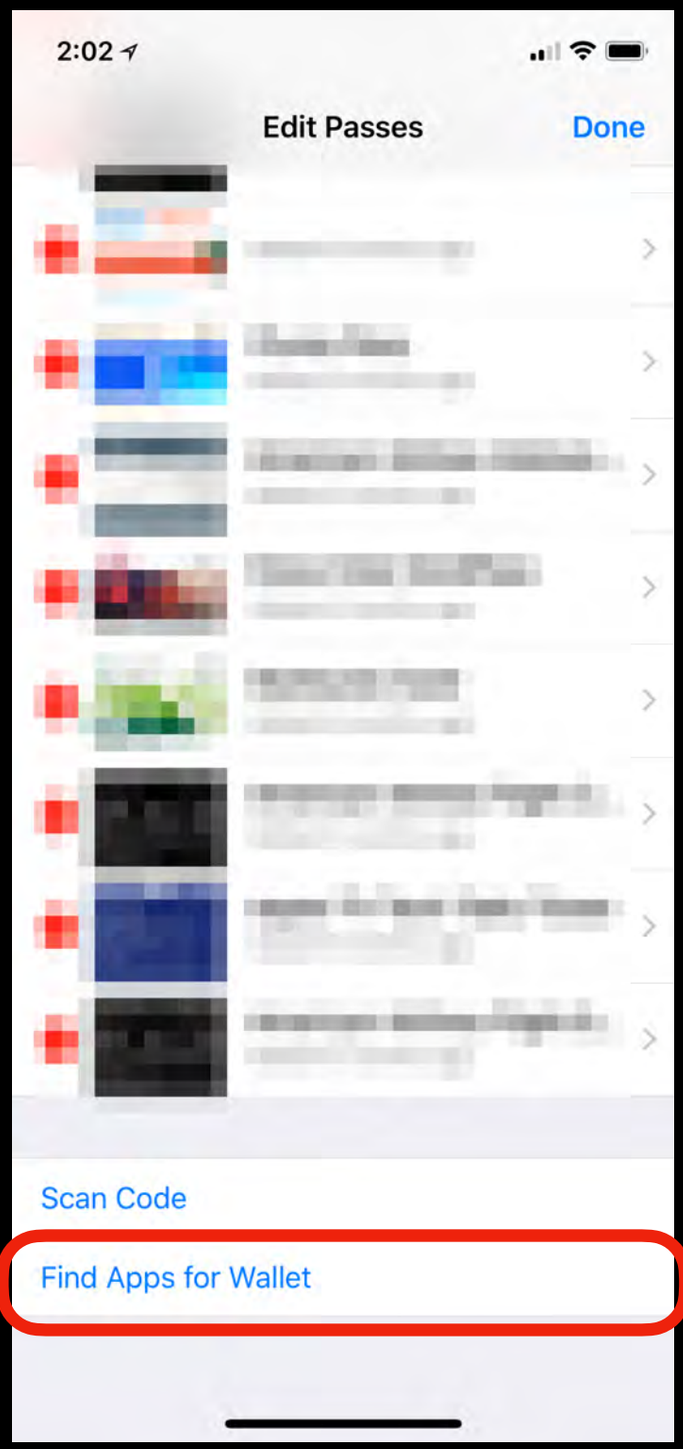
Add Cards to Wallet

- Using Wallet-enabled apps
- With Mail or Messages
- Through a web browser
- Scanning a barode
- Sharing through AirDrop
- From your Mac
- Tapping a Wallet notification

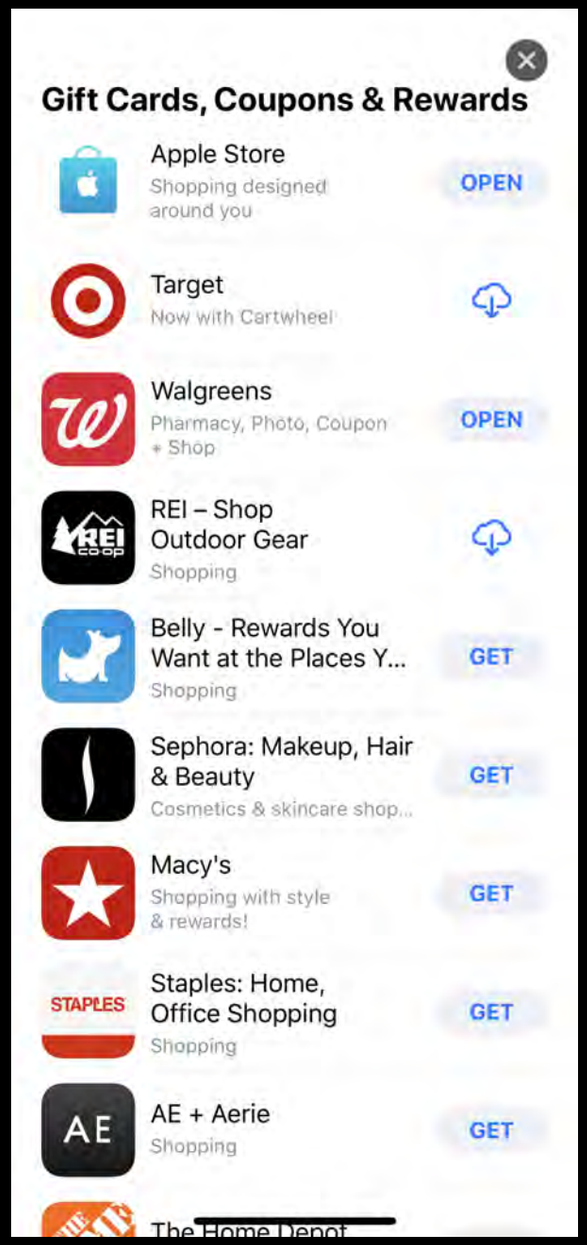
Most common way is using Wallet-enabled apps - and there are a lot!

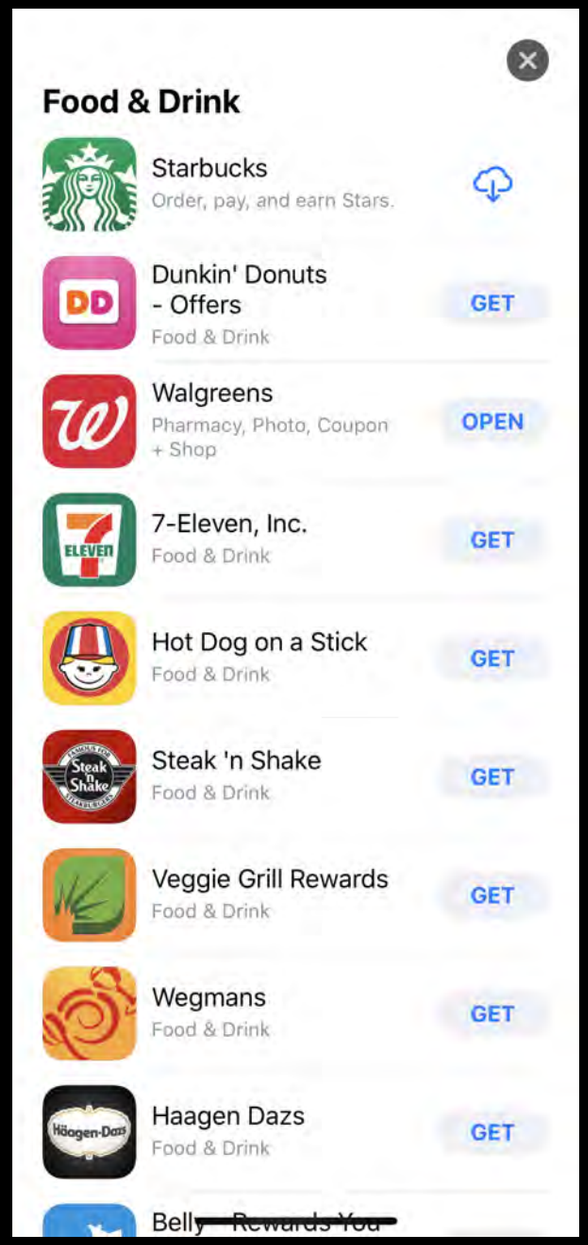
Finding Wallet-enabled Apps

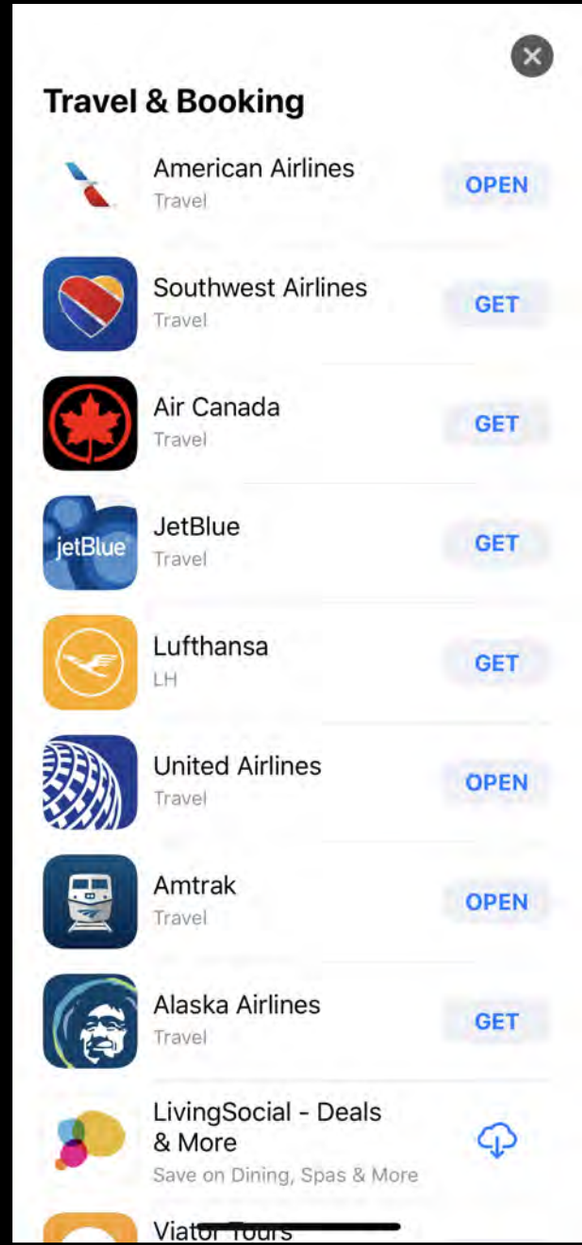


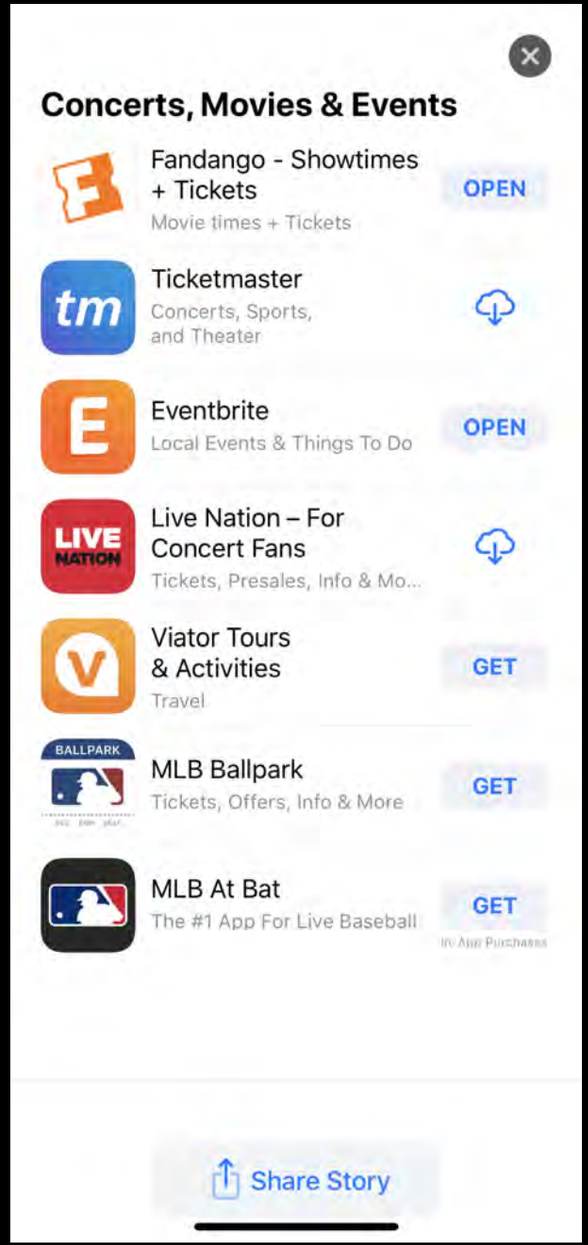


Many Wallet-enabled Apps to Choose



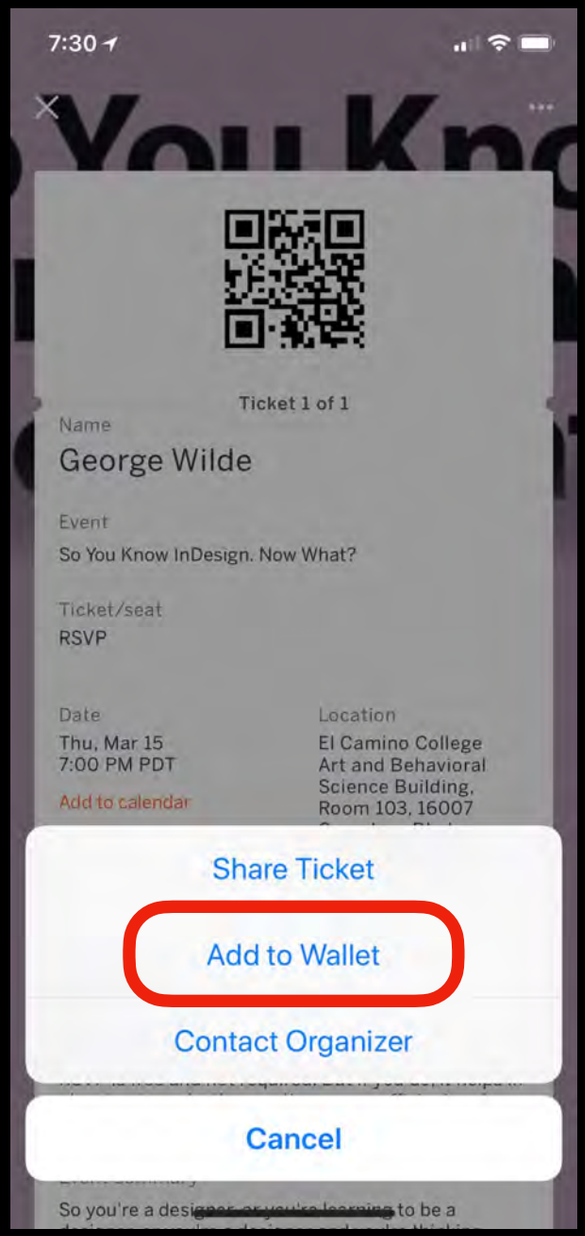


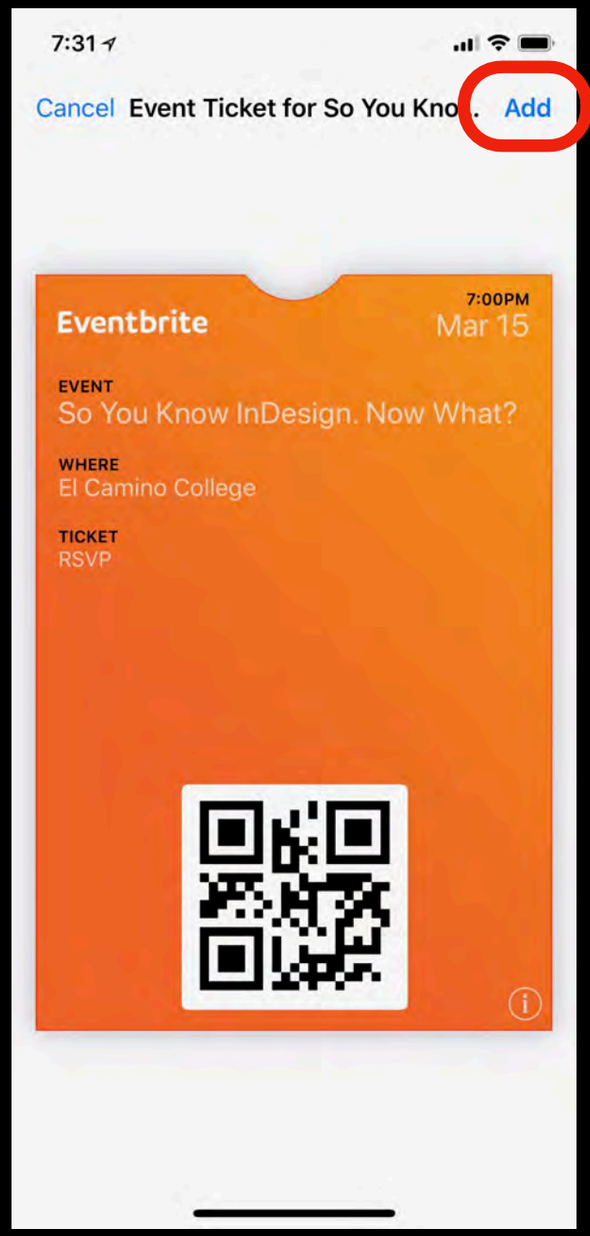


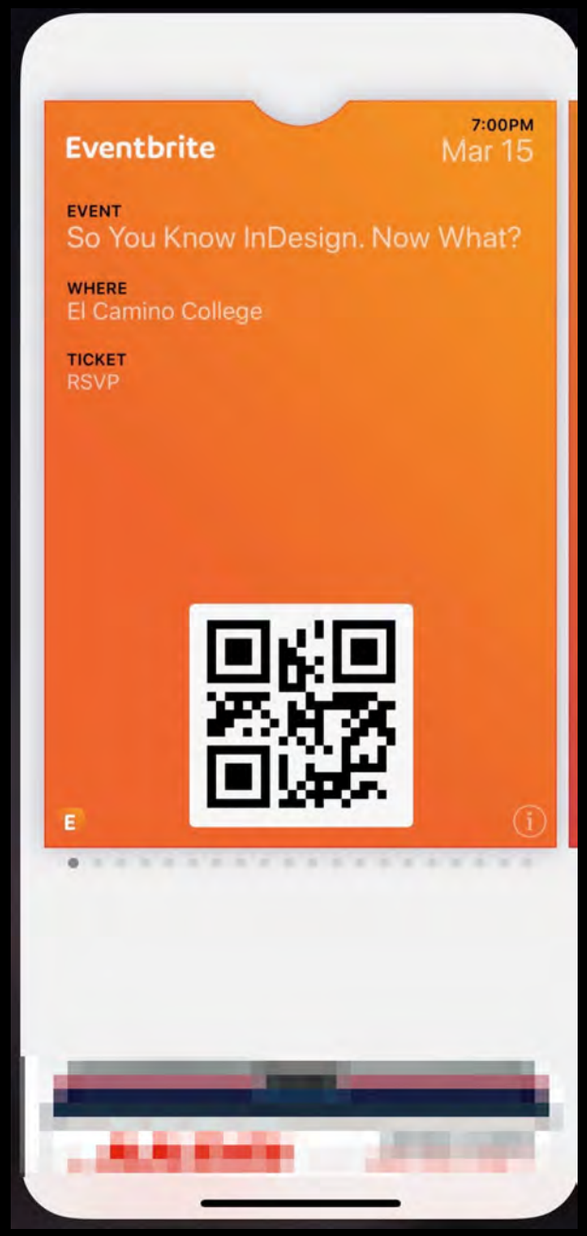


Adding to Wallet Example

Eventbrite





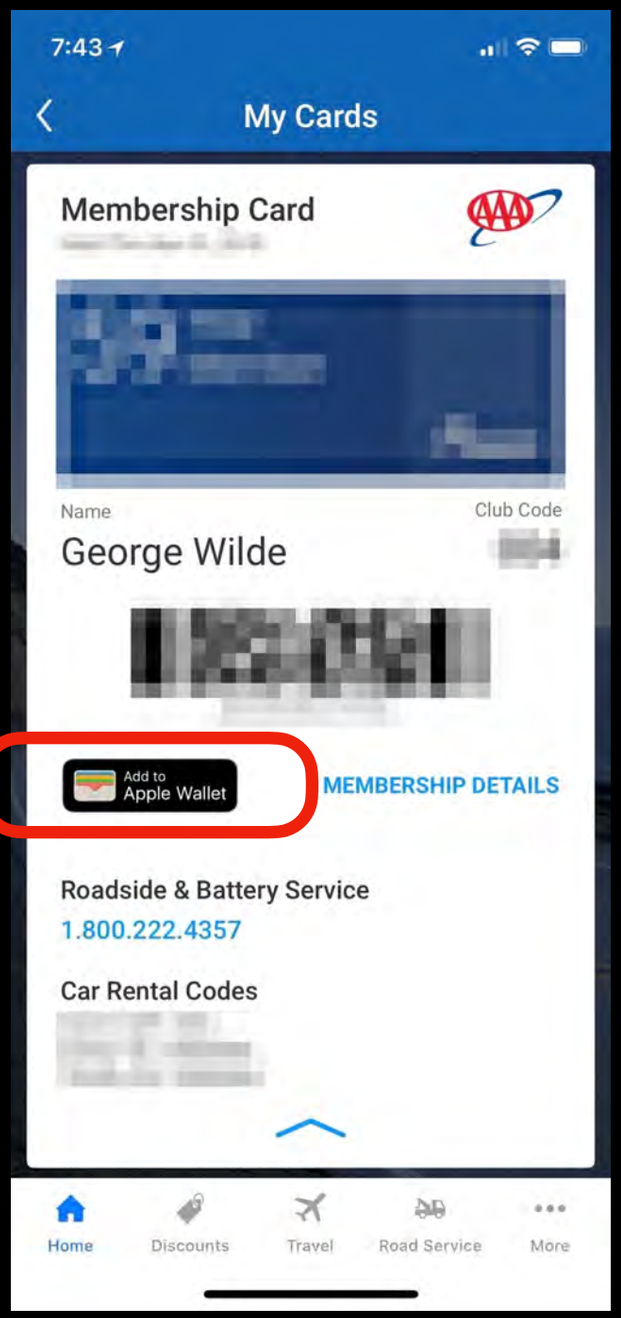


Eventbrite App

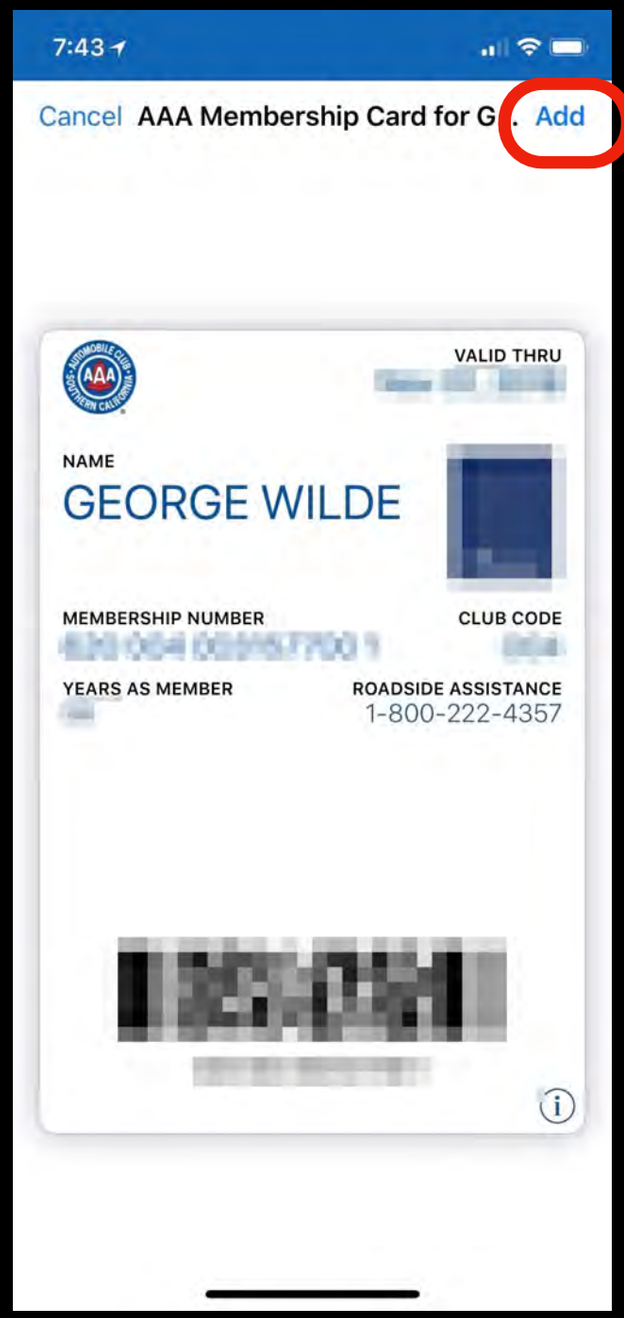
Apple Wallet

Another Example

Auto Club



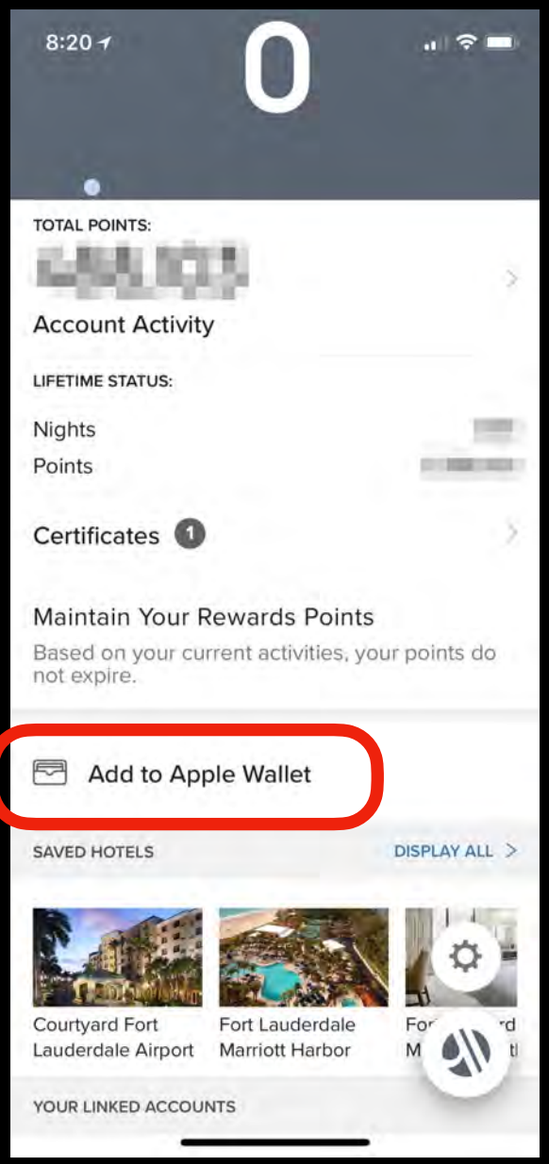
AAA Auto Club App



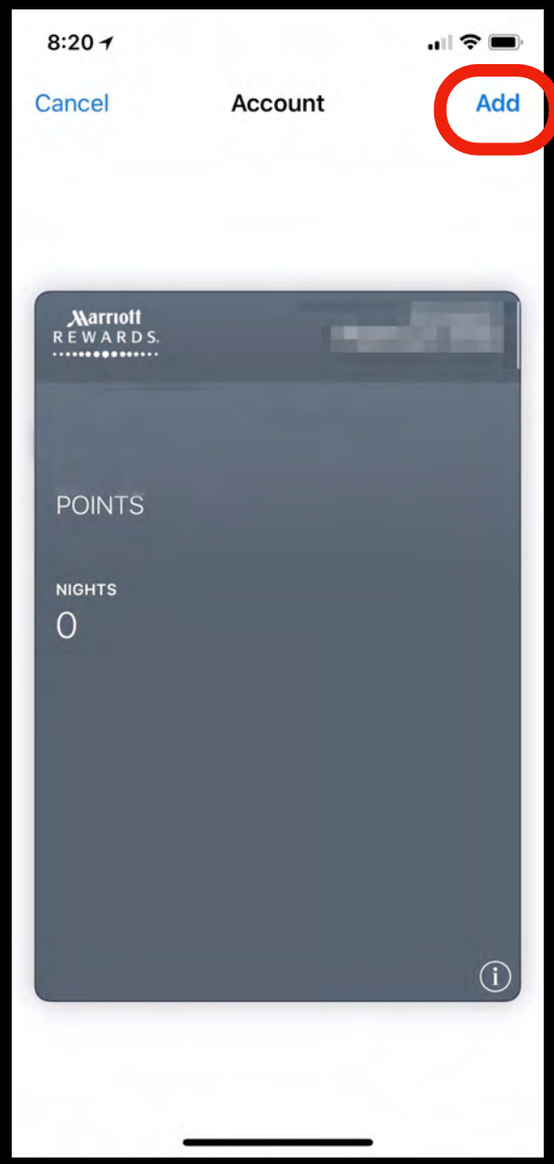
Apple Wallet

Yet Another Example

Hotel Rewards Card



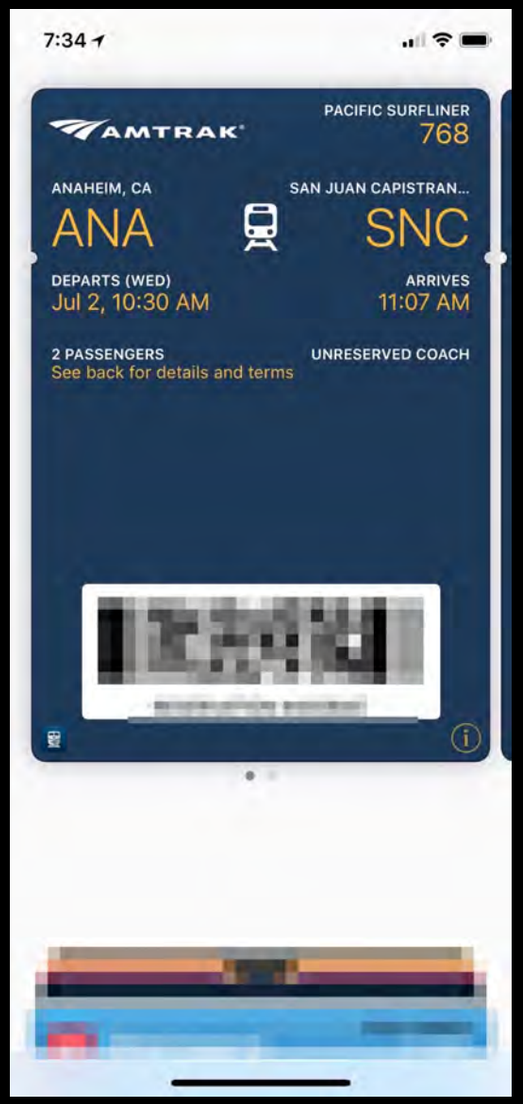
Marriott App



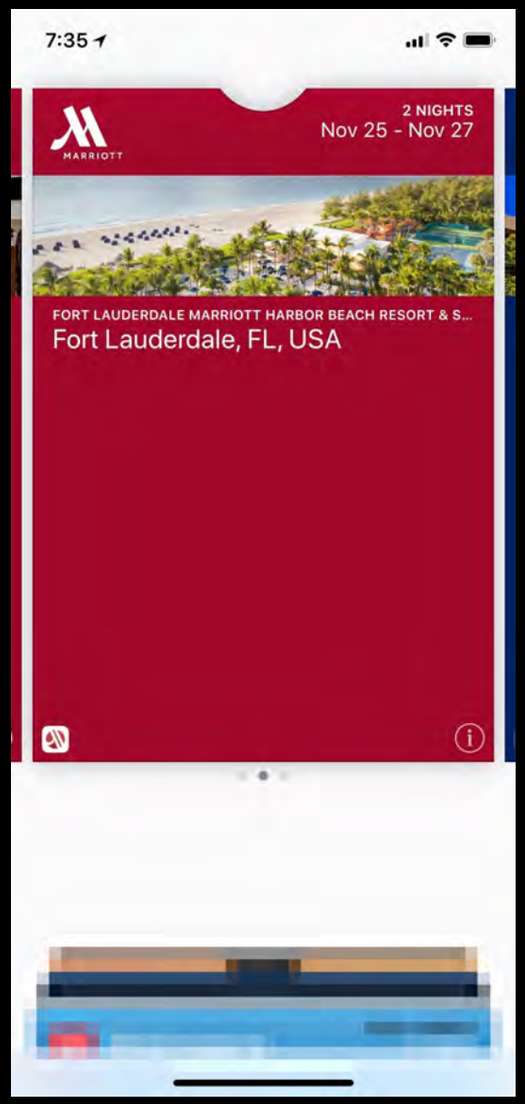
Apple Wallet

Apple Wallet Holds Many Types of Cards and Passes

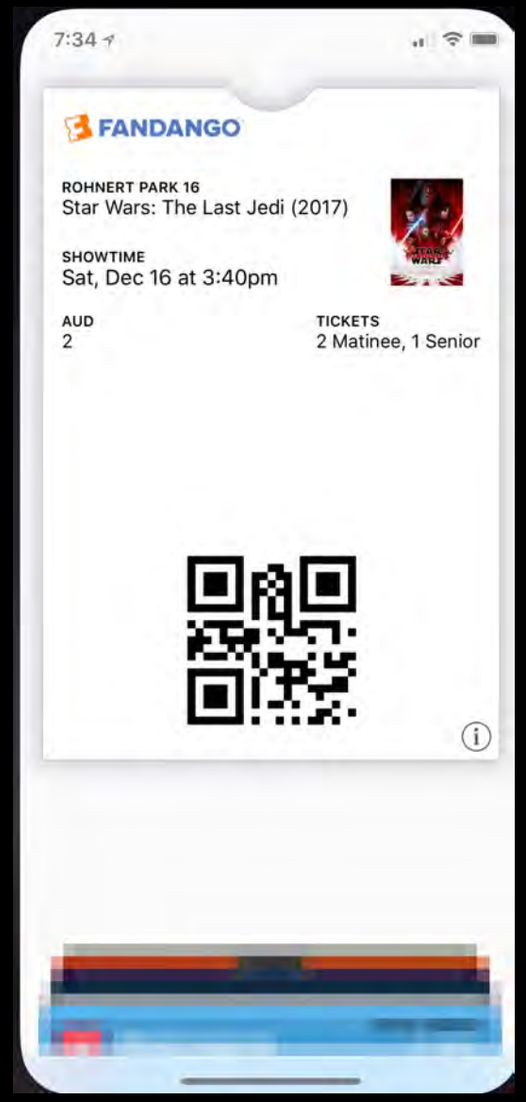
Airline Boarding Passes



Train Tickets



Hotel Reservations



Movie Tickets

Using Apple Wallet

- Present the Apple Wallet card when boarding a plane, at a checkout counter, or when requested
- Various cards and passes are read differently
  - Some use bar code readers or QR code readers
  - Some use NFC (Near-field Communication)
  - Apple Pay uses both Touch ID or Face ID plus NFC

Apple Pay

What is Apple Pay?

- Apple Pay Works with most credit and debit cards stored in the Apple Wallet

- Apple Pay is simpler to use than your physical card, and safer too

- Apple Pay can be used to make secure purchases in stores, in apps, and on the web

- Apple Pay can also be used to send and receive money from friends and family right in Apple Messages

- The merchant never touches your physical card and can not see your actual account number

What Stores Accept Apple Pay?

Literally Millions

Some Examples

ACE · ACME · Aéropostale · American Eagle Outfitters · Apple · Bi-Lo · B&H · Babies"R"Us · Barneys New York · Bashas' · Baskin-Robbins · Big Lots · Best Buy · BevMo! · BJ's · Bloomingdales · Casey's General Store · Cash&Carry Smart Foodservice · Champs Sports · Chevron · Chick-fil-A · Coca-Cola vending · Corner Store · Crate&Barrel · Cub · Disney Store · Duane Reade · Dunkin' Donuts · Express · ExtraMile · Farm Fresh · Firehouse Subs · foodmaxx · Foot Locker · Footaction · Fuddruckers

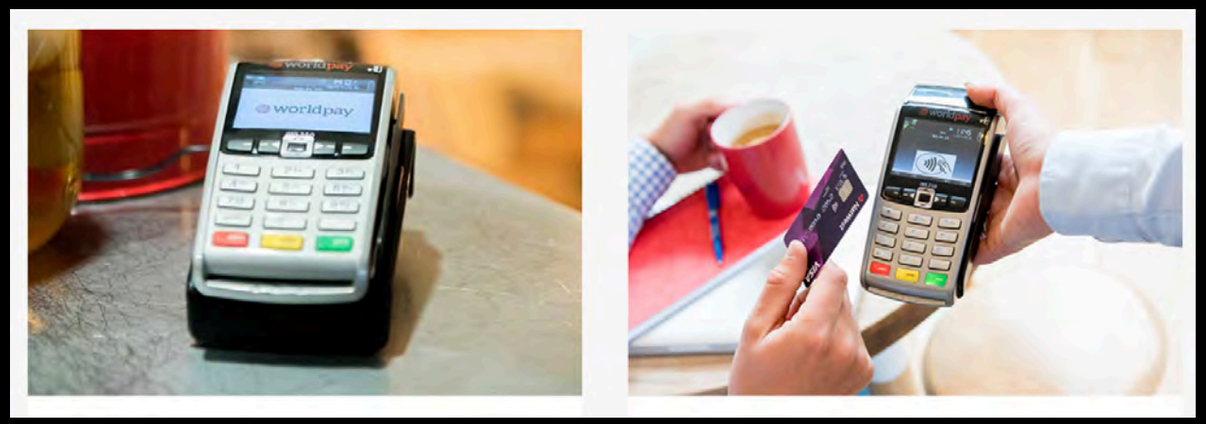
GameStop · GAP · Giant · Giant Eagle · Giant · Golden State Warriors · Hannaford · Harveys · Hornbacher's · Jamba Juice · J.Crew · Jersey Mike's Subs · jetBlue · Jewel Osco · Jimmy John's · KFC · Kids Foot Locker · Kohl's · Lady Foot Locker · LEGO · Levi's · Lin's · L.L.Bean · Luby's · Lucky · maceys · macy's · Martin's · McDonald's · meijer · Nike · Office Depot OfficeMax · Old Navy · Orlando Magic · Panera Bread · Peet's Coffee

Pep Boys · petco · PETSMART · Phoenix Suns · Pizza Hut · QuikTrip · Raley's · Rubio's · Save Mart · Schnucks · SEPHORA · shaw's · Shop 'n Save · Shoppers · SIX:02 · Smart & Final · Sprouts Farmers Market · STAPLES · Starbucks · star market · Stater Bros. · Stop&Shop · SUBWAY · SUPERVALU · Target · Toys"R"Us · Trader Joe's · ULTA Beauty · United supermarkets · unleashed! · Walgreens · Walt Disney World · Wegmans · White Castle · Whole Foods Market · Winn-Dixie

Spanz Pro X

What Do You Need To Use Apple Pay At A Store?

- An Apple Pay compatible iPhone or Apple Watch
- A merchant using a compatible Contactless Terminal



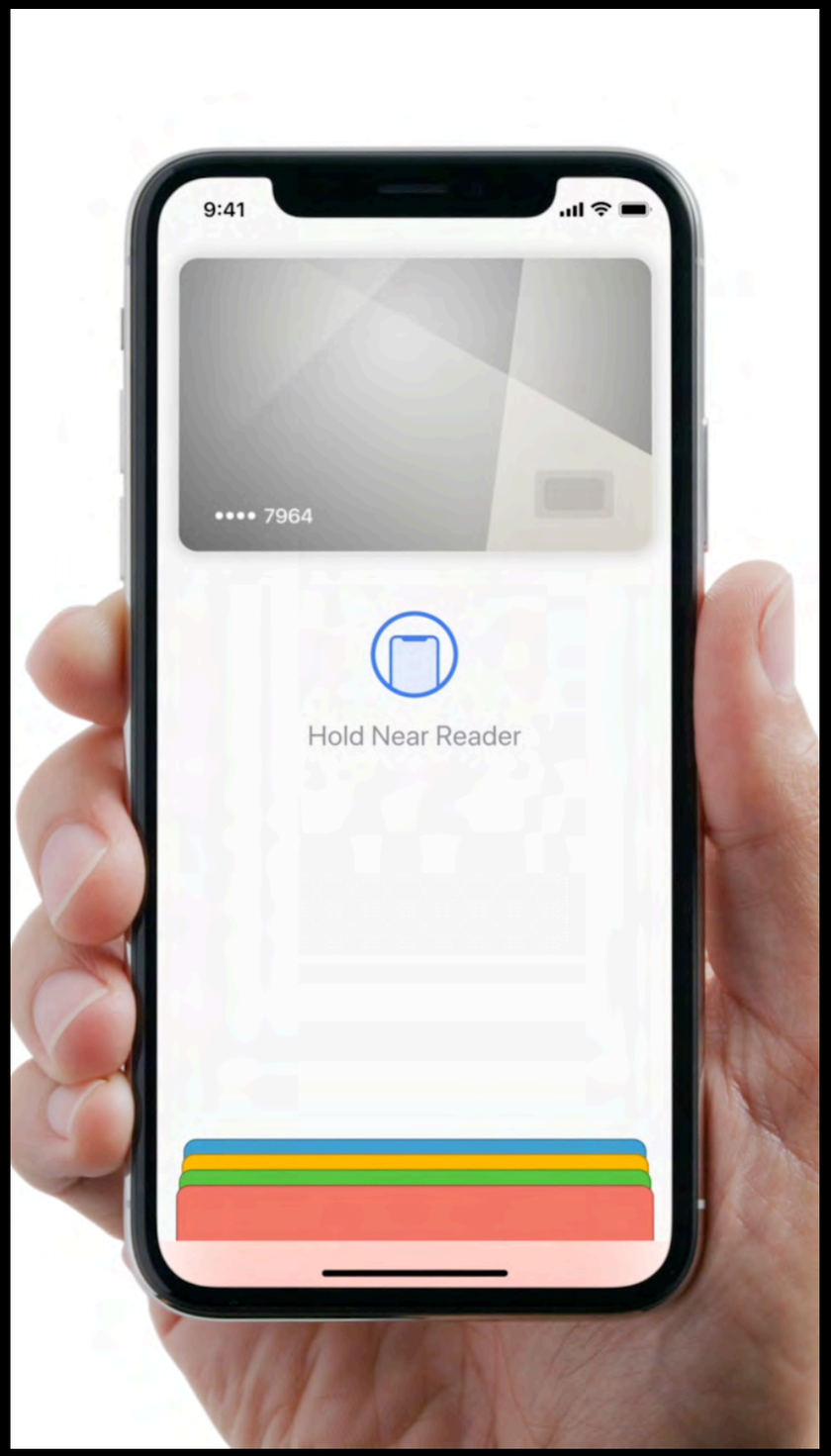
Apple Pay Compatible Devices

To use Apple Pay you need Touch ID or Face ID, and to purchase with contactless readers in stores you need NFC. These are your choices:

- iPhone SE, iPhone 6, iPhone 6 Plus, iPhone 6s, iPhone 6s Plus, iPhone 7, iPhone 7 Plus, iPhone 8, iPhone 8 Plus, and iPhone X
  - Can be used for payments in stores, within apps, on the web in Safari, person to person, and in Business Chat
- Apple Watch (first generation), Apple Watch Series 1, Apple Watch Series 2, and Apple Watch Series 3
  - Can be used for payments in stores, within apps, person to person, and in Business Chat
- iPad mini 3, iPad mini 4, iPad Air 2, iPad (5th generation), iPad Pro, iPad (6th generation)
  - Can only be used for payments within apps, on the web in Safari, person to person, and in Business Chat
- MacBook Pro with Touch ID or a Mac model introduced in 2012 or later with an Apple Pay-enabled iPhone or Apple Watch
  - Can only be used for payments on the web in Safari and in Business Chat

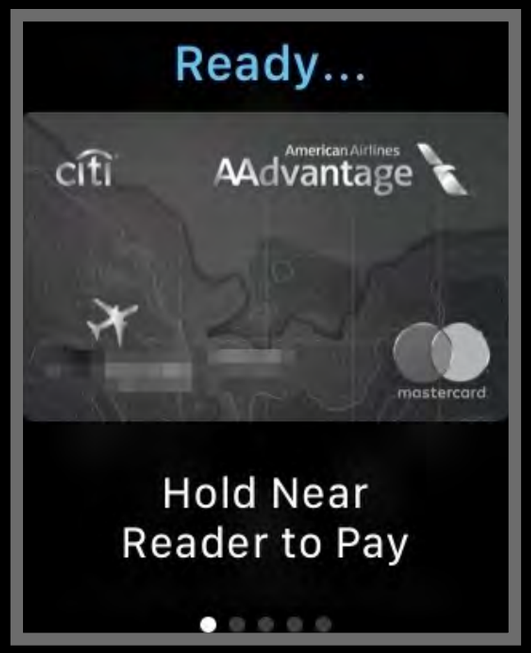
How To Use Apple Pay In Stores

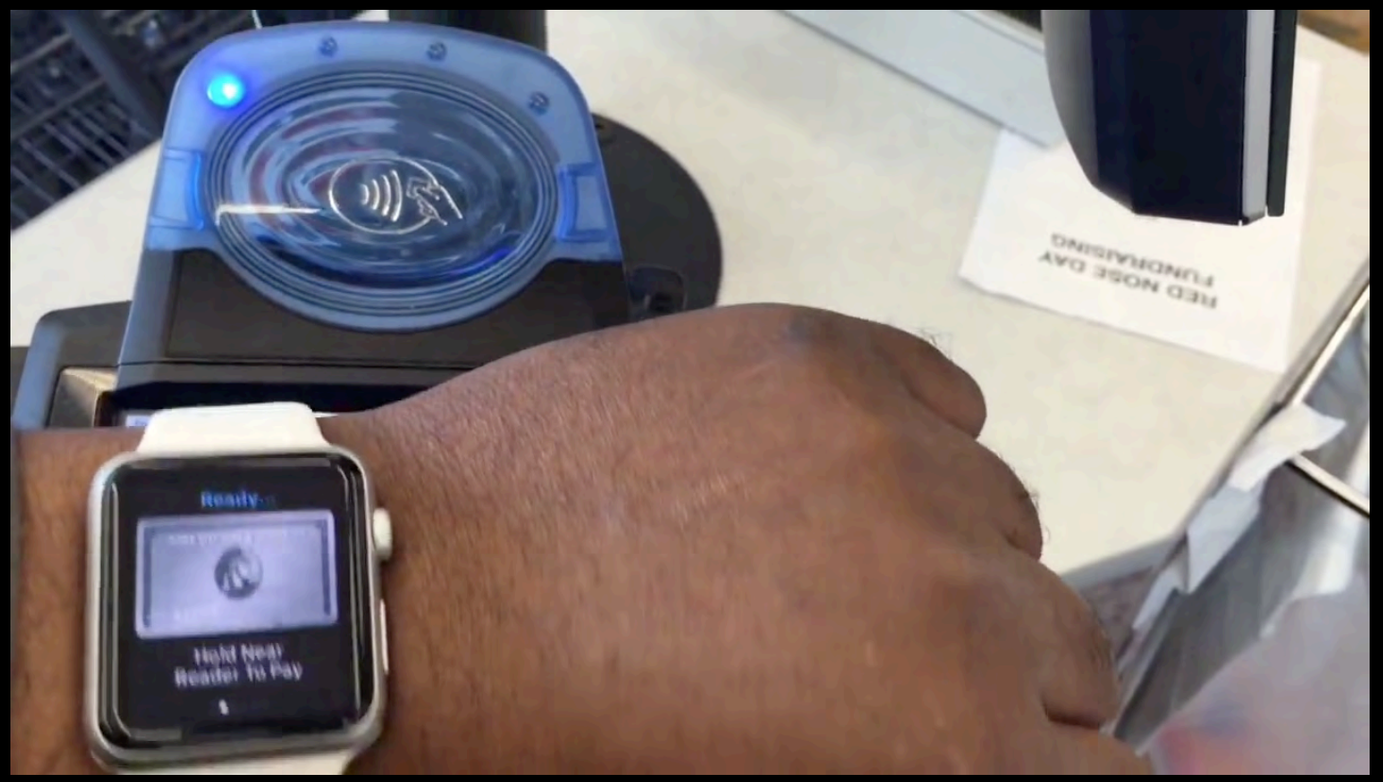
Activate Apple Pay on your iPhone or Apple Watch and place the device within 4 cm of the contactless terminal



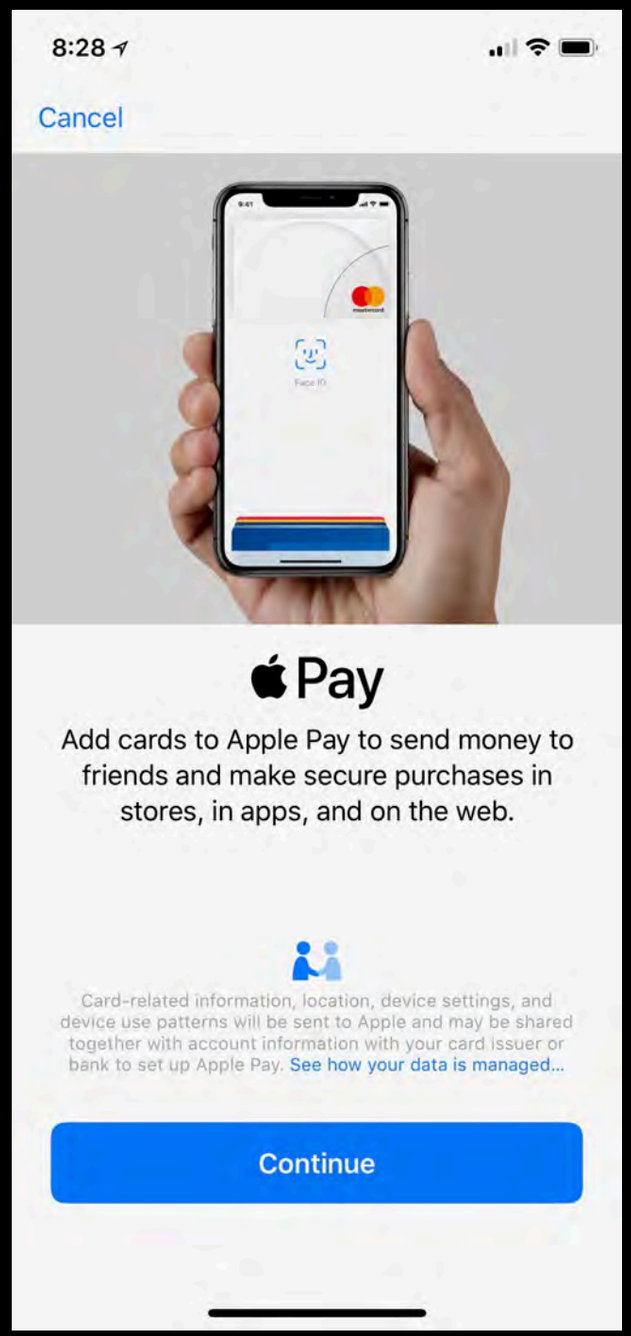
Or Use Your Apple Watch

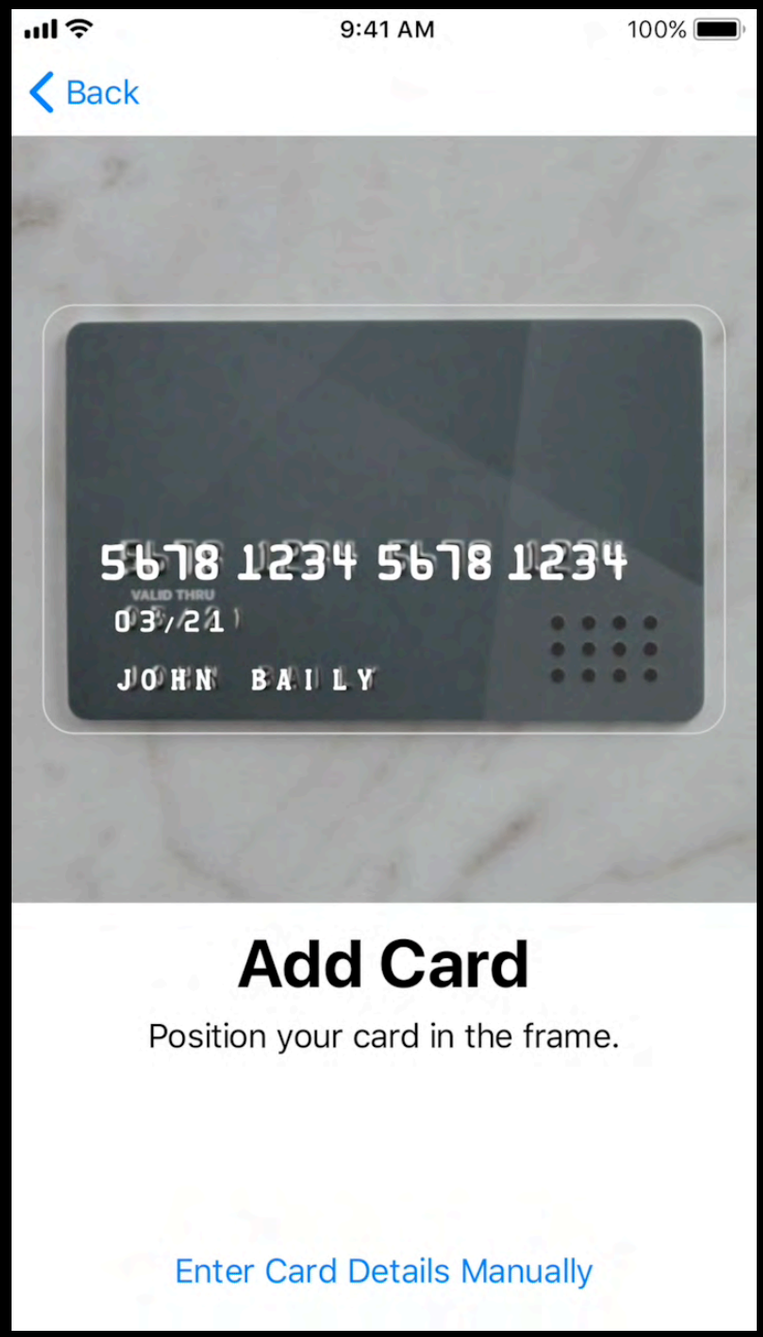
- Use Apple Watch for Apple Pay at Walgreens just by double-clicking the side button.
- Can also be used for Walgreens Balance Rewards



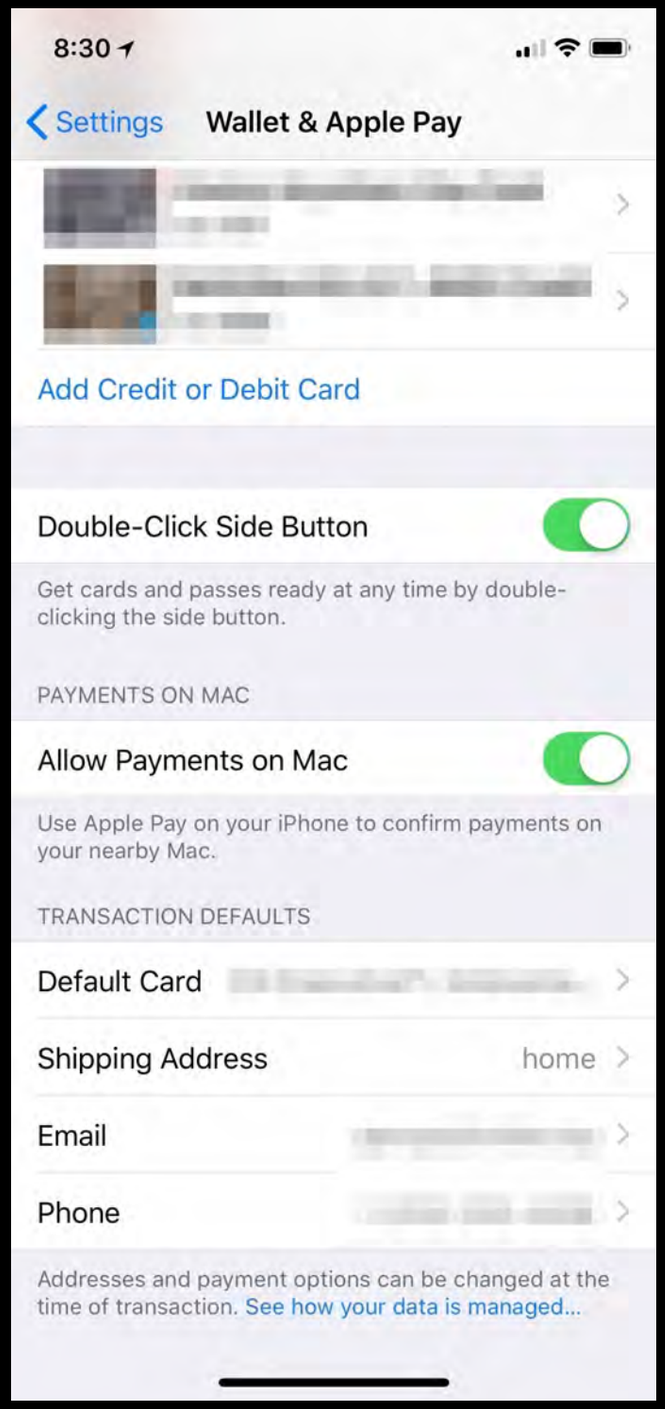


Set Up Apple Pay

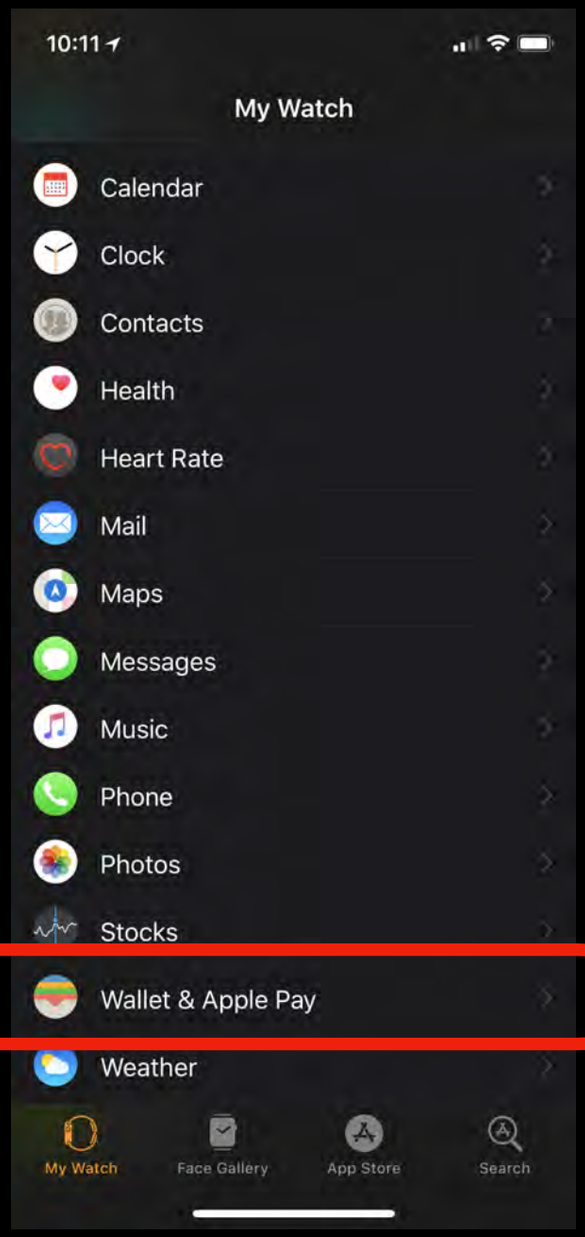


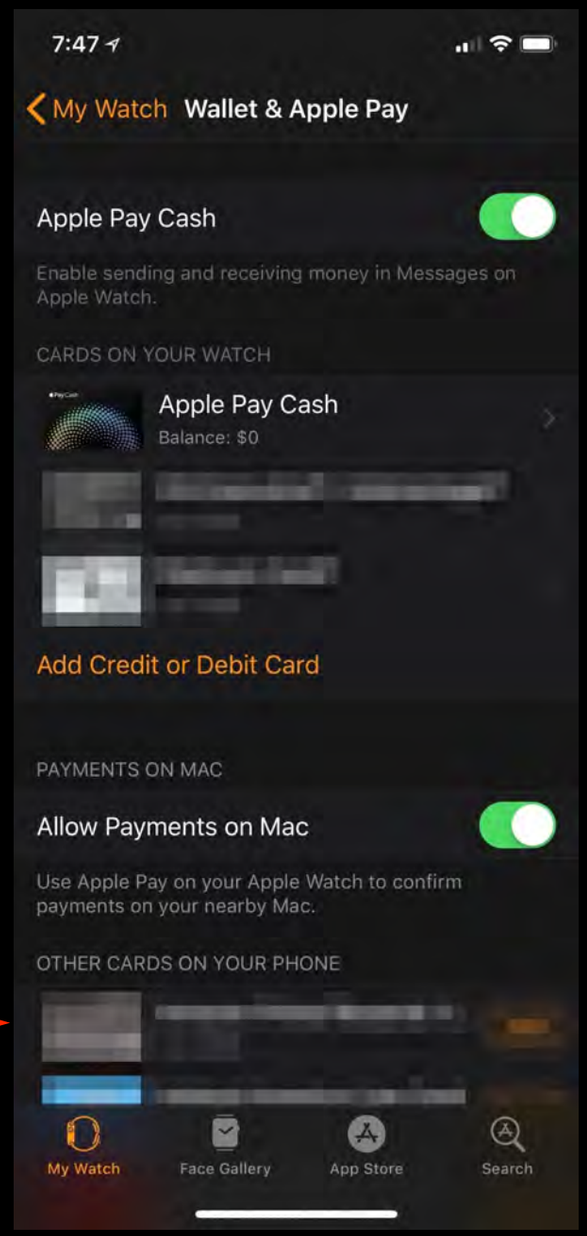


Apple Pay & Wallet Settings

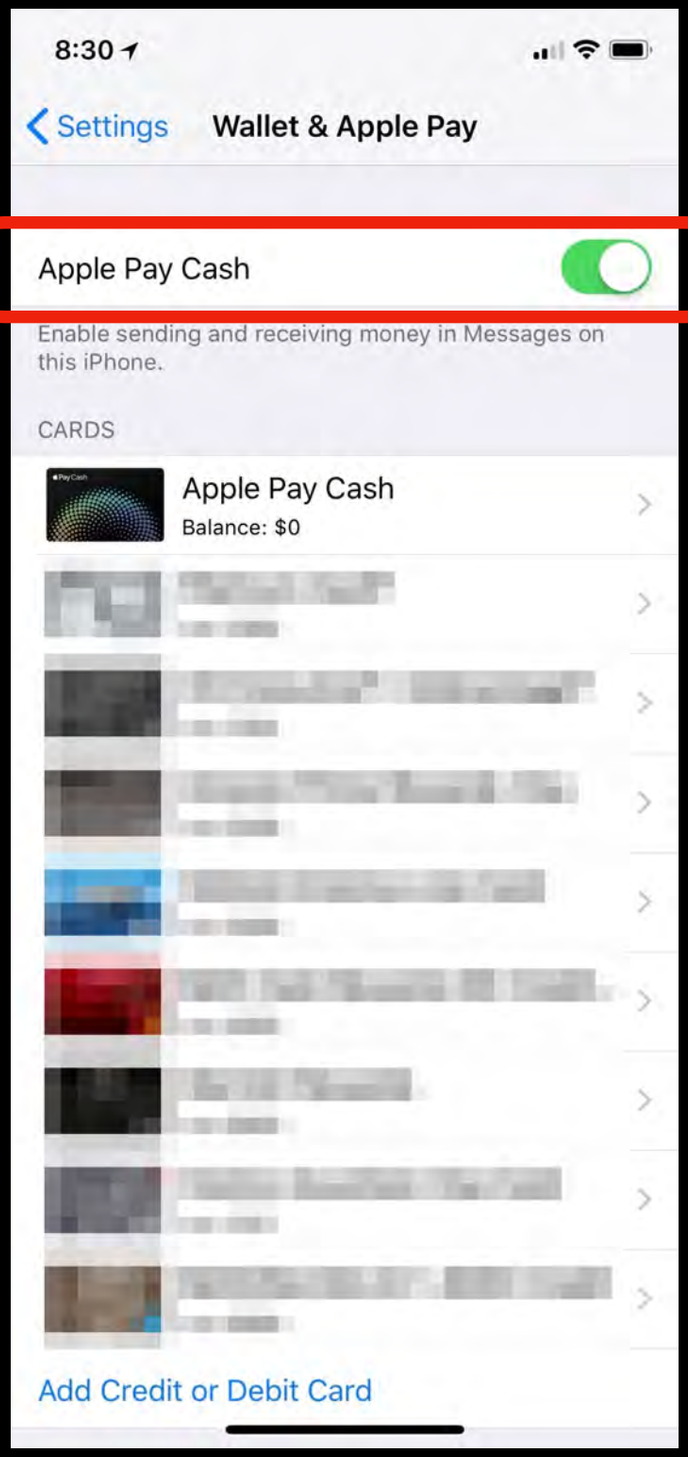


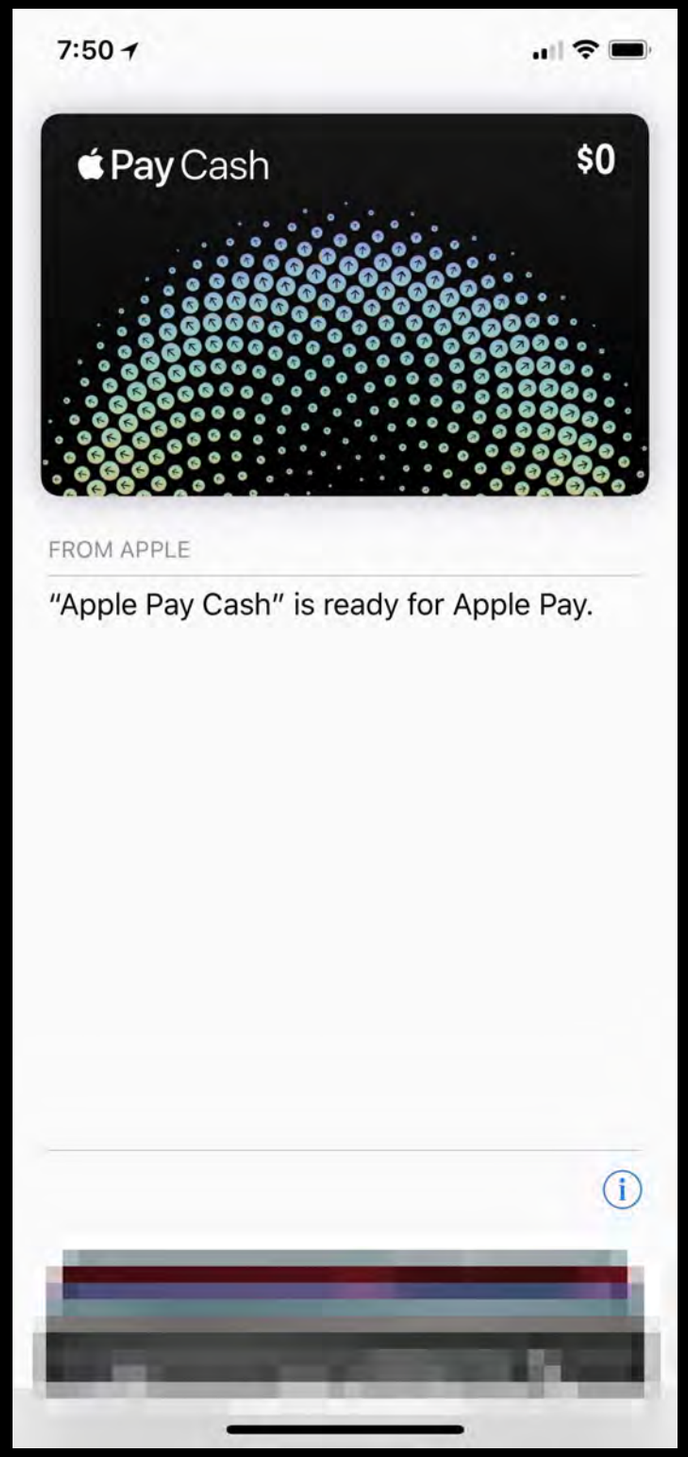
Set Up Apple Pay on Apple Watch





Set Up Apple Pay Cash

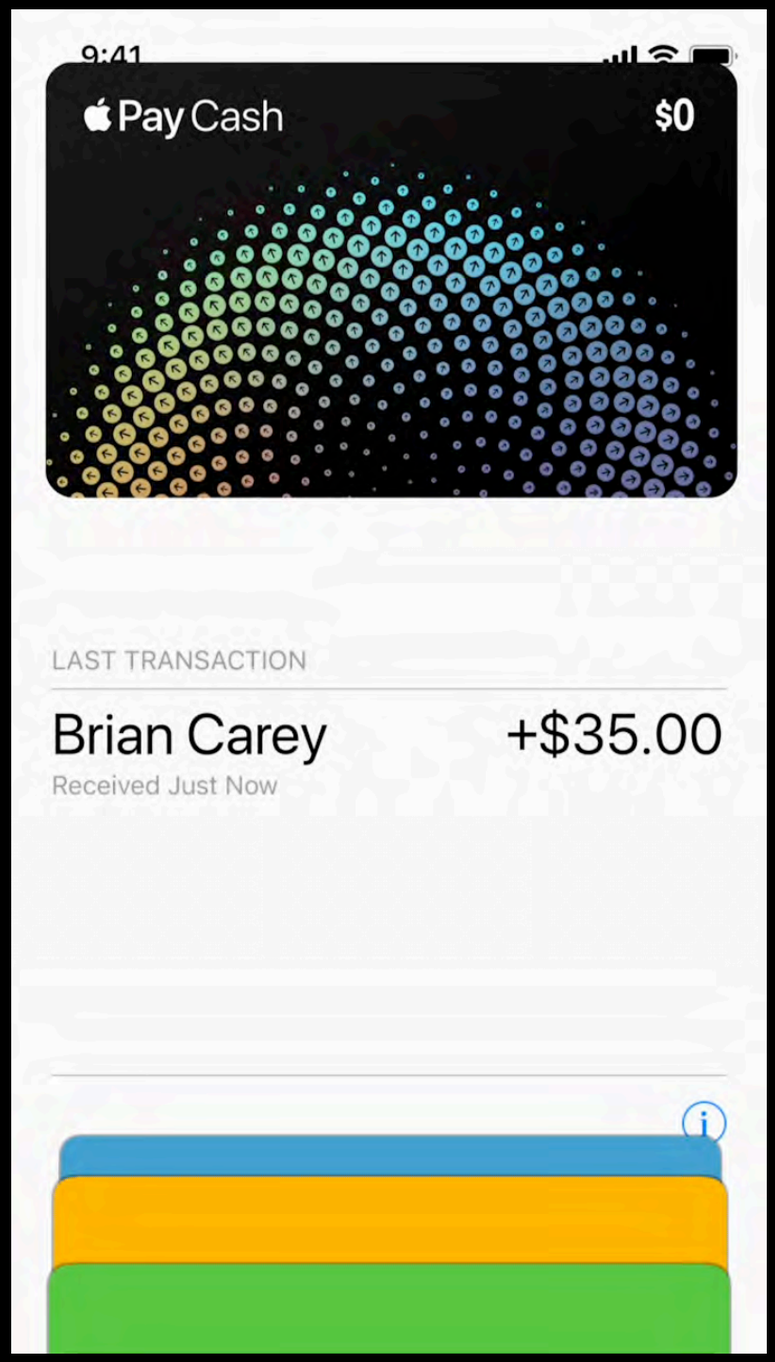




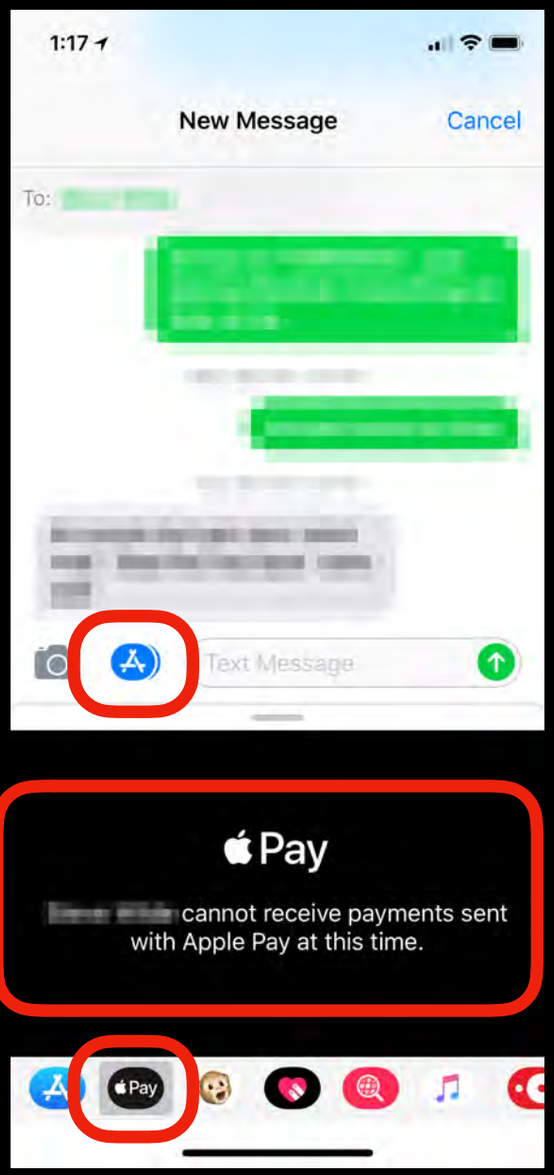
Requirements for Apple Pay Cash & Person to Person Payments

- Requires compatible iOS device with iOS 11.2 and later or watchOS 4.2 or later
- Requires two-factor authentication for your Apple ID and you must be signed in to iCloud with this Apple ID on any device used to send or receive money
- Requires an eligible credit or debit card in your Wallet
- Requires that you agree to the Terms and Conditions and you may be asked to verify your identity

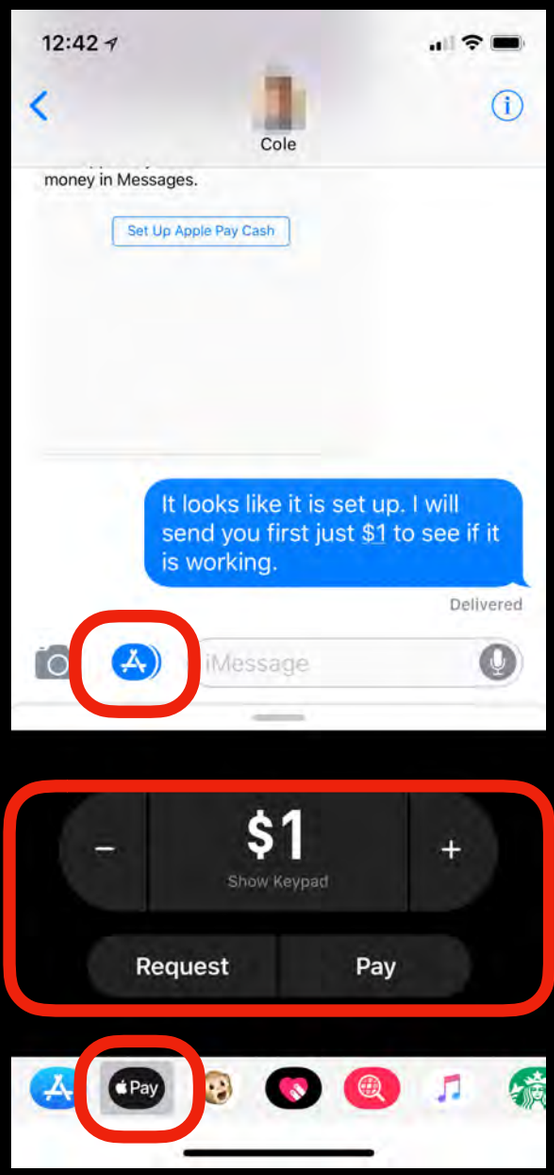
Using Apple Pay Cash



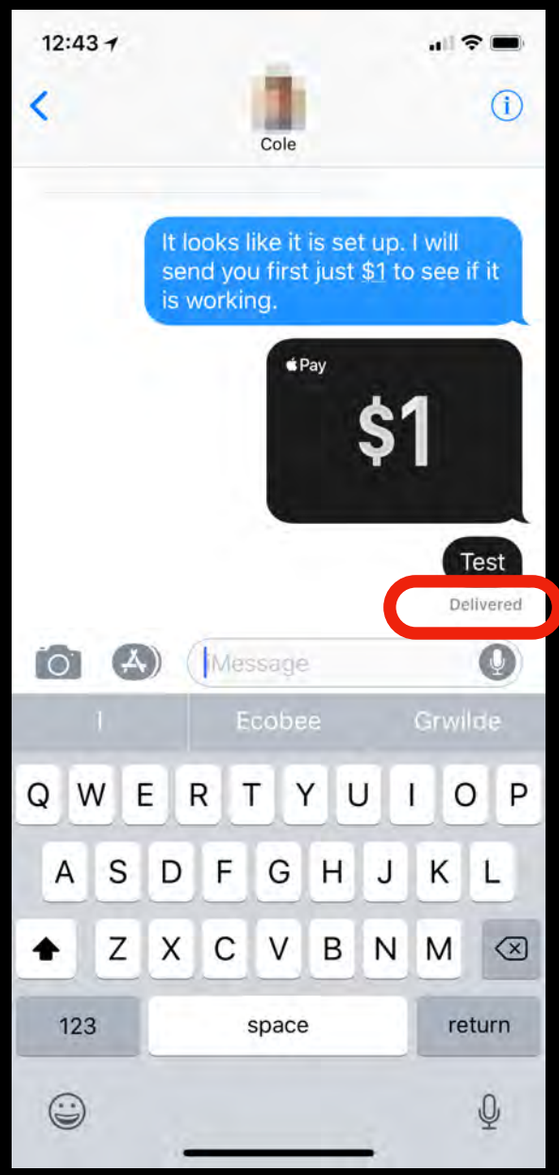
Apple Pay Cash Transactions



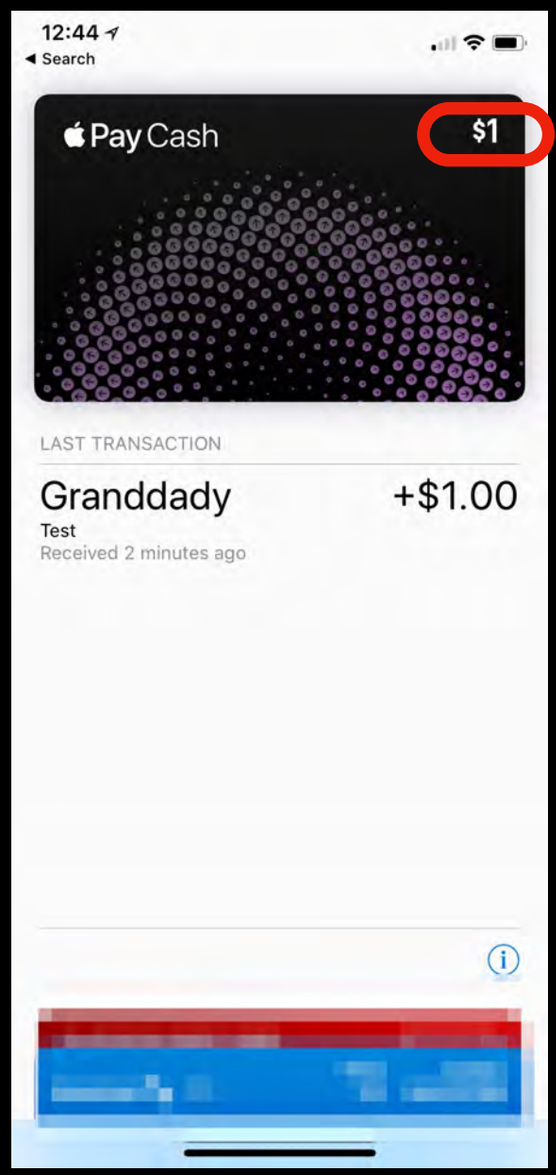
Cannot send Apple Pay Cash since recipient not on iPhone



Sending Test Payment after recipient sets up Apple Pay Cash

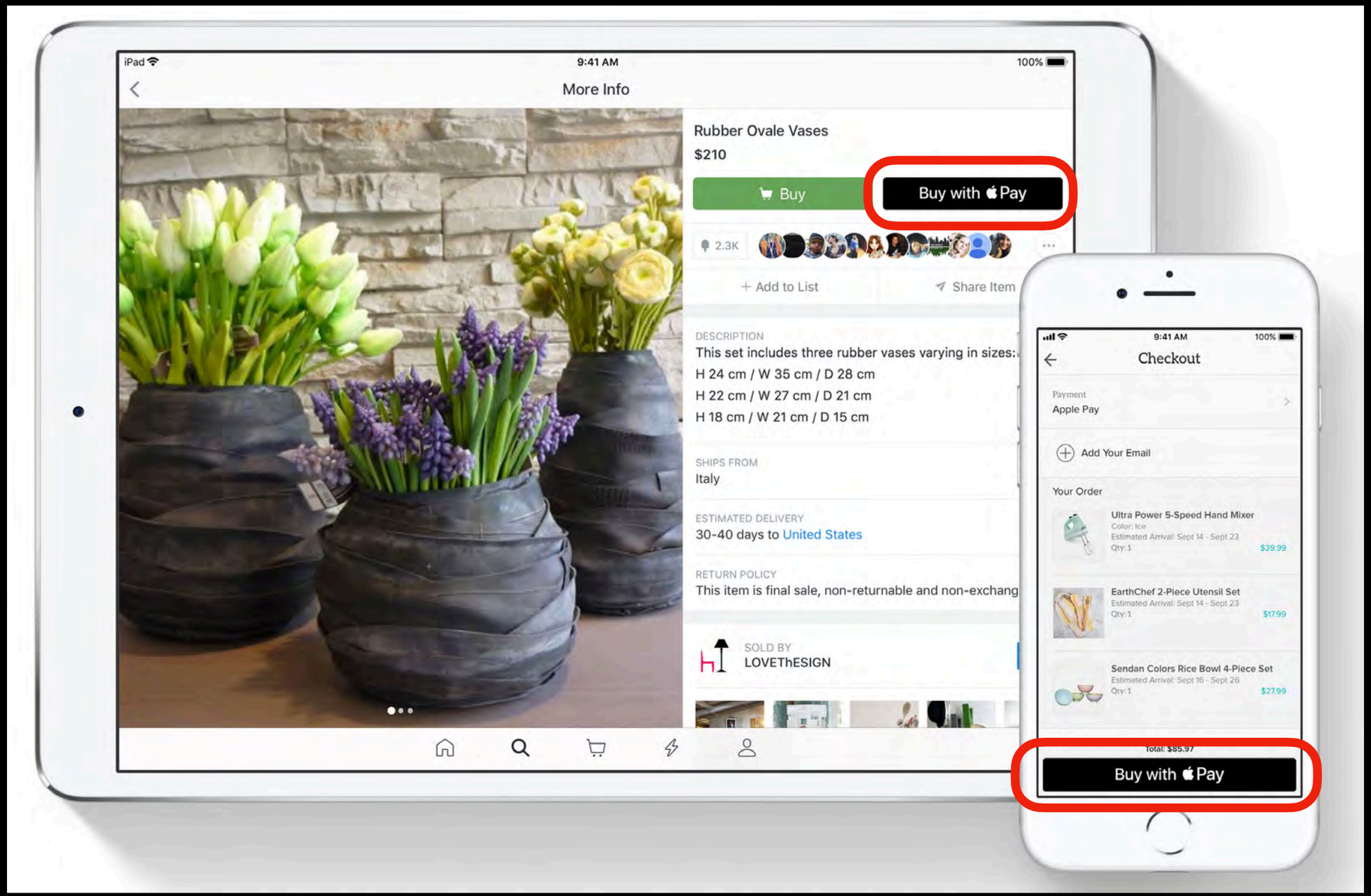


Apple Pay Cash Payment Delivered

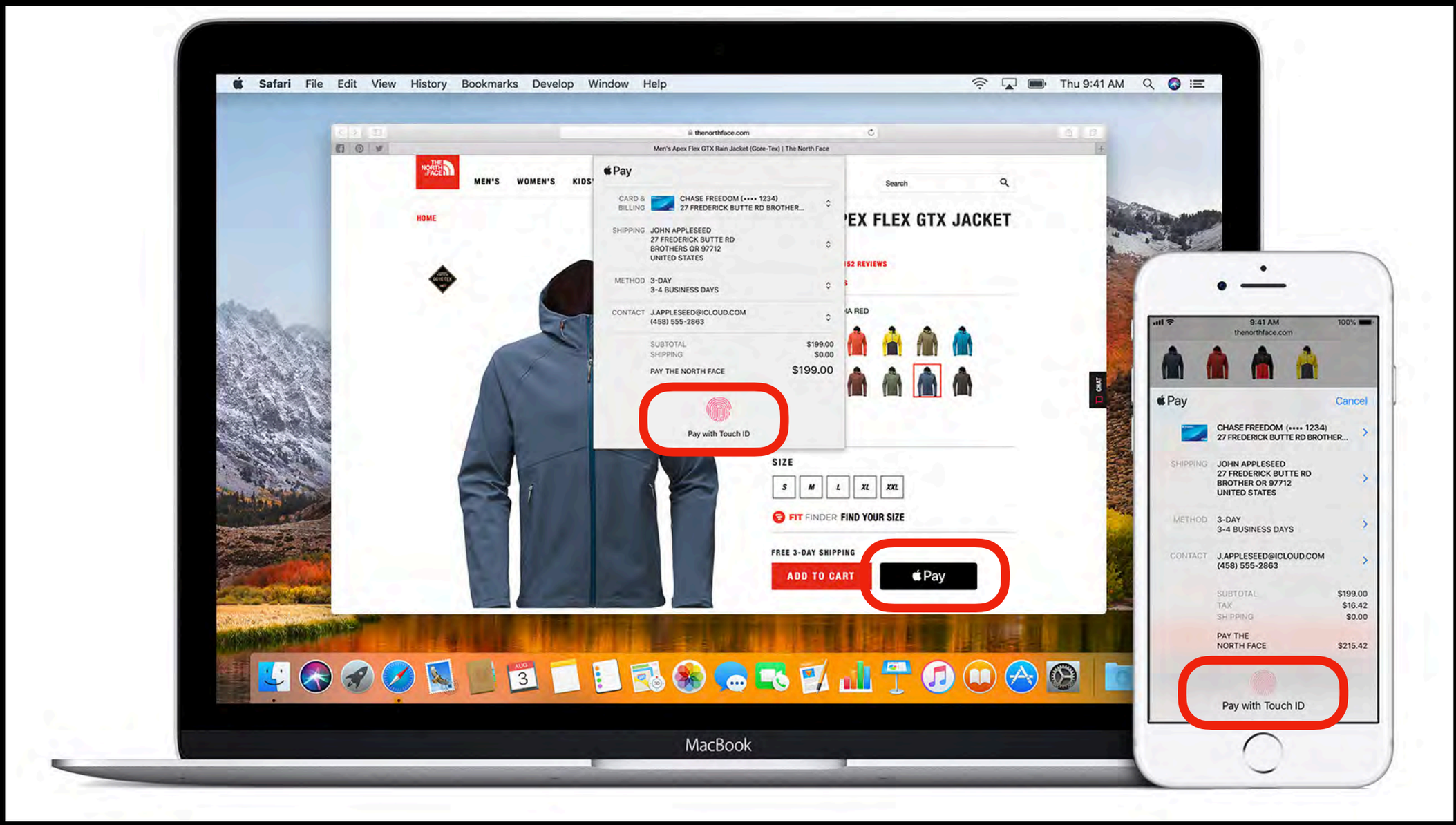


Apple Pay Cash in recipients Wallet

Use Apple Pay Within iPhone or iPad Apps



Use Apple Pay On The Web With Safari



Apple Messages

Apple Messages App

- One of the most used iPhone Apps - available on iPhone, iPad, iPod Touch, and Mac
- Used to send messages - both iMessages and SMS (Short Message Service)/MMS (Multimedia Messaging Service) messages
- There are several 3rd Party Messaging Apps that are potentially more secure than Apple's Messages App - but I will only be discussing the Messages App which is pre-installed on all iOS and Mac devices

What Are iMessages

- Developed by Apple for use between Apple Devices (iPhones, iPads, iPods, Macs, and Apple Watches)

- Fundamentally different than text messages because they use Wi-Fi or cellular data to send messages, not the text messaging plan provided by your wireless carrier

- Much more capable and faster than SMS/MMS -capable of sending photos, videos, files, locations, money, and much more

- Very secure, and much more secure than email since it uses end-to-end encryption - Apple cannot see your messages because Apple does not hold the encryption keys

What Are SMS/MMS Messages

- SMS messages are the original text messages used with cellular phones for years, and are limited to 160 characters and can only contain text

- MMS messages extend the capability of SMS messages and support photos, longer text messages, and other content

- The Messages app will automatically send iMessages as long as all recipients are on an Apple device - but if any recipient is on another device (i.e.; an Android phone) all recipients will receive an SMS/MMS message

Cost Considerations

- SMS/MMS messages are part of your cellular calling plan - some carriers limit the number of text messages per month before you incur additional charges - many carriers these days allow unlimited texting

- iMessages use Wi-Fi or your cellular data plan - costs may be significant depending upon your cellular data plan if you send many iMessages with heavy video content using cellular data

- Understand the cost implications when traveling to other countries because of potentially significant roaming charges when not using Wi-Fi

iMessage vs SMS/MMS

Blue Bubbles

Green Bubbles

iMessage Security

- When you first enable the Message app, your device creates two sets of private and public keys - one set for encrypting data and one set for signing data

- Your public keys are sent to Apple’s servers and your private keys remain on your device and Apple never sees them

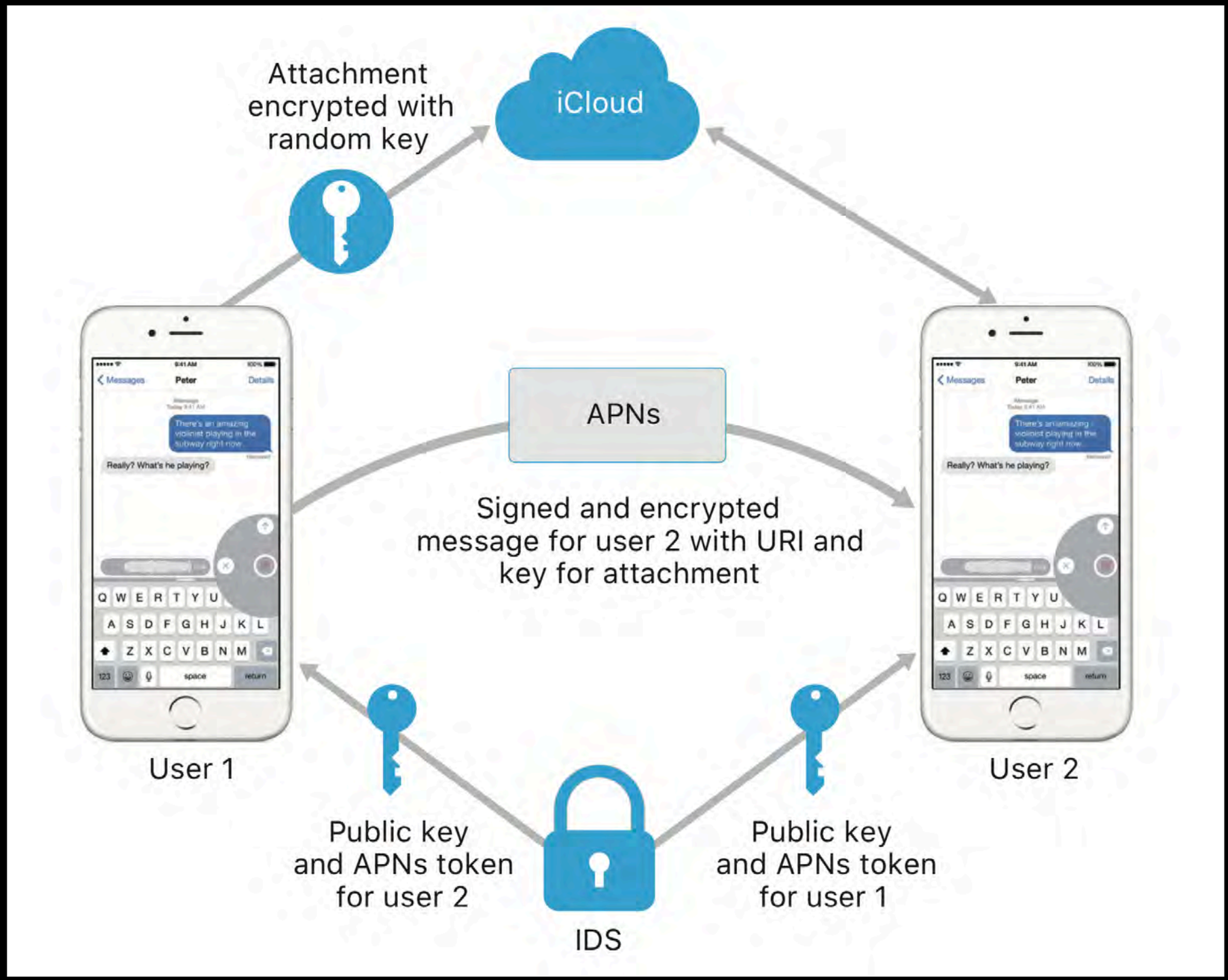
- When someone starts an iMessage conversation with you they fetch your public keys from Apple’s servers - before the iMessage leaves the sender’s device it’s encrypted so that only your device can read it

- If you have multiple devices, each device you add to iCloud has a separate set of keys and each iMessage is encrypted independently for each device - so each iMessage sent to you is actually encrypted and stored on Apple’s servers multiple times (once for each device)

- When you retrieve an iMessage it’s specifically encrypted for the device you are on

- Once you retrieve an iMessage for a specific device, the encrypted copy of the message is deleted from Apple’s servers, but encrypted copies meant for your other devices can remain on Apple’s servers for up to seven days unless they are retrieved by those devices

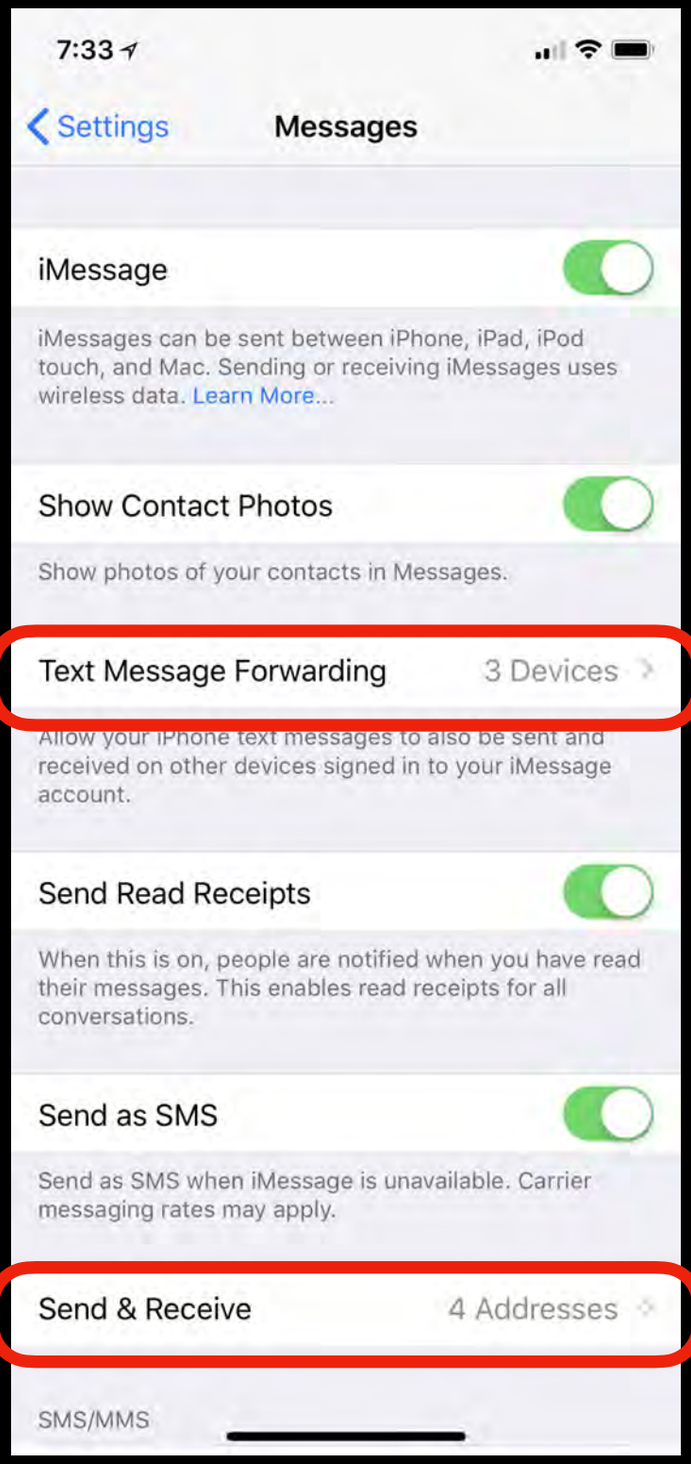
iMessage Security

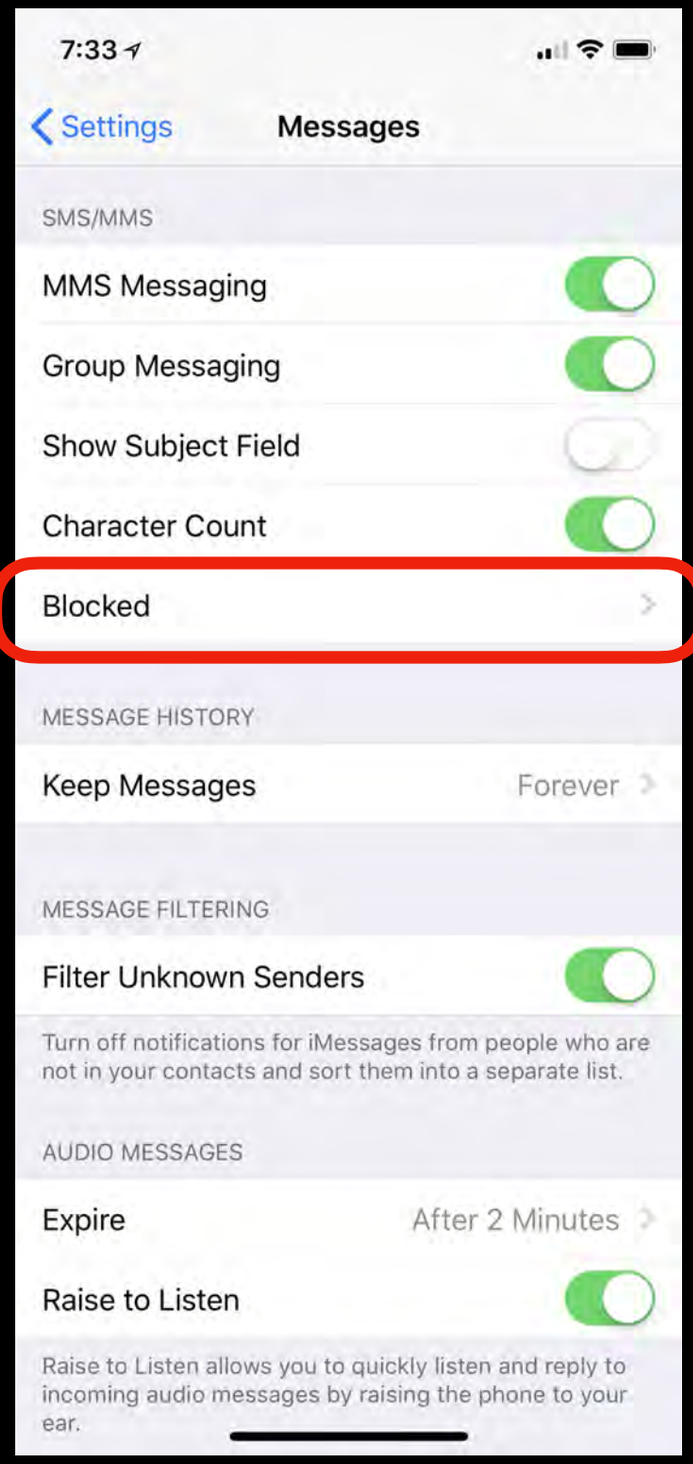


Cellular Provider Record Retention Periods

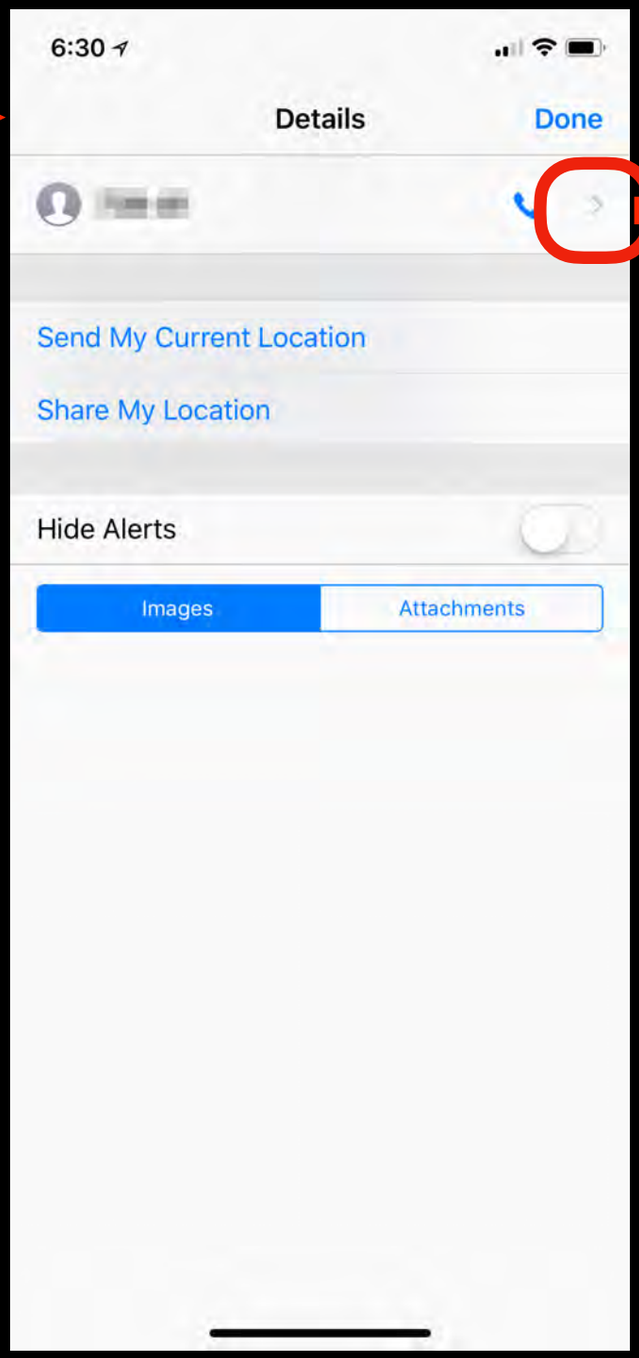
Item	Verizon Wireless	AT&T	Sprint	T-Mobile	US Cellular
Subscriber Information	7-10 Years	7 Years	10 Years	3-5 Years	7 Years
Call History	7 Years	7 Years	18 Months	23 Months	1 Year
Tower Locations	1 Year	7 Years	18 Months	23 Months	1 Year
SMS Content	3-5 Days	Not Retained	Not Retained	Not Retained	3-5 Days
Tower Dumps	1 Year	7 Years	18 Months	3 Months	1 Year
Range to Tower	8 Days	180 Days	90 Days	23 Months	N/A

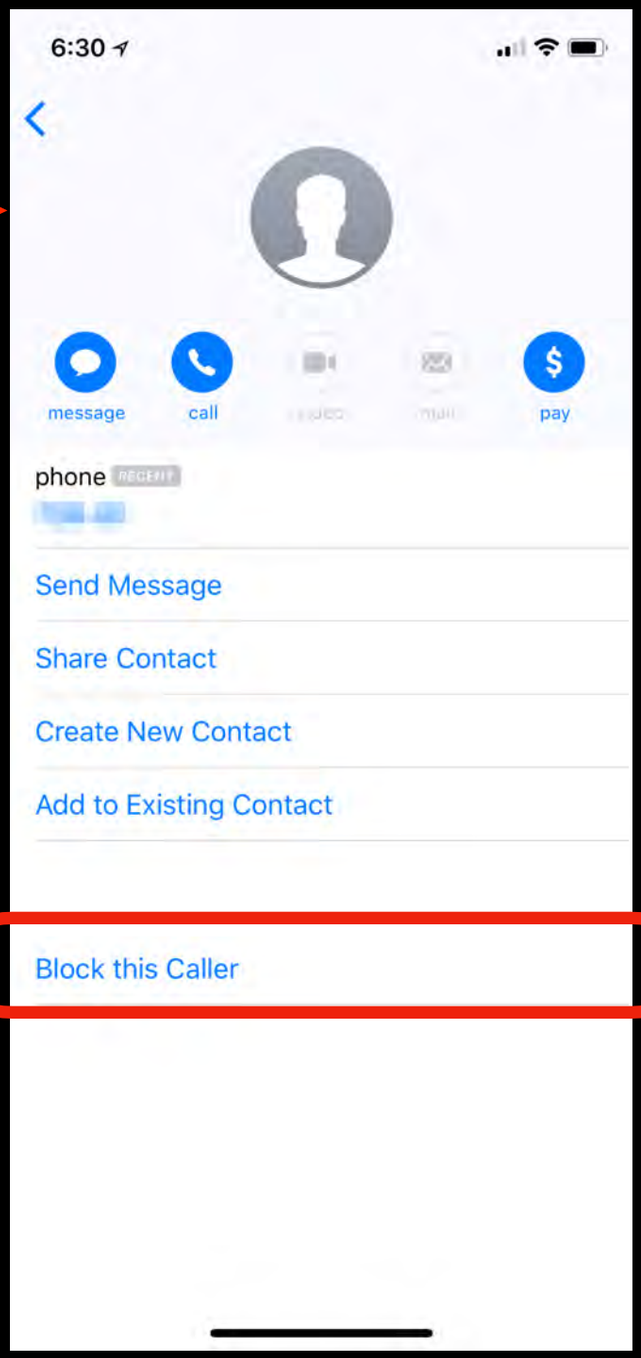
Set Up Messages on iPhone



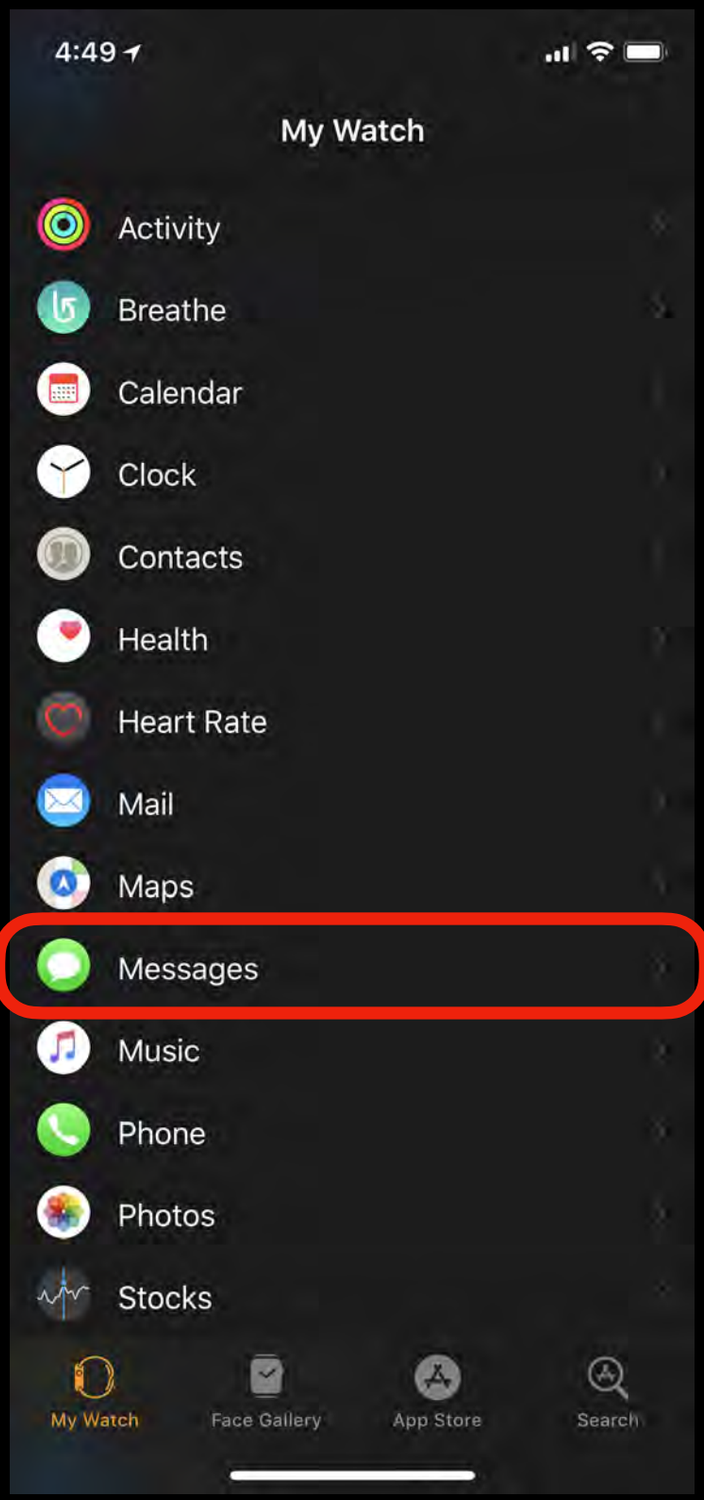


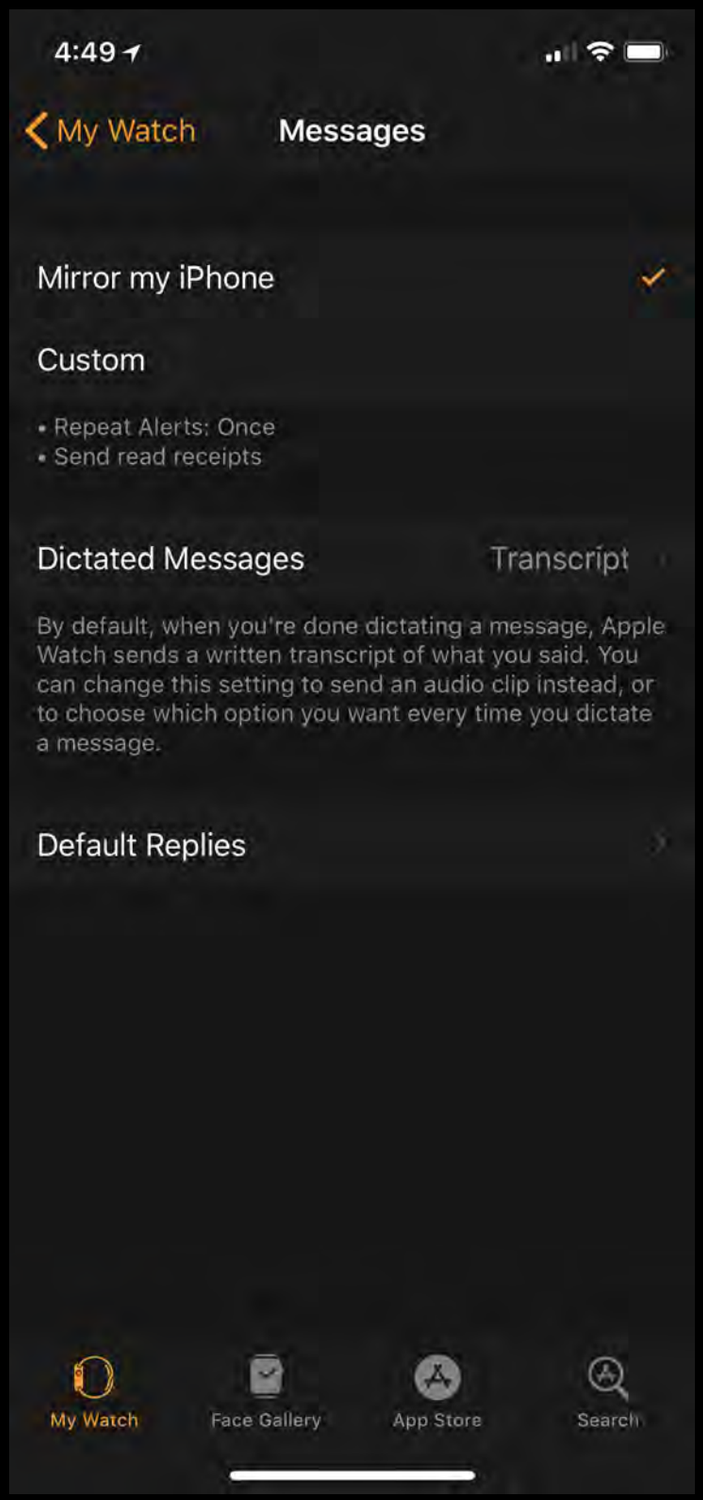
Blocking Unwanted Texters





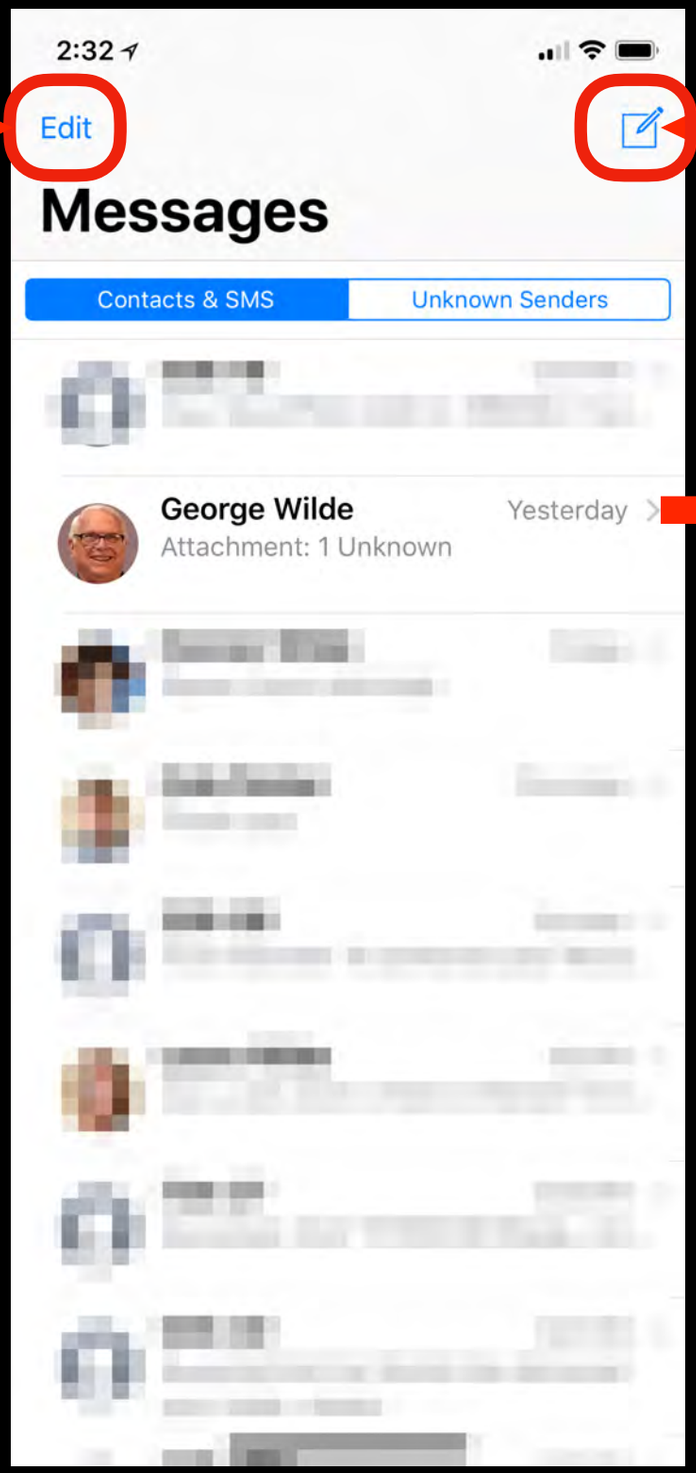
Set Up Messages on Apple Watch





Creating & Reading Messages

Touch Edit to select message conversations to delete



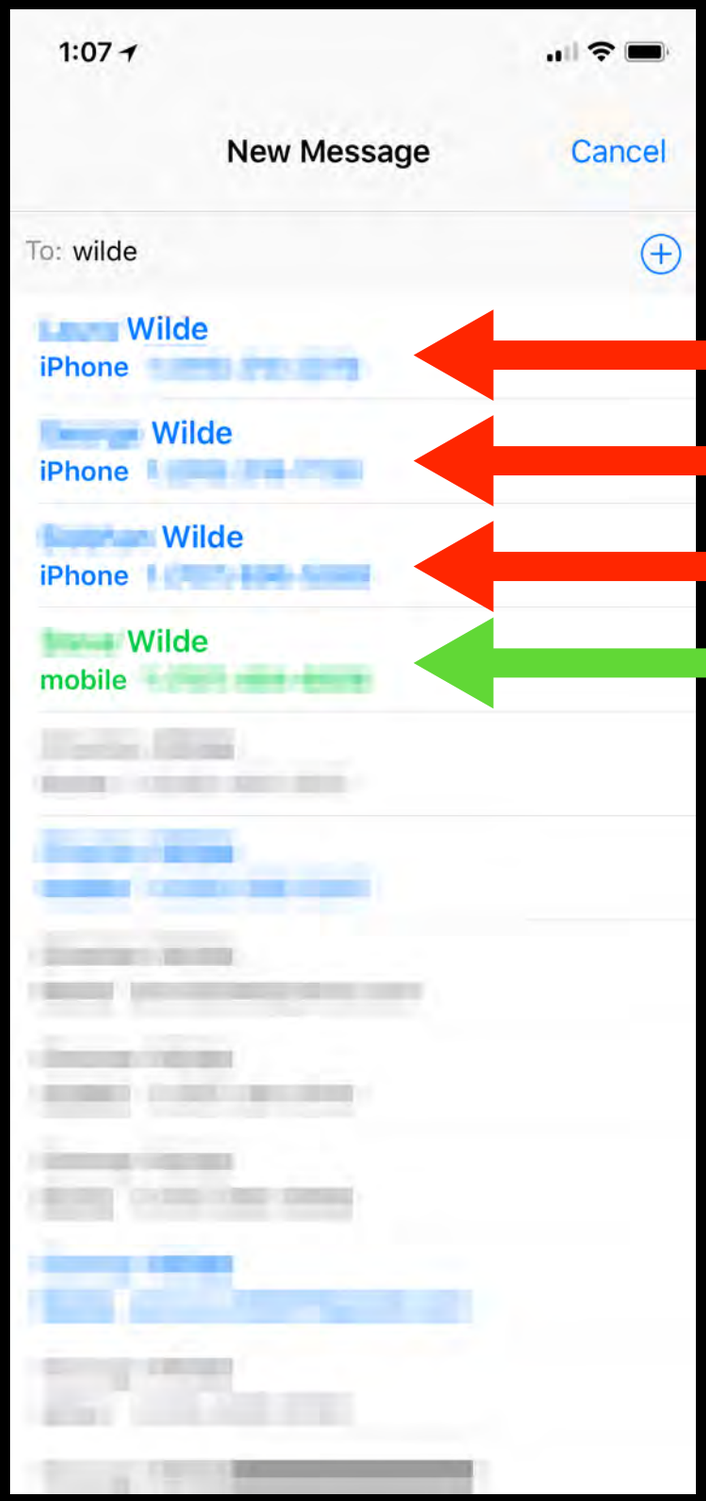
Touch to create new message

Touch arrow or swipe right to read or reply to existing message

Addressing Messages

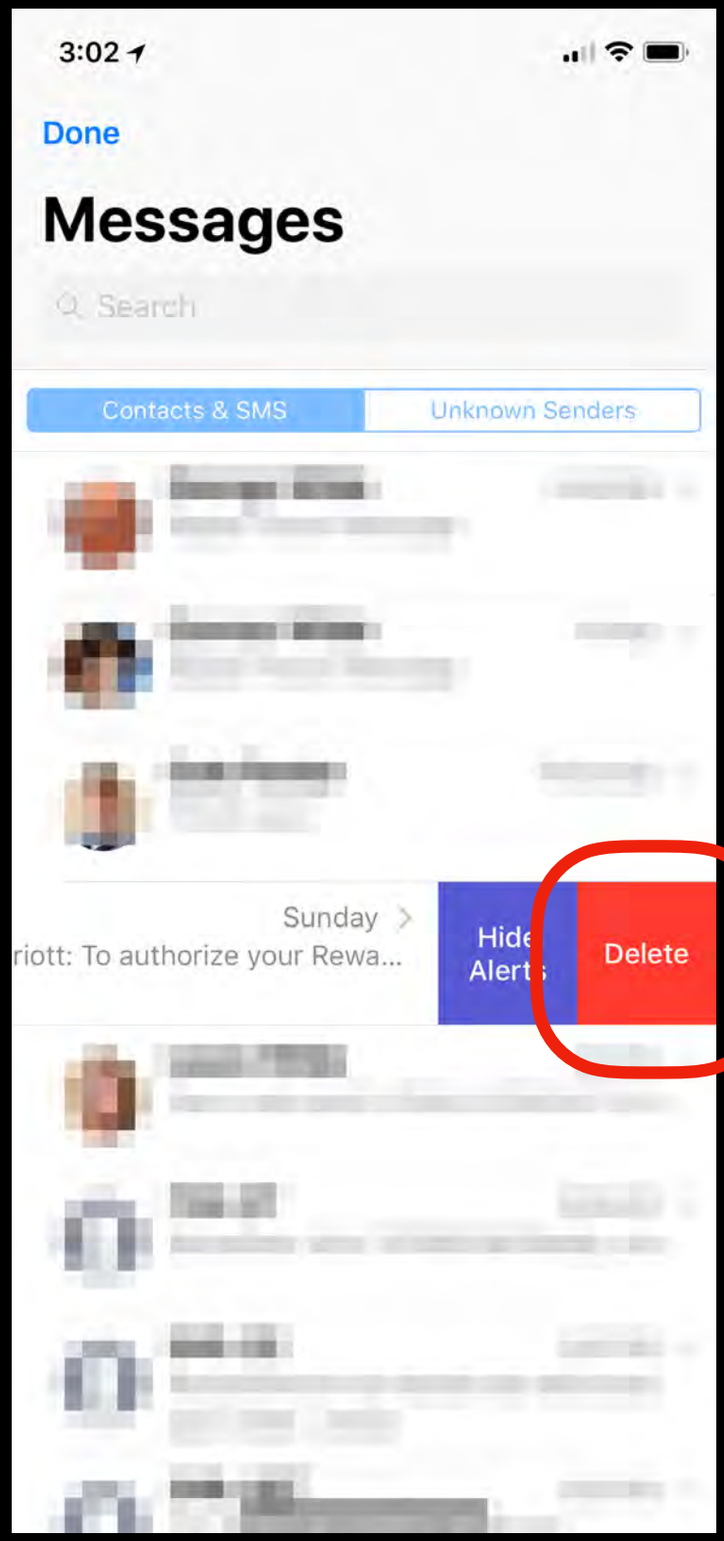
Enter the address of the individual you are sending the message to, or search for the individual in your contacts

Address can be a phone number or an email address registered in iCloud

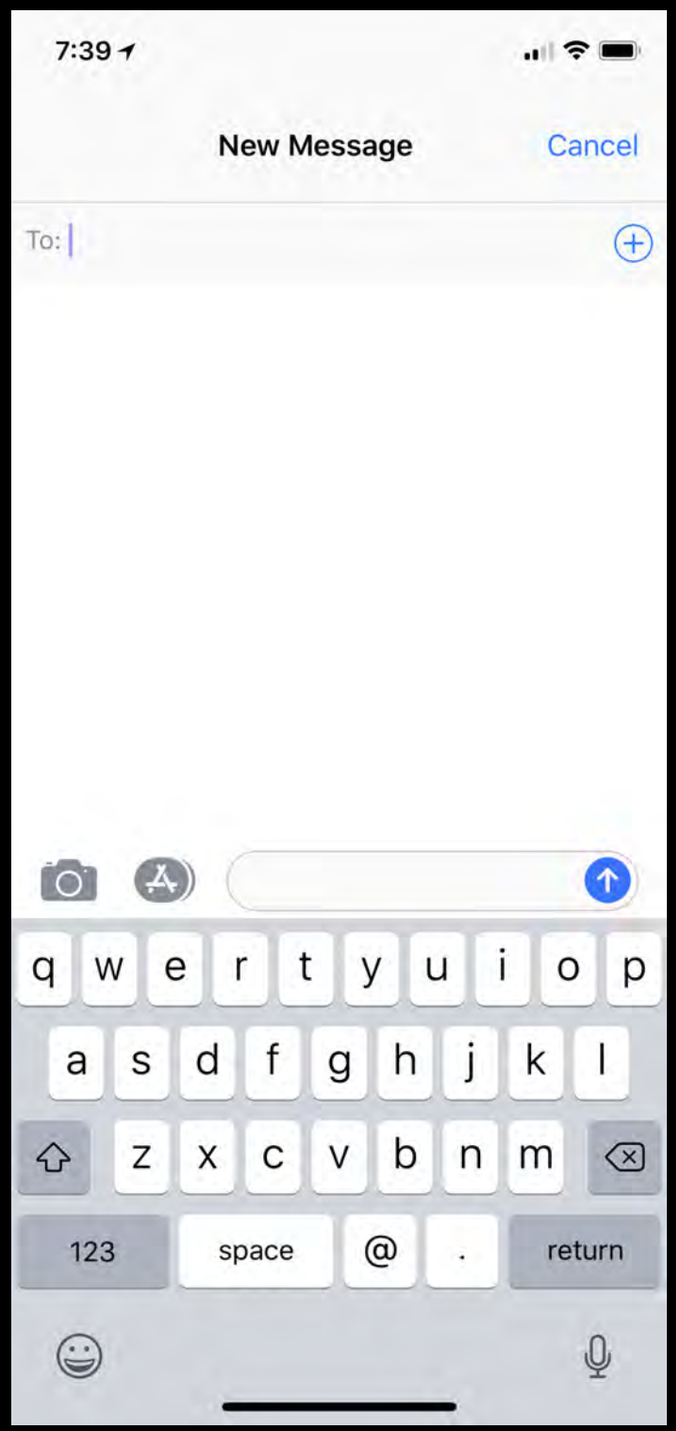


Deleting Message Conversations

Swipe left and tap Delete to delete an individual message conversation

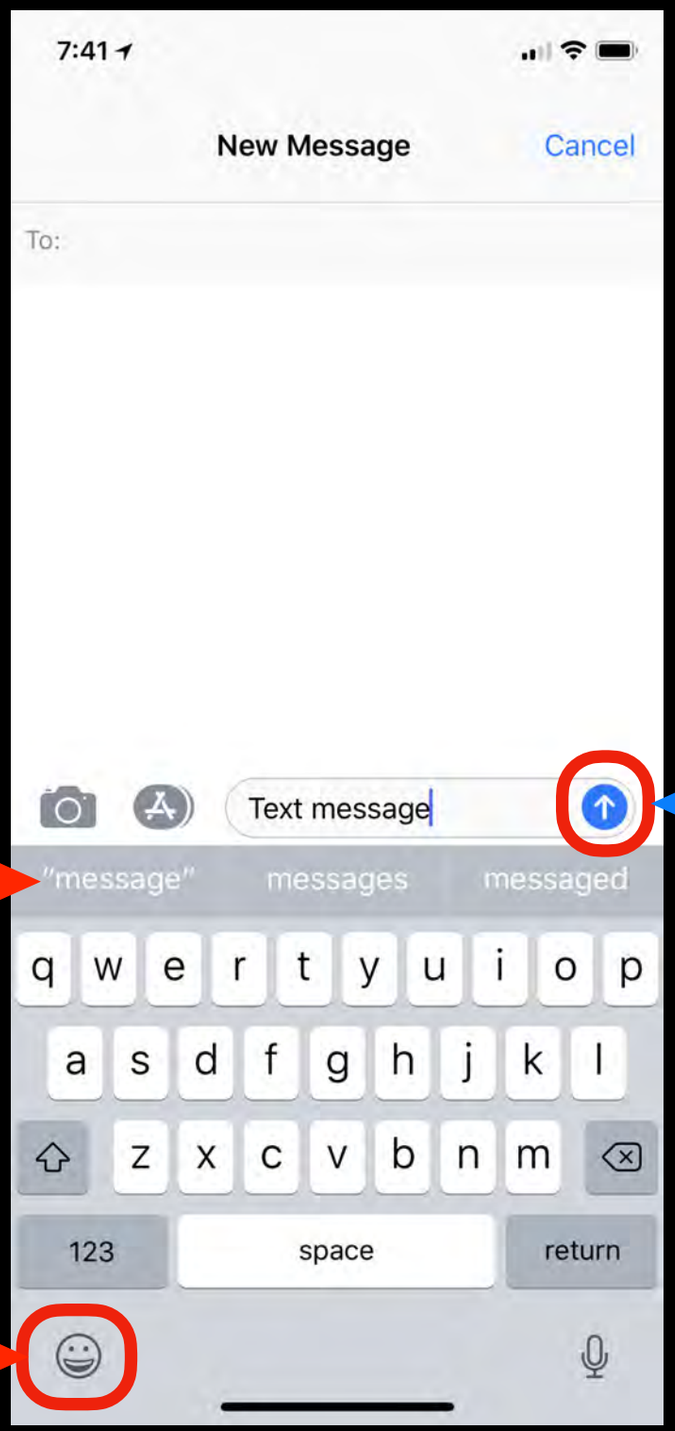


Sending an iMessage

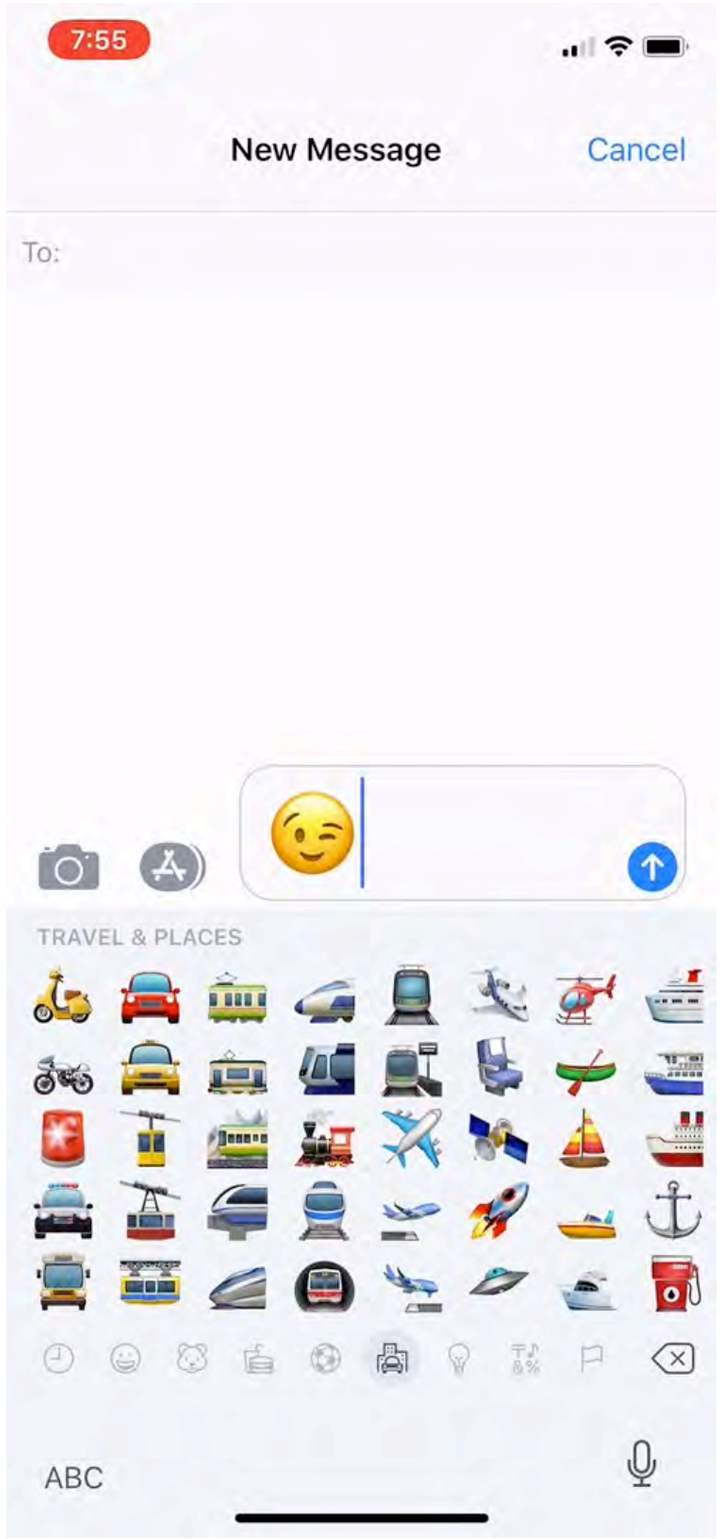


Suggested Words

Emoji



Send Message



Emoji Categories

- 😃 Smileys & People
- 🐻 Animals & Nature
- 🍔 Food & Drink
- ⚽ Activity
- 🌇 Travel & Places
- 💡 Objects
- 🔣 Symbols
- 🎌 Flags

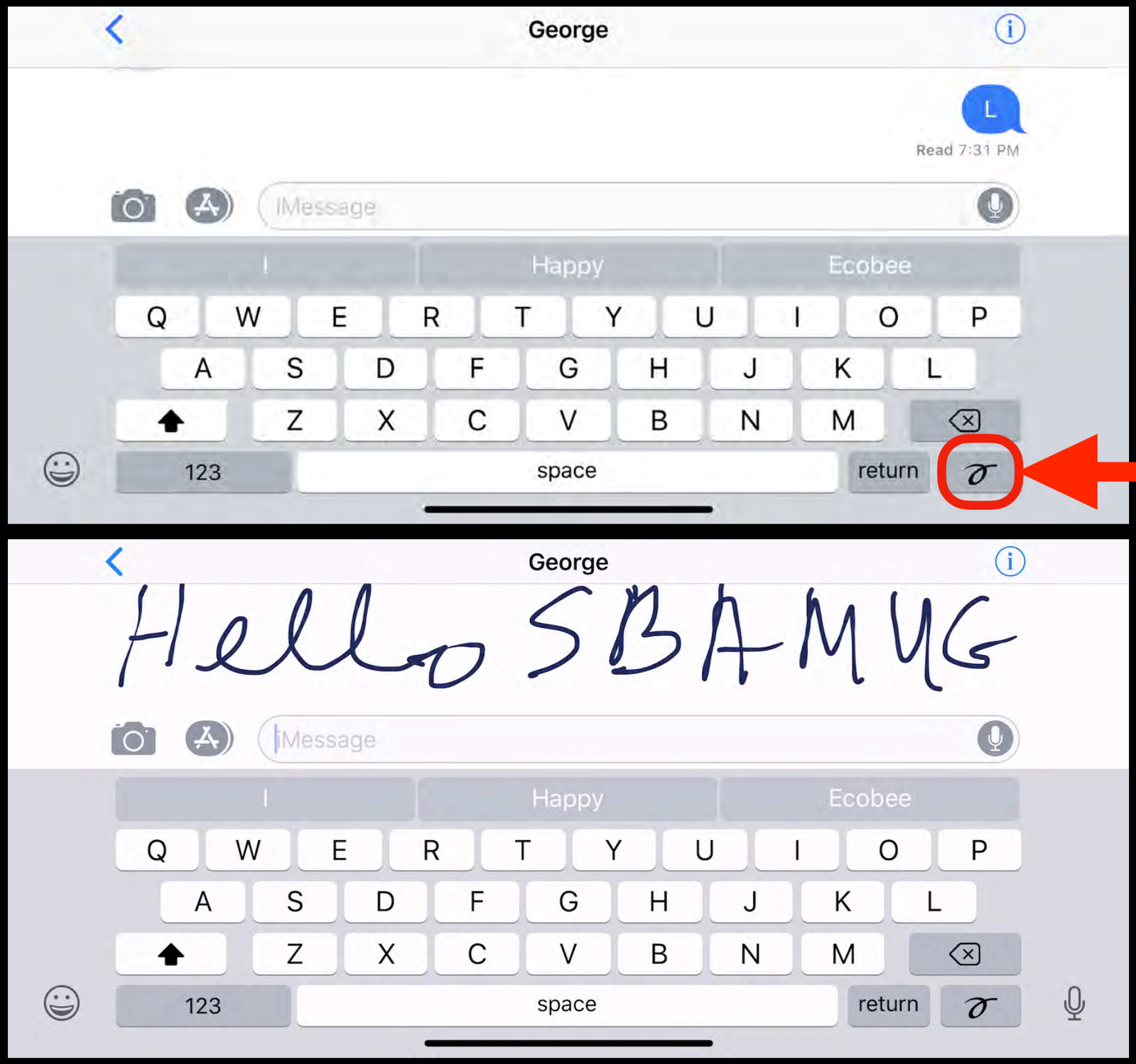
Dictate Message

Microphone for Dictation

Send Audio Message

Microphone for Audio Message

Handwritten Messages

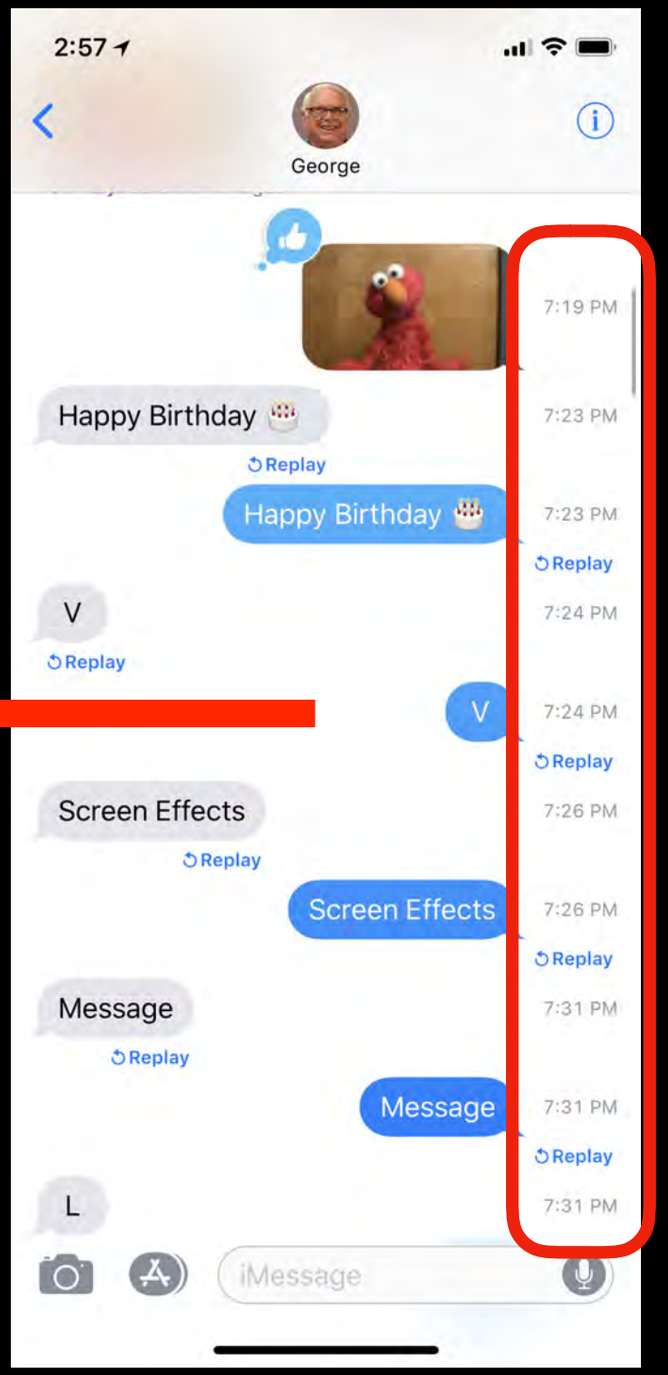


Hold iPhone horizontal and tap handwriting symbol

Manage Messages

View Time Message Sent

Swipe Screen to Left

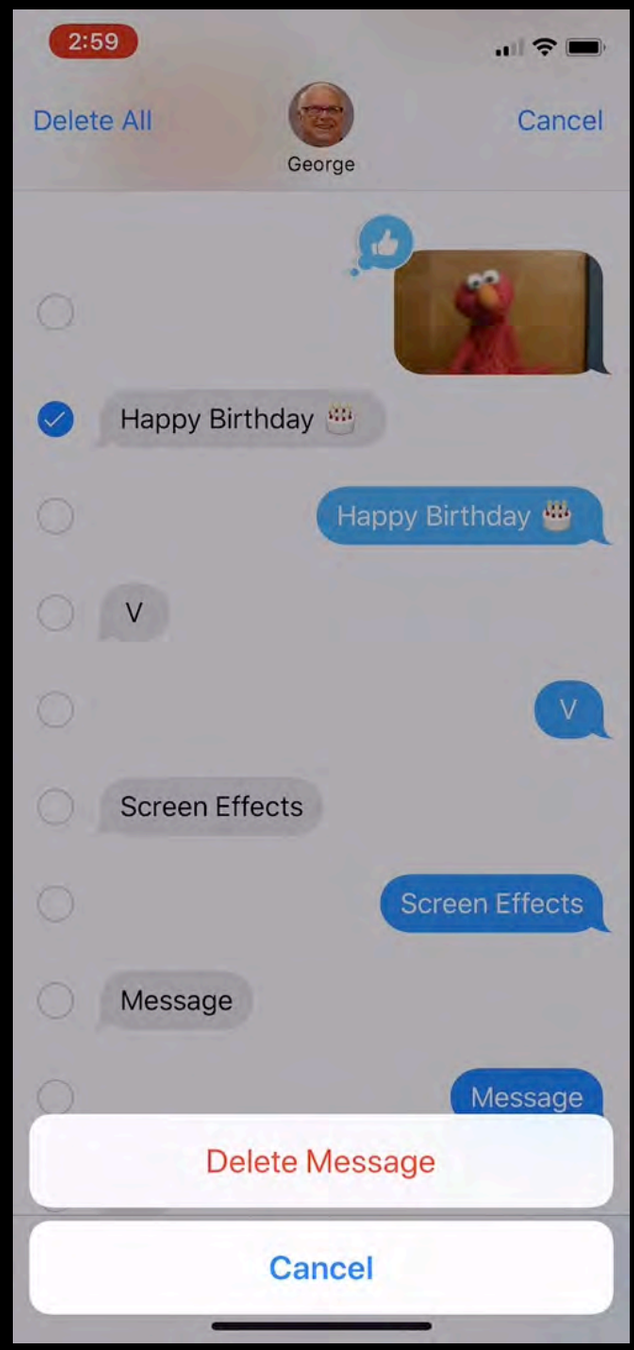


Touch & Hold on Message

Select Messages to be Acted Upon

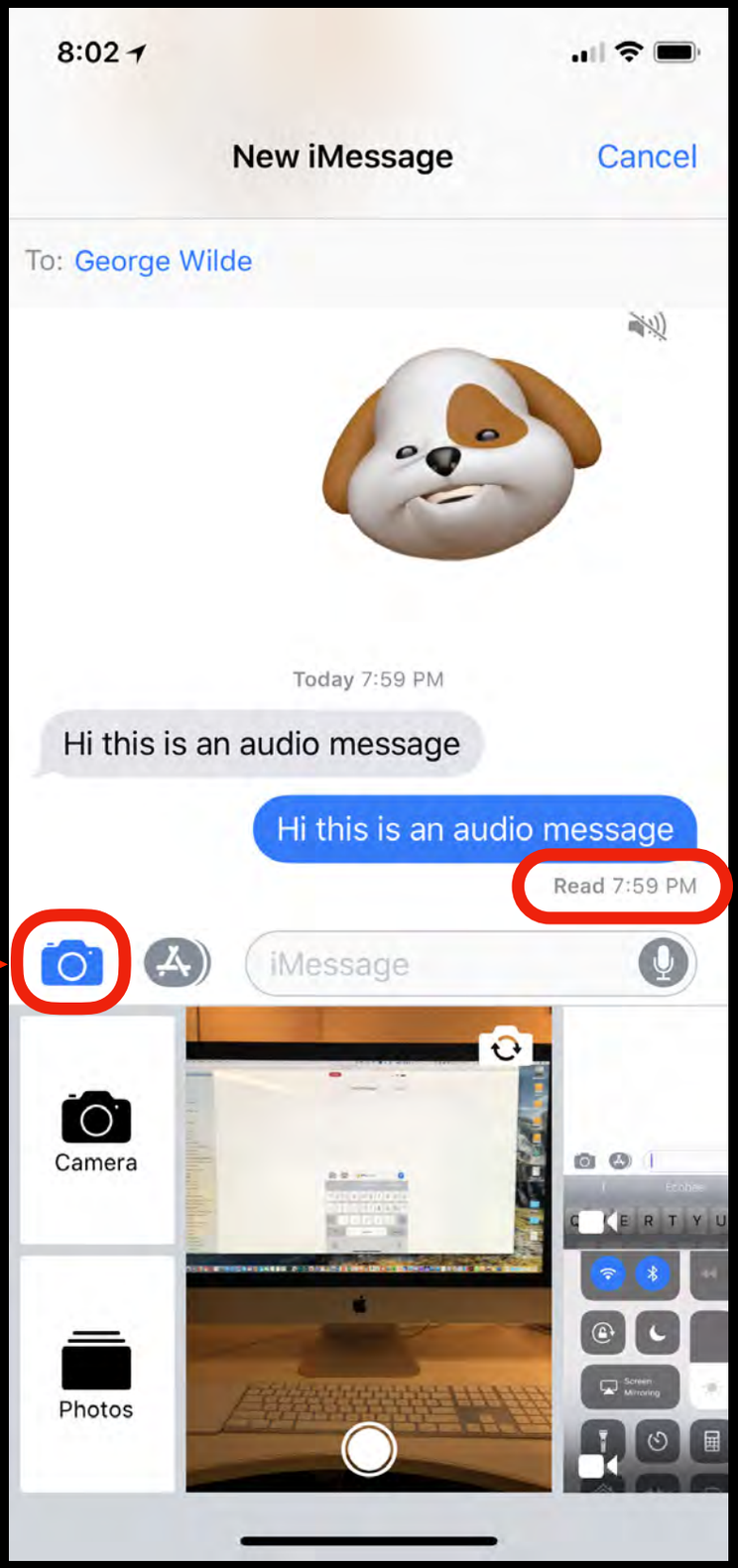
Choose to Copy, Speak, Forward, or Delete Message

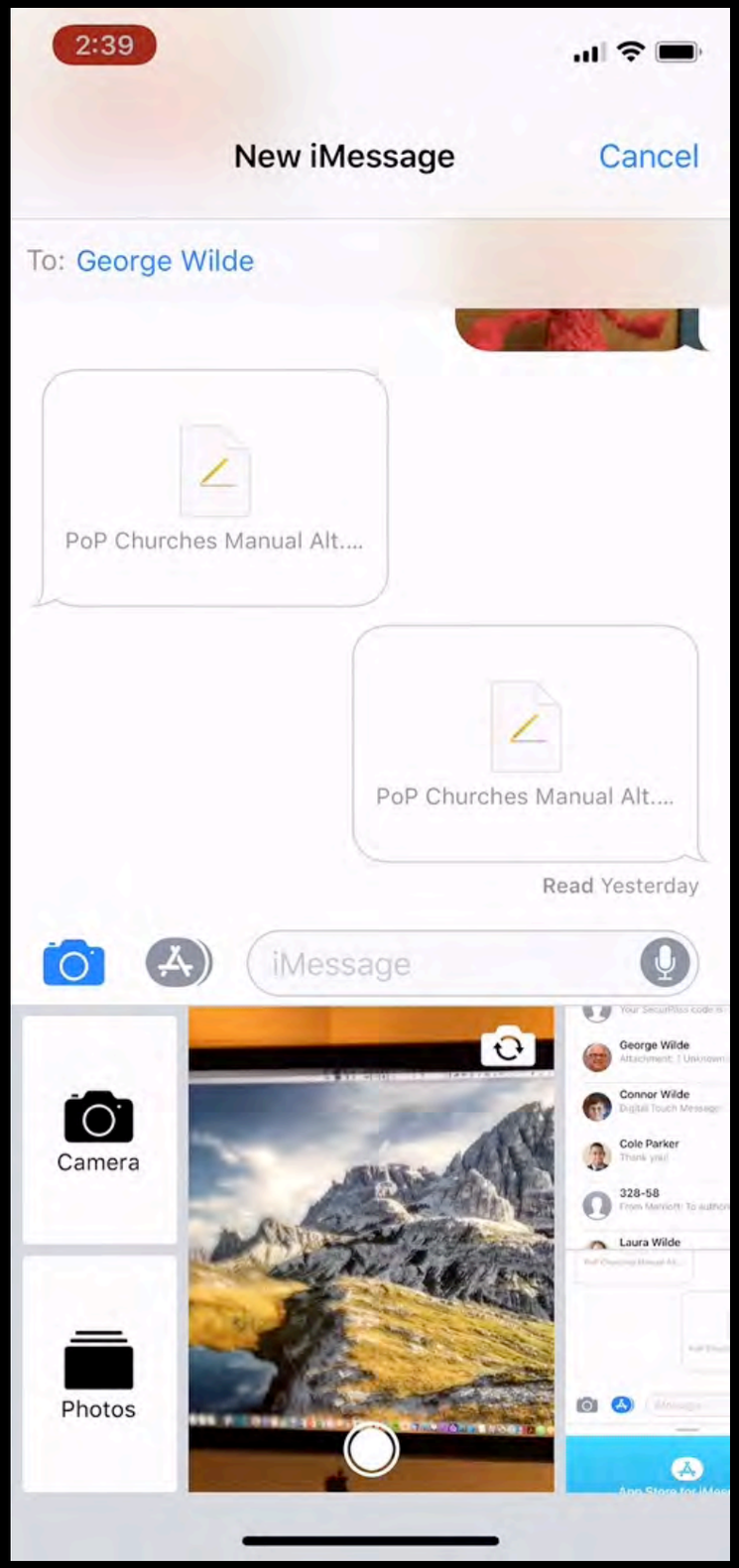
Delete Individual Messages



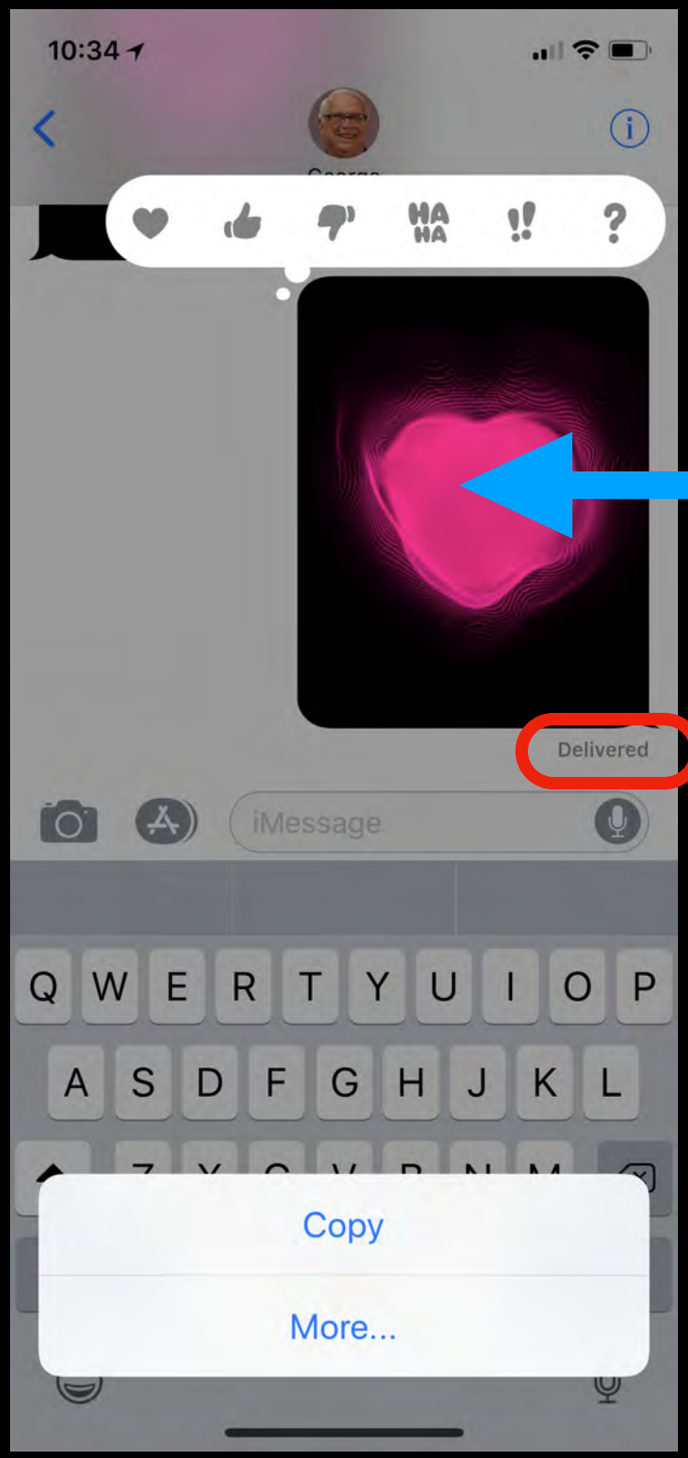
Send Photos & Videos

Touch Camera





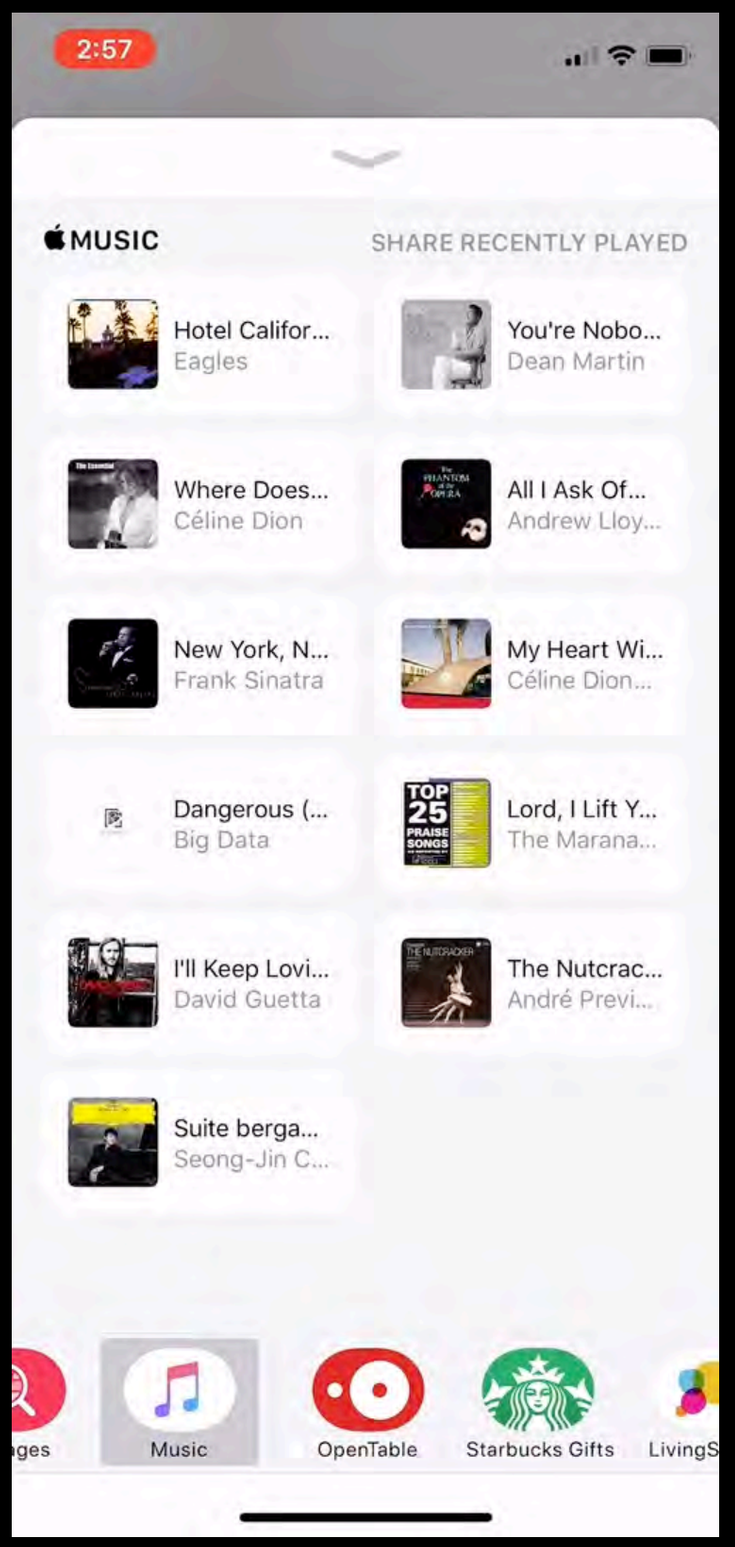
Send Tapback to a Message



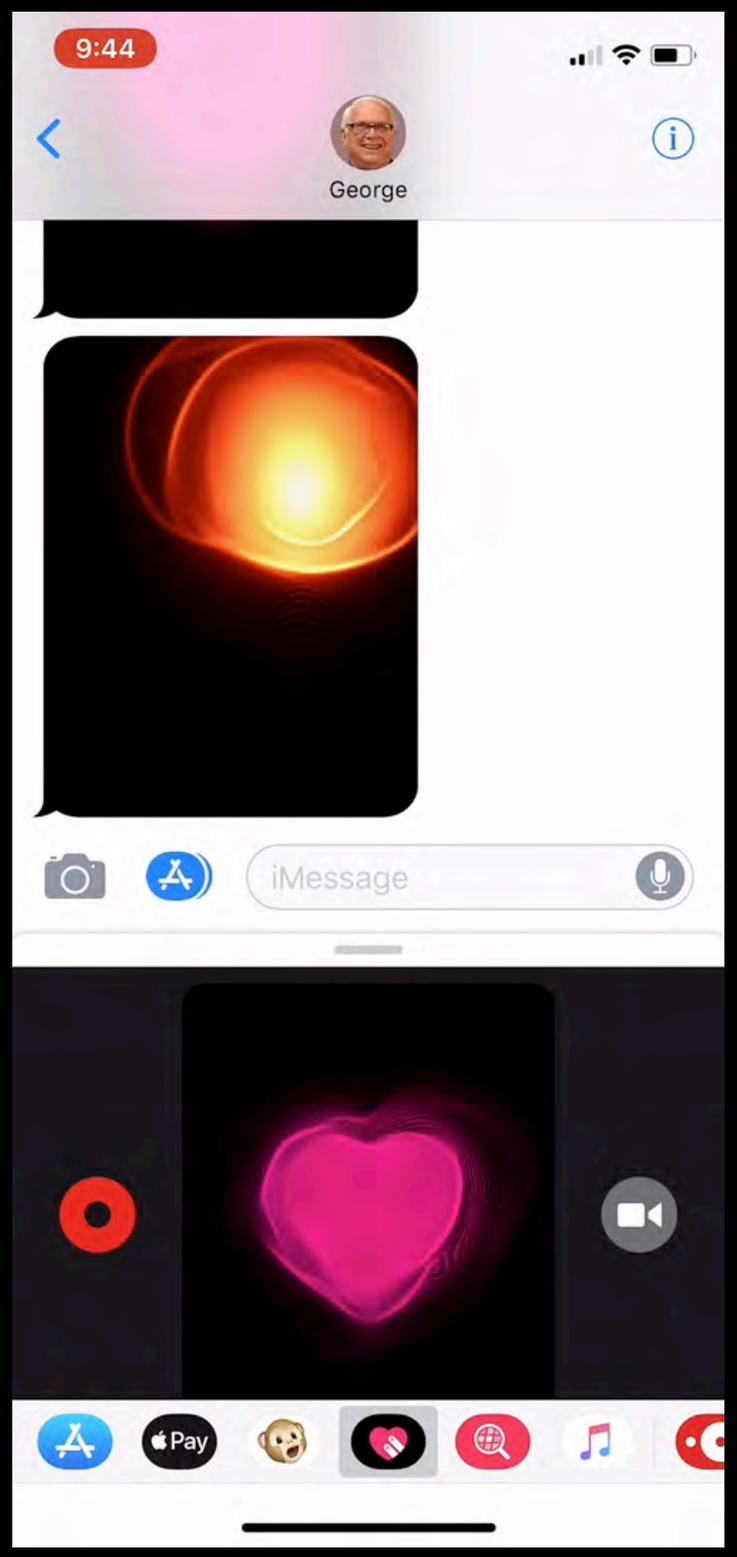
Touch and hold on message - then select Tapback response

iMessage Apps

Touch



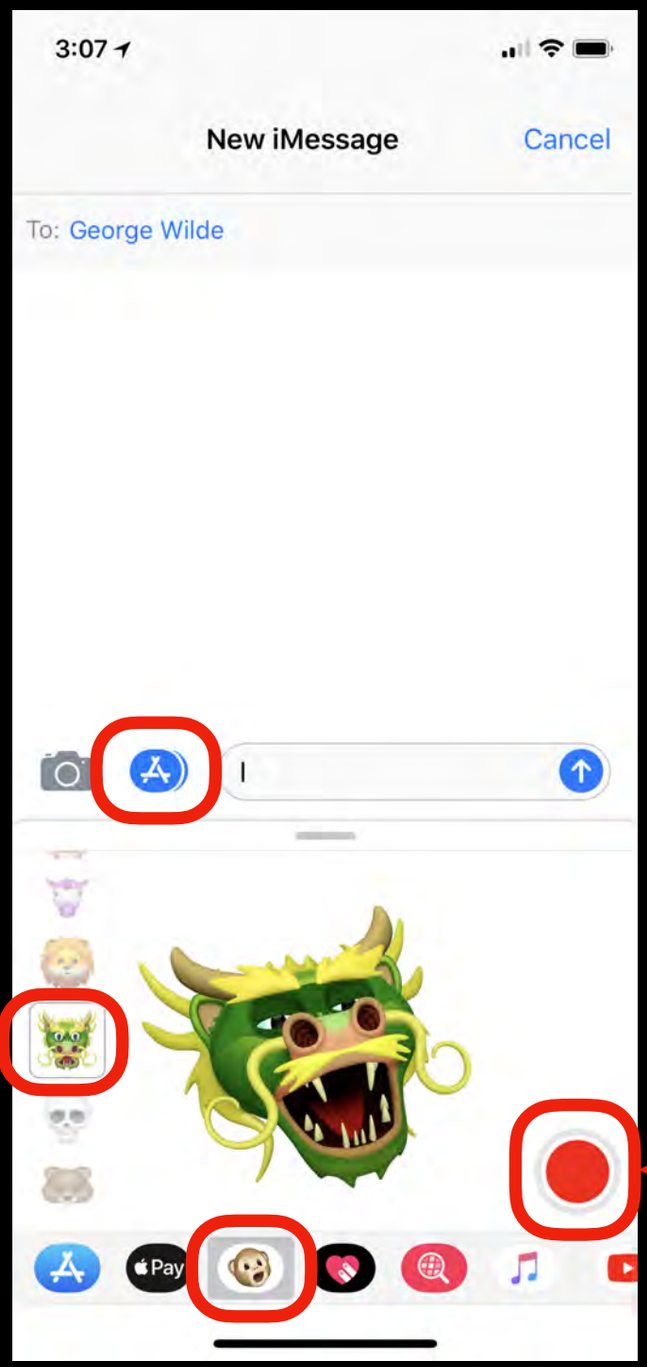
Digital Touch Messages



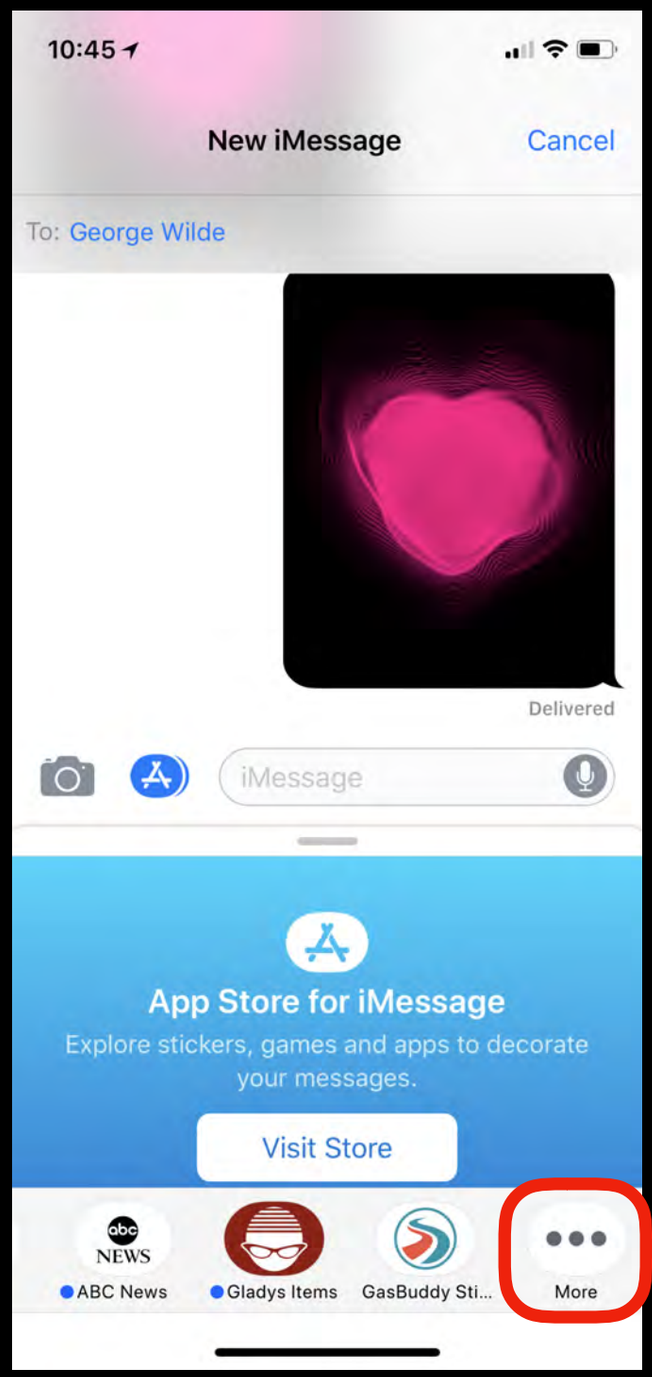
Create Animoji Video

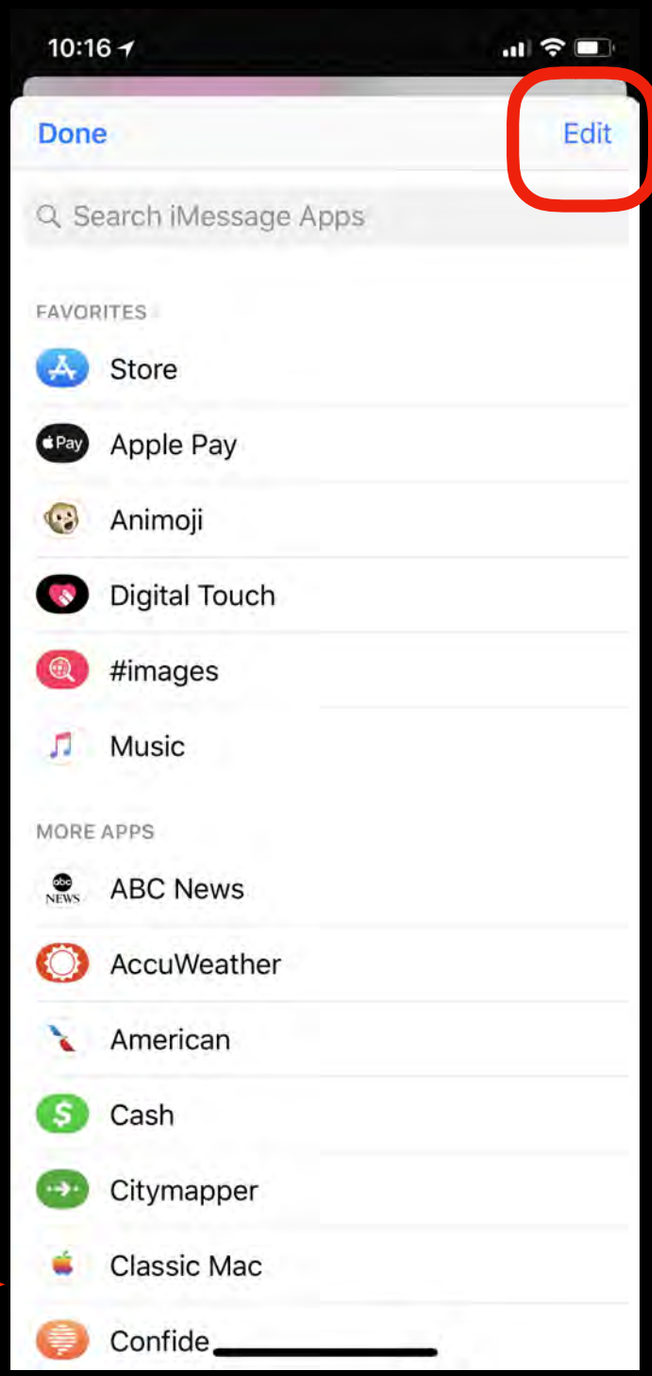
Look into camera, press record, and talk with facial expressions

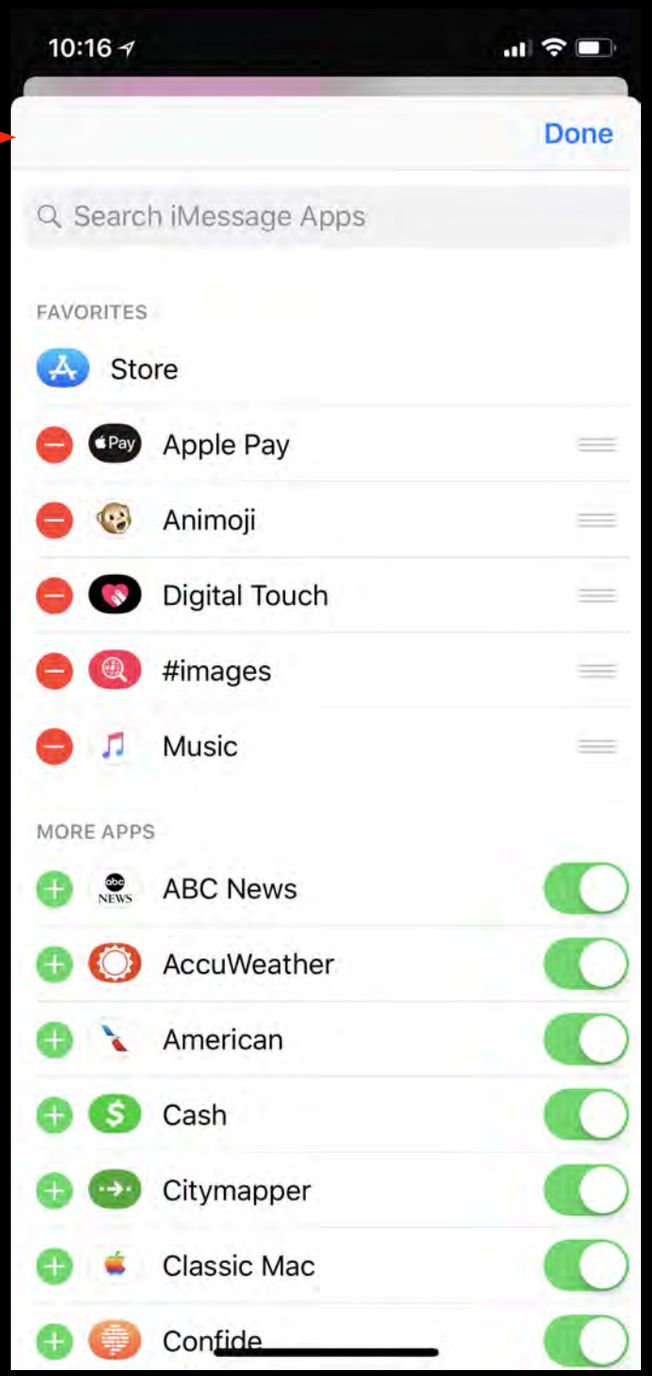
Tap record again to Quit, or Quit automatically after 10 seconds



Managing iMessage Apps



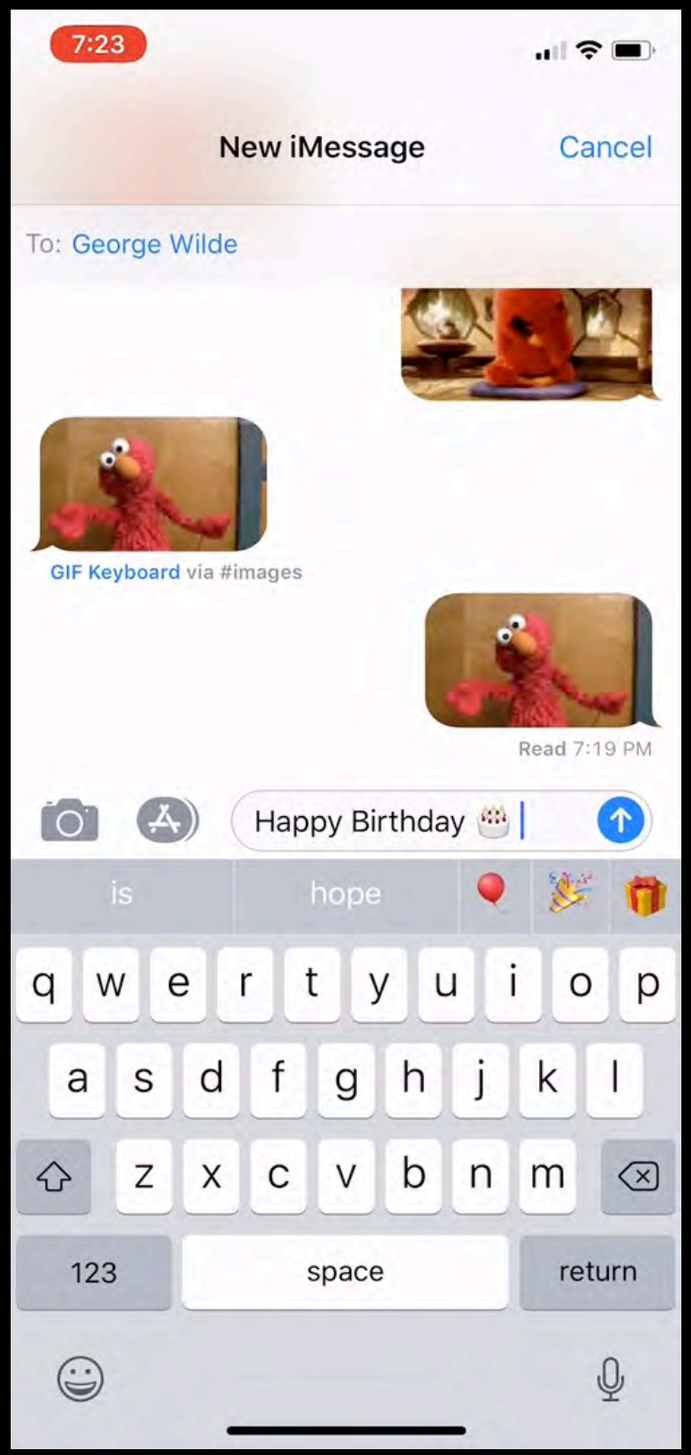




Adding Bubble Effects

Use word suggestions to speed entry

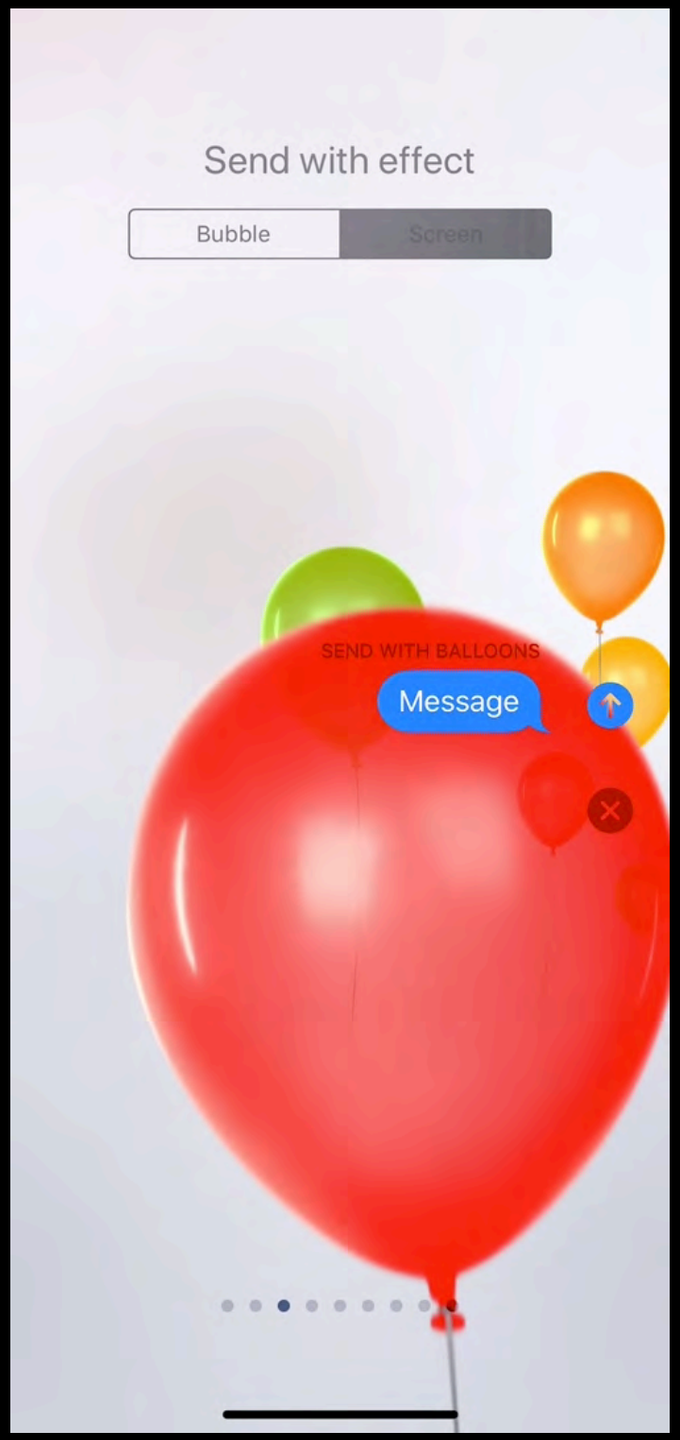
Use emoji suggestions if desired



Press and Hold Send Arrow to choose effect desired

Select desired effect and touch Send Arrow to send

Adding Screen Effects

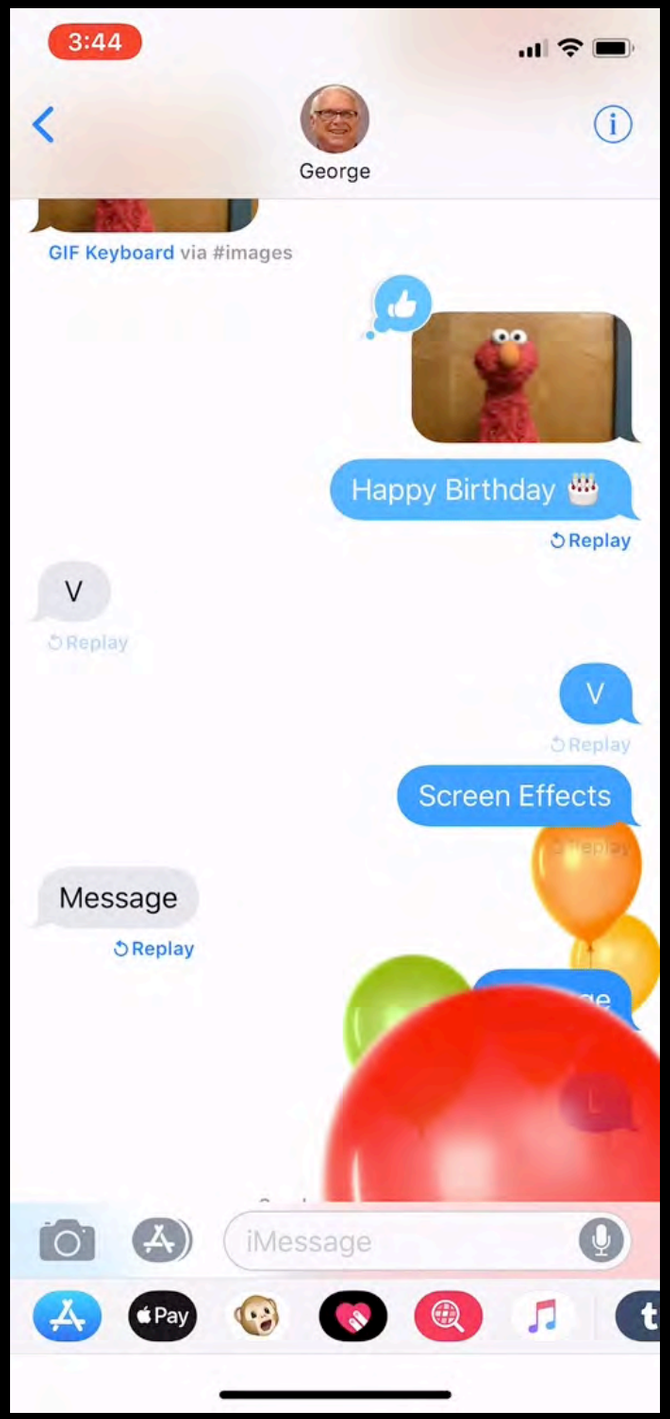


Press an Hold Send Arrow to select effect desired

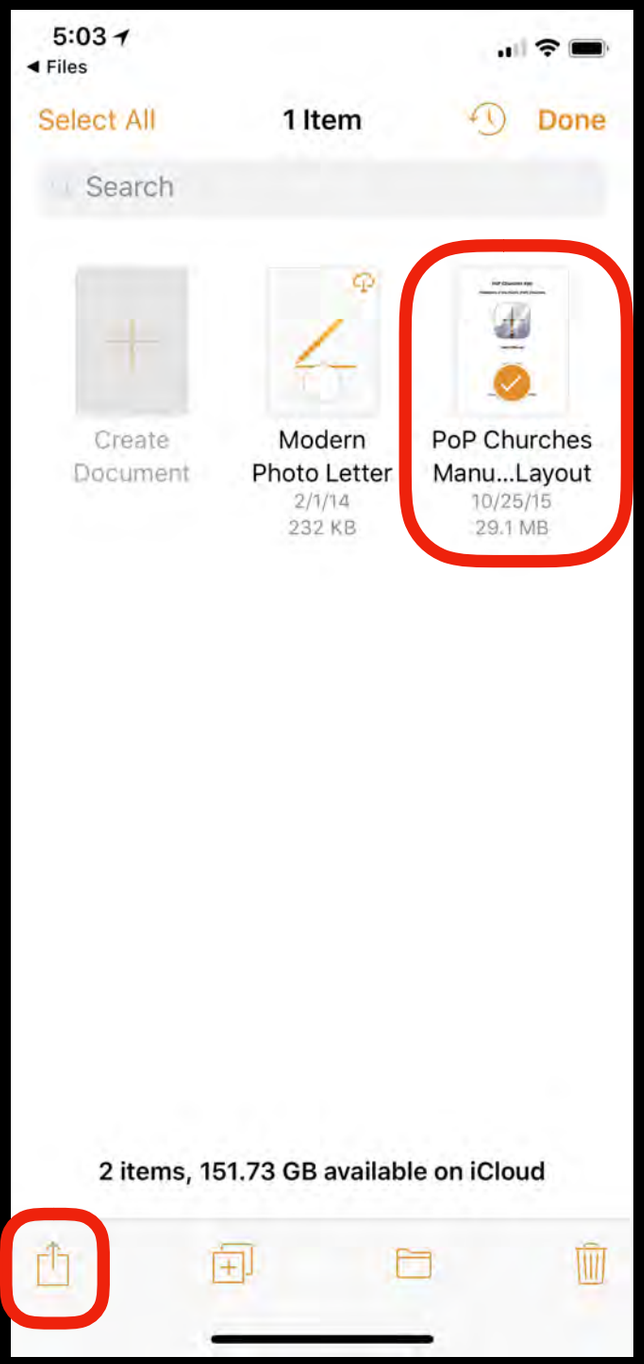
Swipe Left to view available Screen Effects

Replay Messages

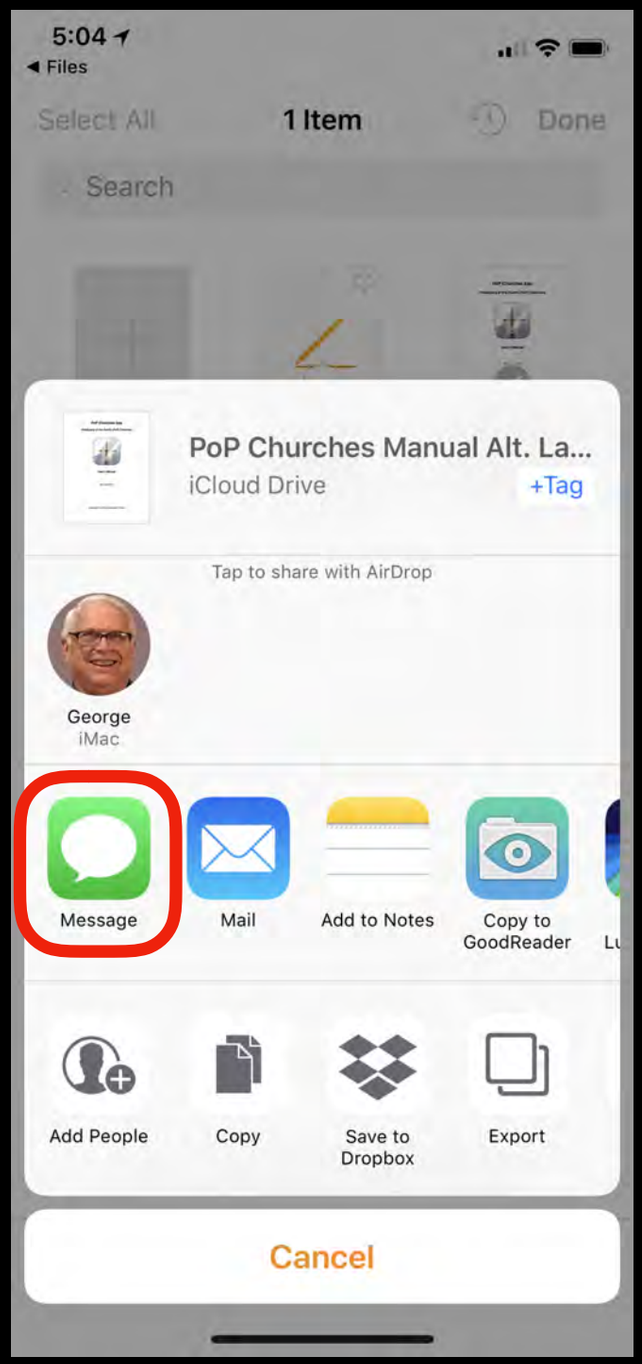
Touch Replay to play again



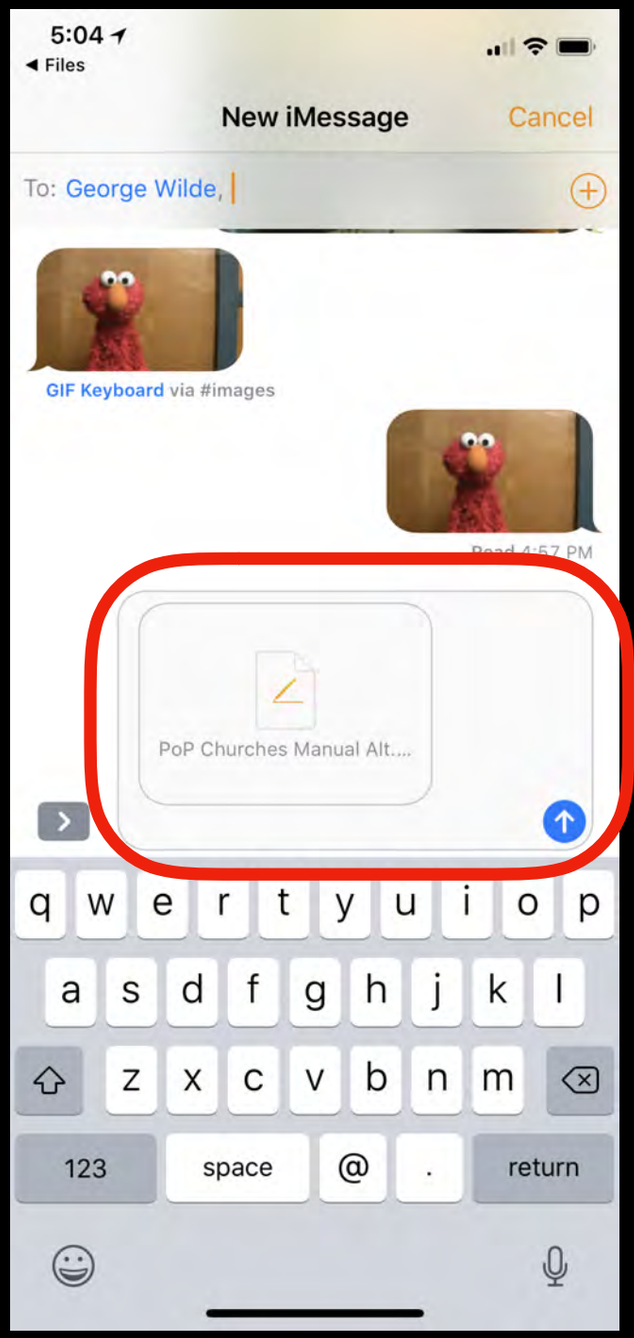
Send Files with iMessage



Files App

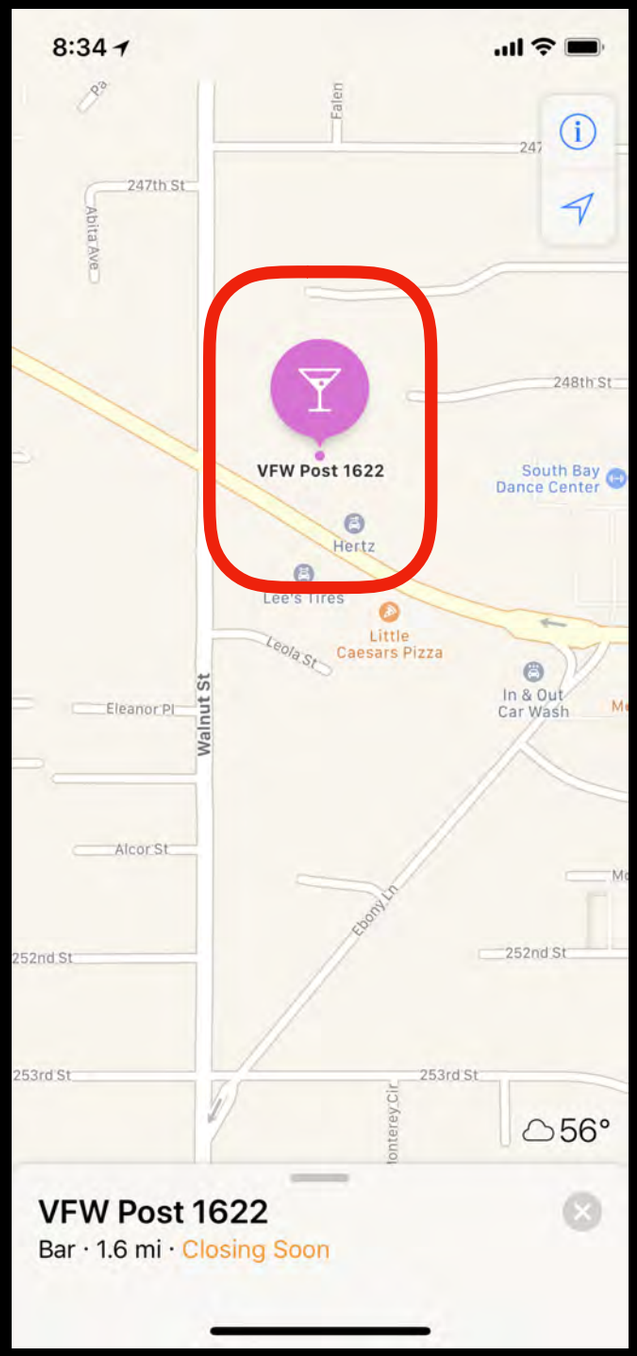


Share Sheet

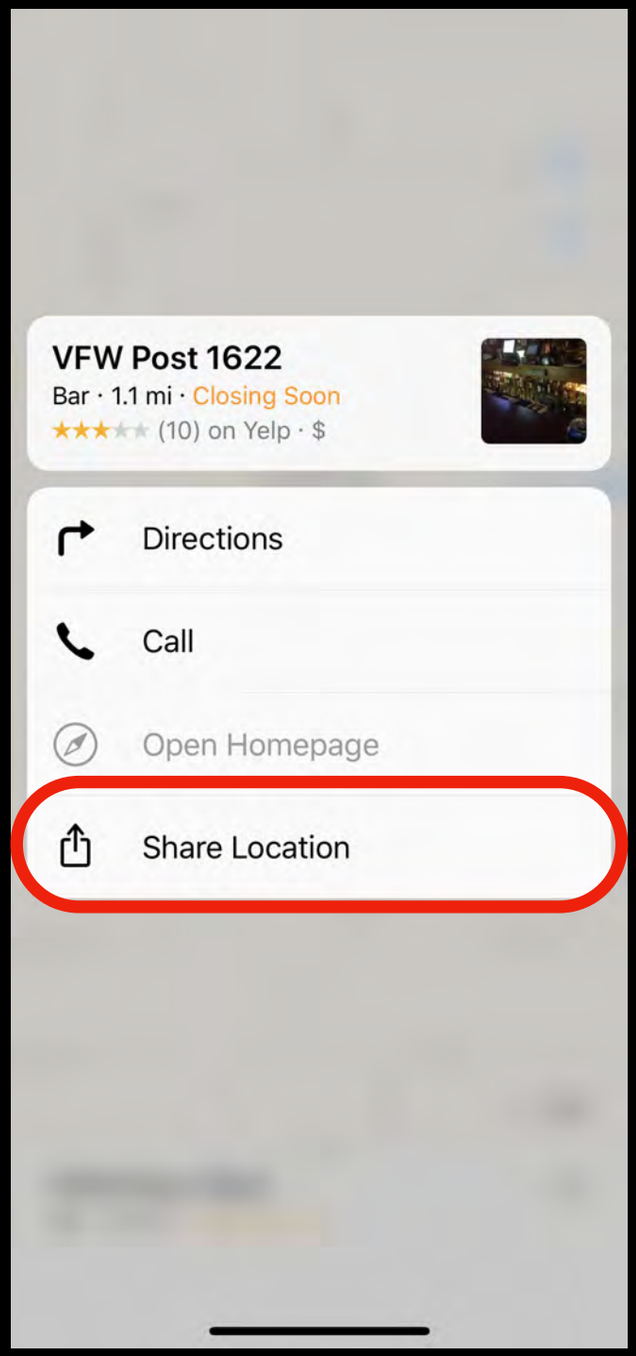


File Sent in Messages App

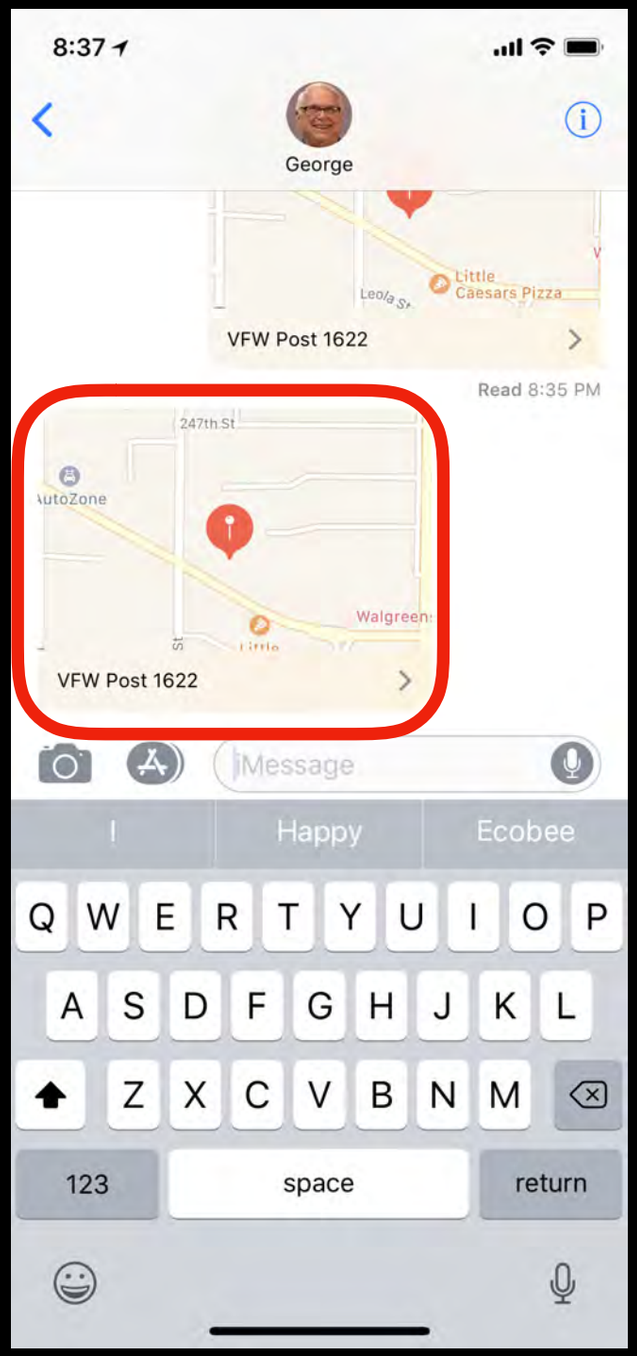
Send Location with iMessage



Maps App

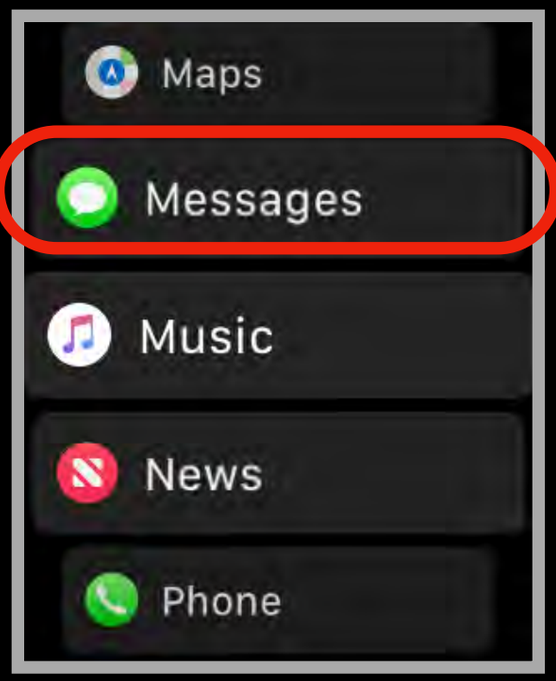


Share Location

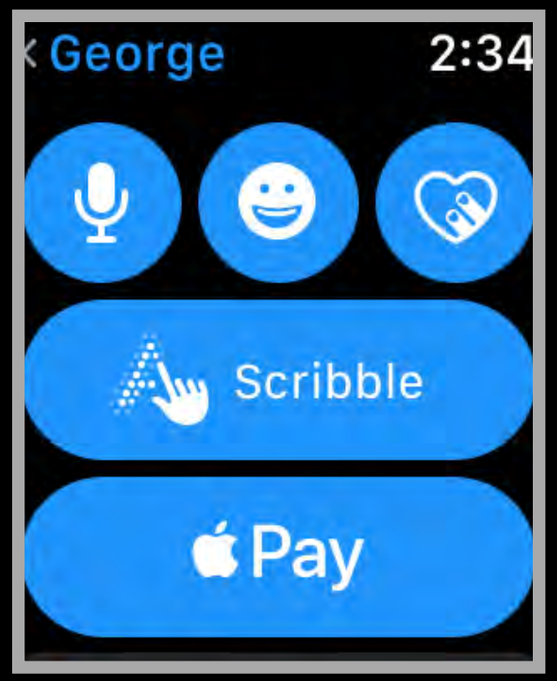


Location in Messages App

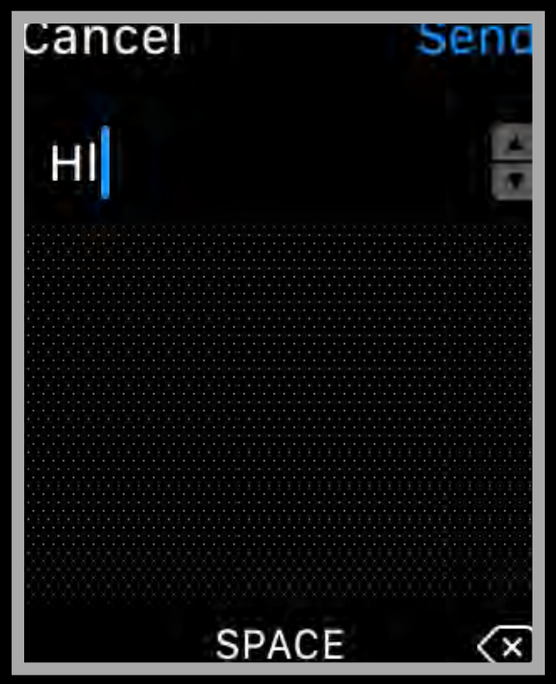
iMessages with Apple Watch



Suggested Responses

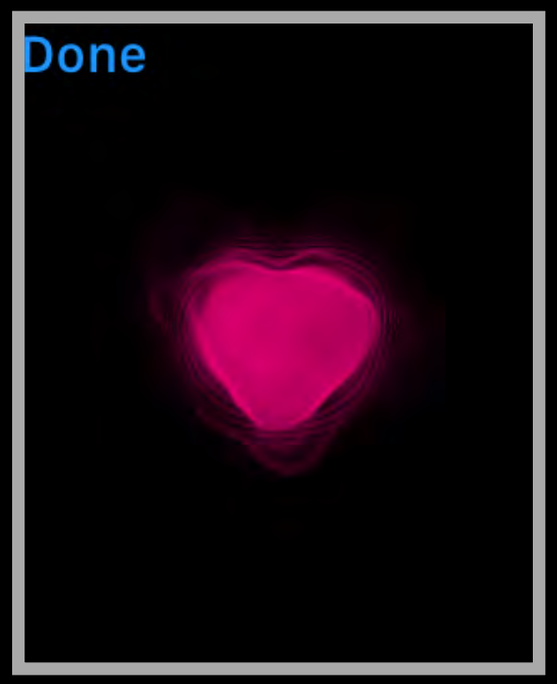


Selections



Scribble

Dictate Text

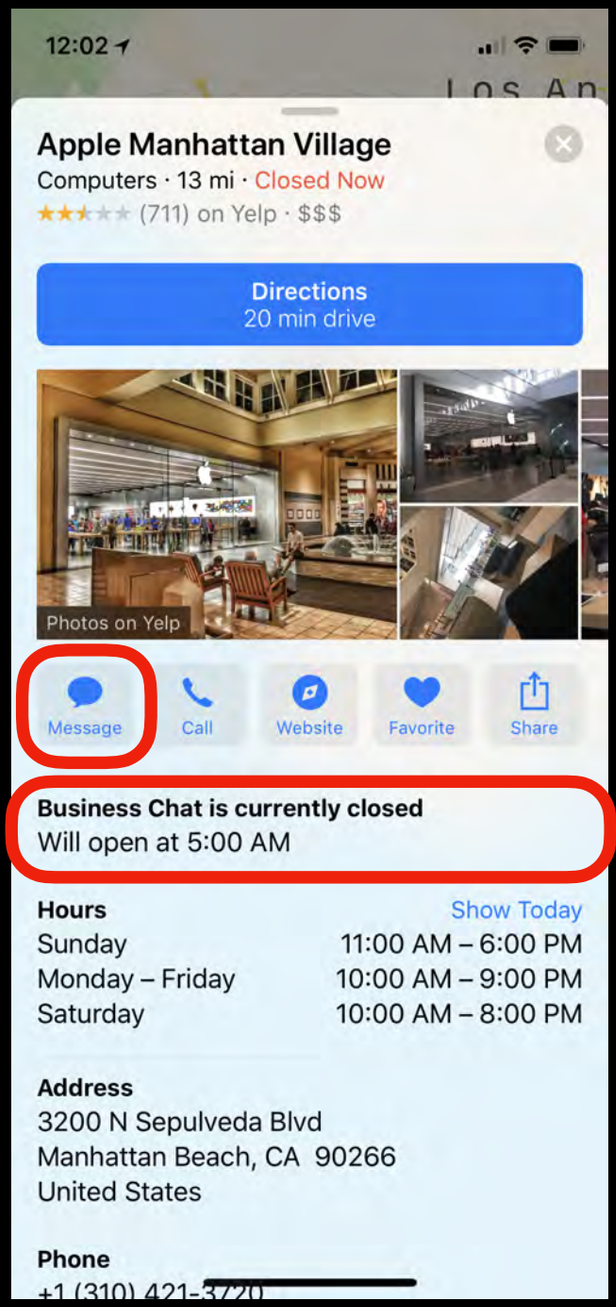


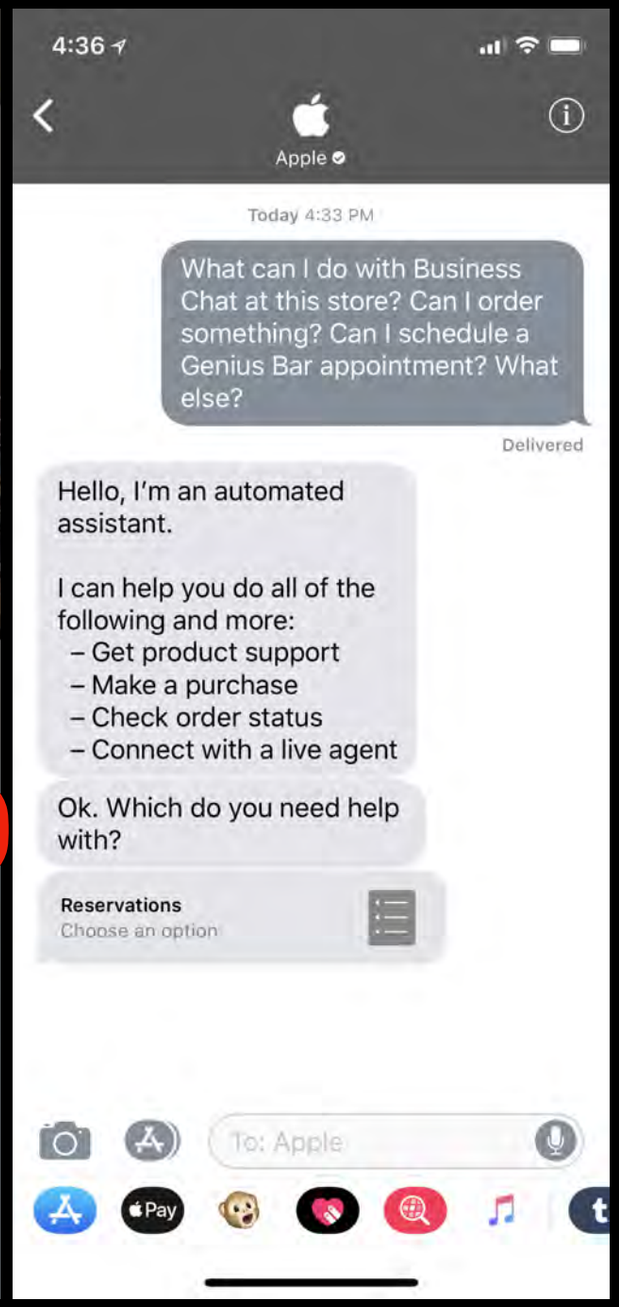
Heartbeat

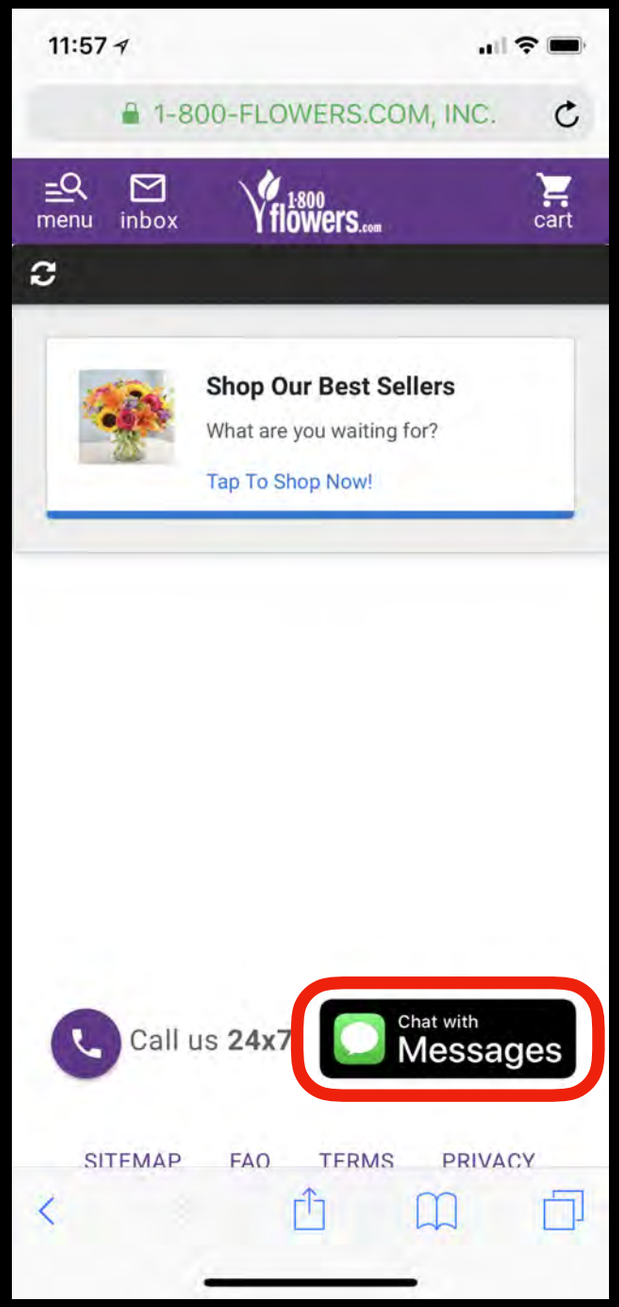
Business Chat

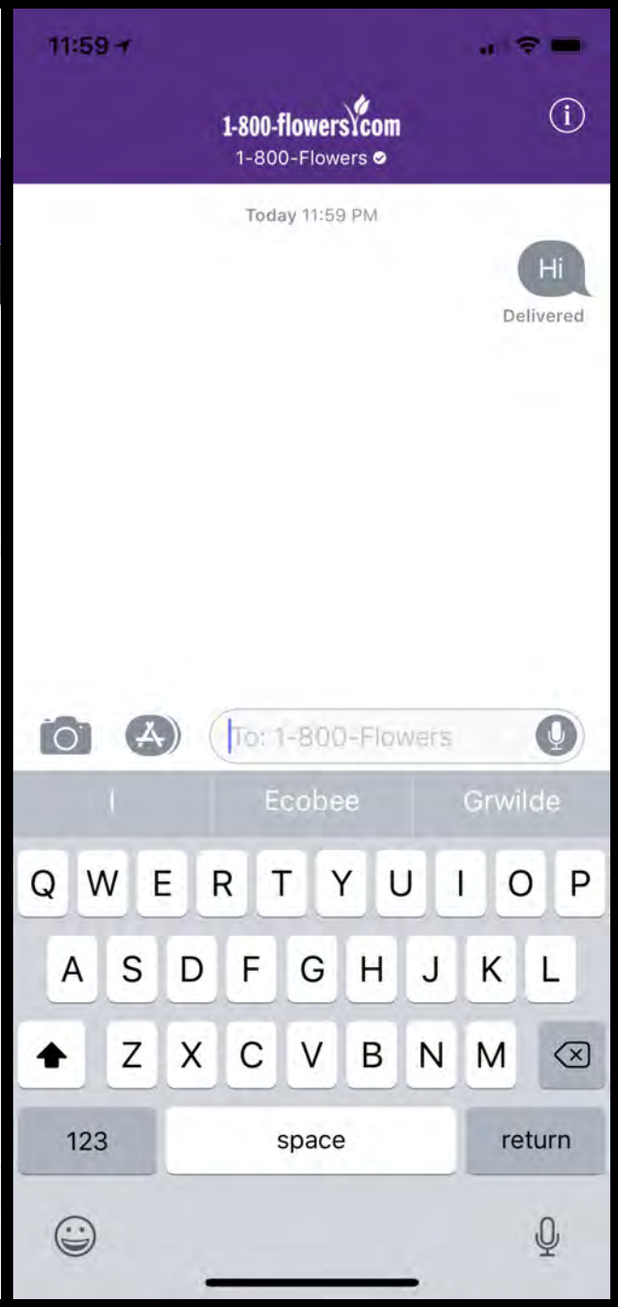
- New feature in iOS 11.3 and macOS 10.13.4
- Provides secure chat conversations with businesses
- Can be used for customer service, purchases, and much more
- Currently supported by Apple, Discover, Home Depot, Lowe’s, Marriott, Hilton, 1-800 Flowers, and several others

Using Business Chat









Messages in iCloud???

- Messages in iCloud was announced by Apple almost a year ago - but is still not in released versions of iOS 11 and macOS High Sierra

- Has been in several Beta versions and may be included in final releases of iOS 11.4 and macOS 10.13.5

- Messages in iCloud stores your iMessages in iCloud rather than on each individual device, potentially saving space on your devices

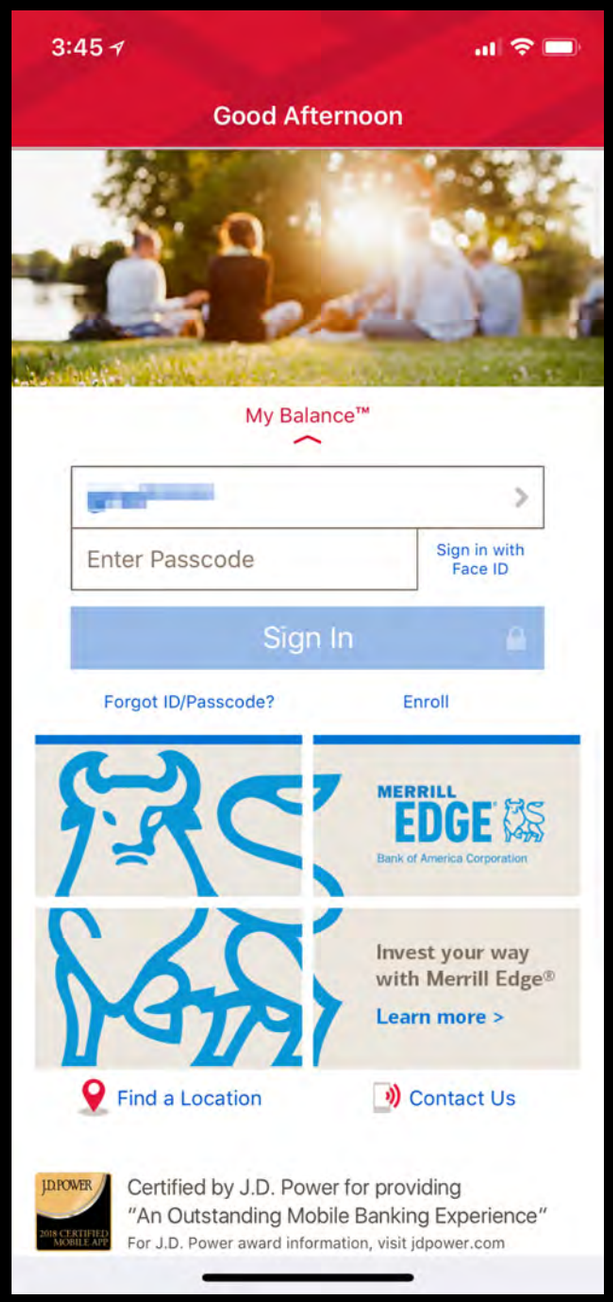
- Allows improved syncing among all of your devices

- Deleting a message from one device deletes it from all devices, and all of your messages can be downloaded to a new device

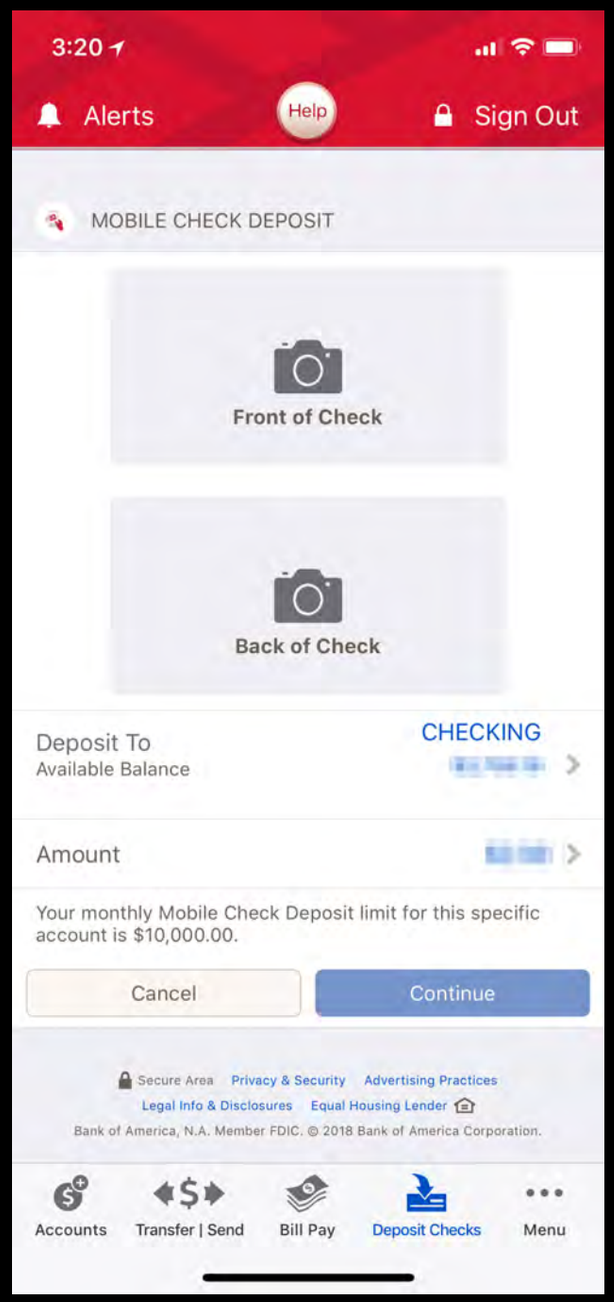
Mobile Banking

Using iPhone

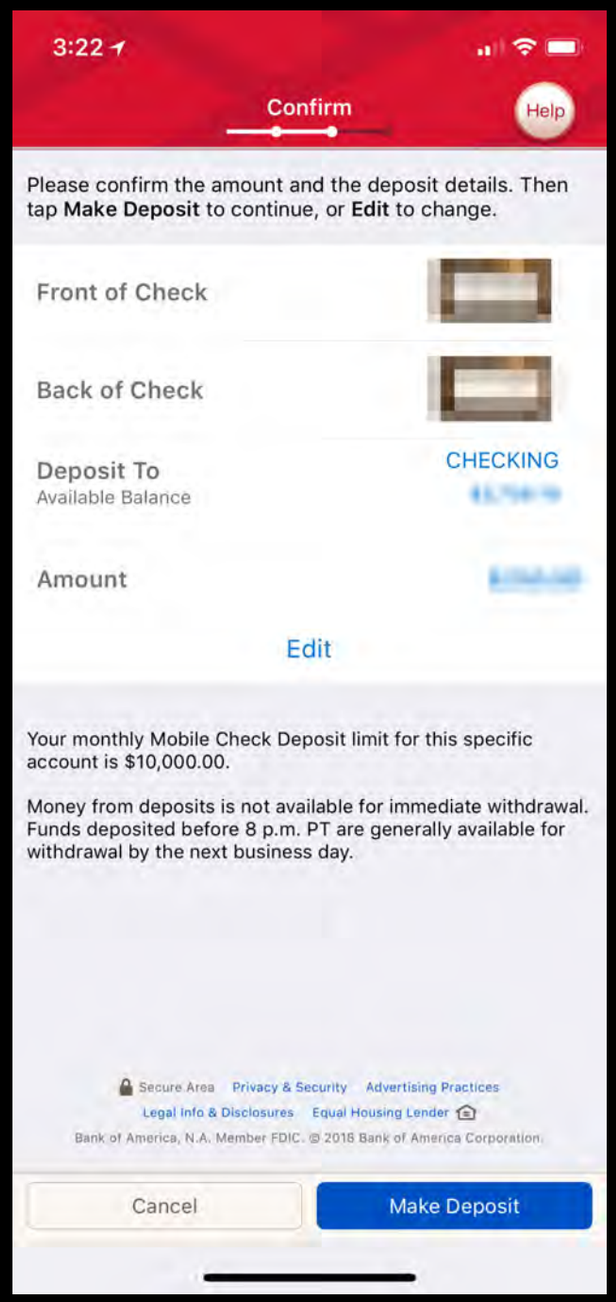
Deposit Checks with iPhone



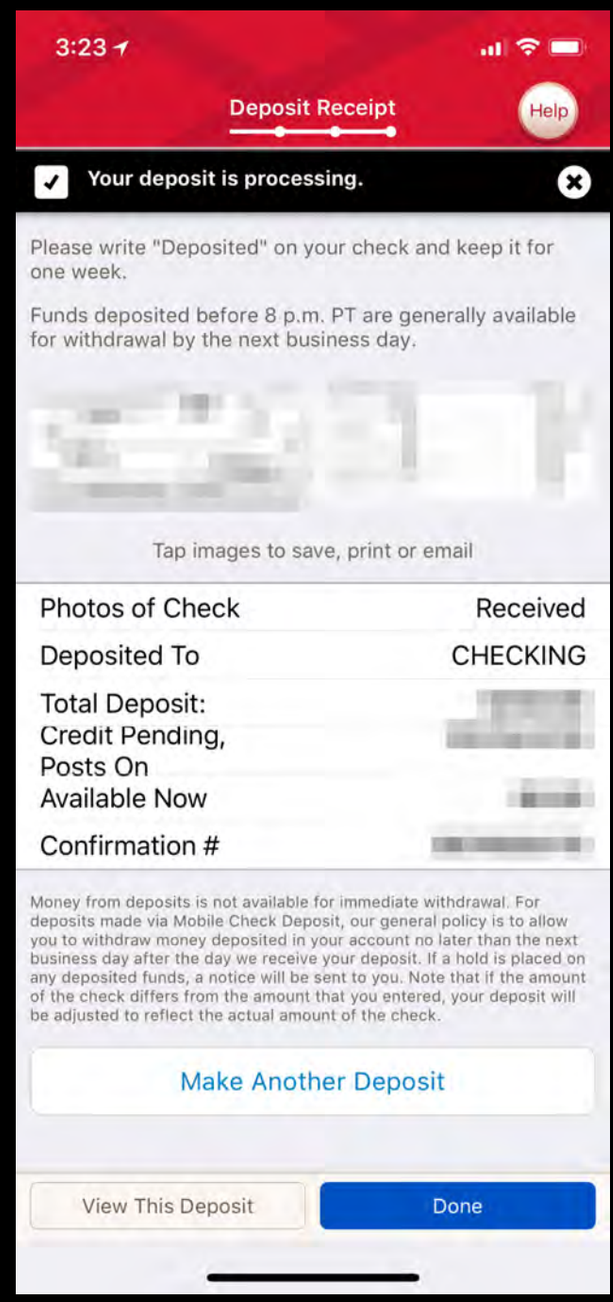
Open Mobile Banking App



Endorse Check & Photograph Front and Back

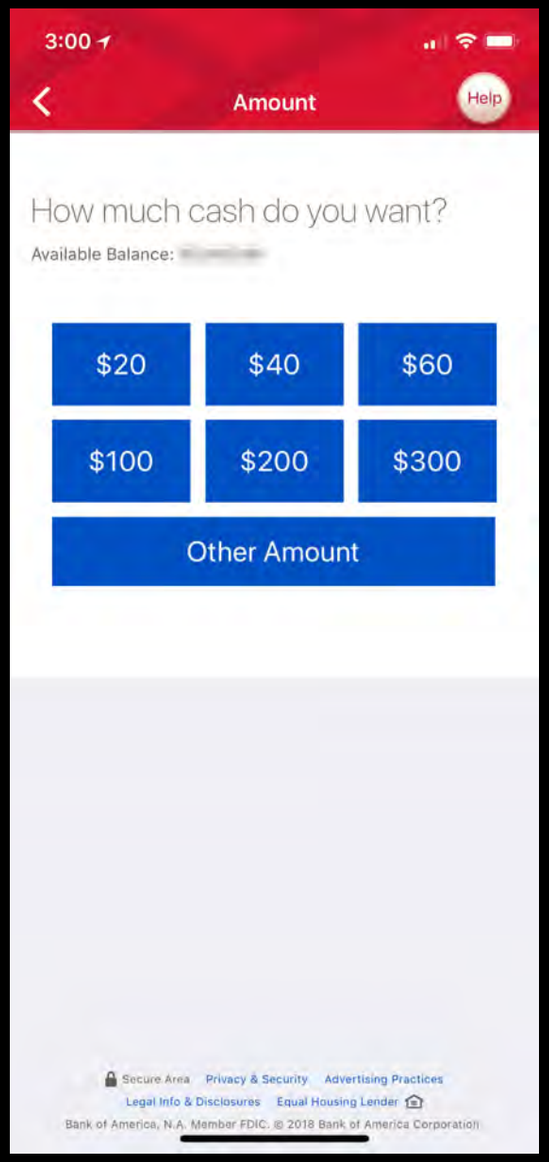


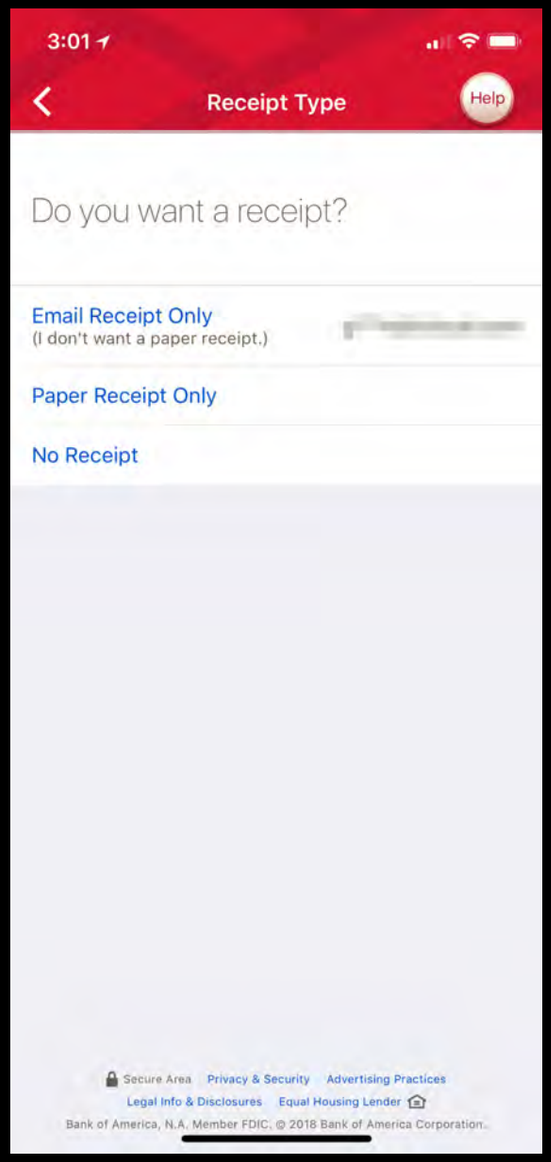
Select Account and Enter Amount

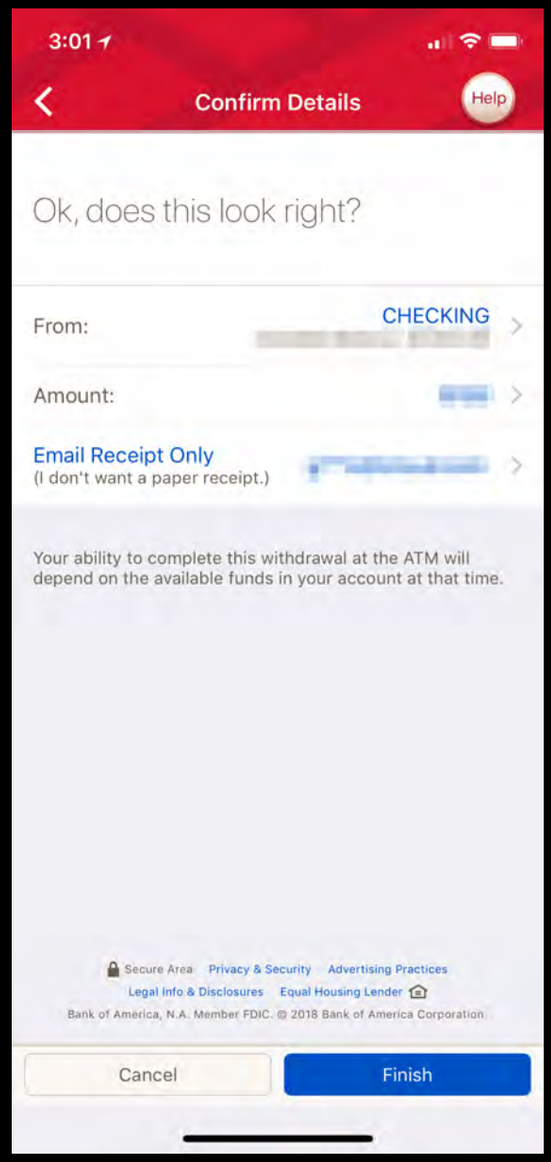


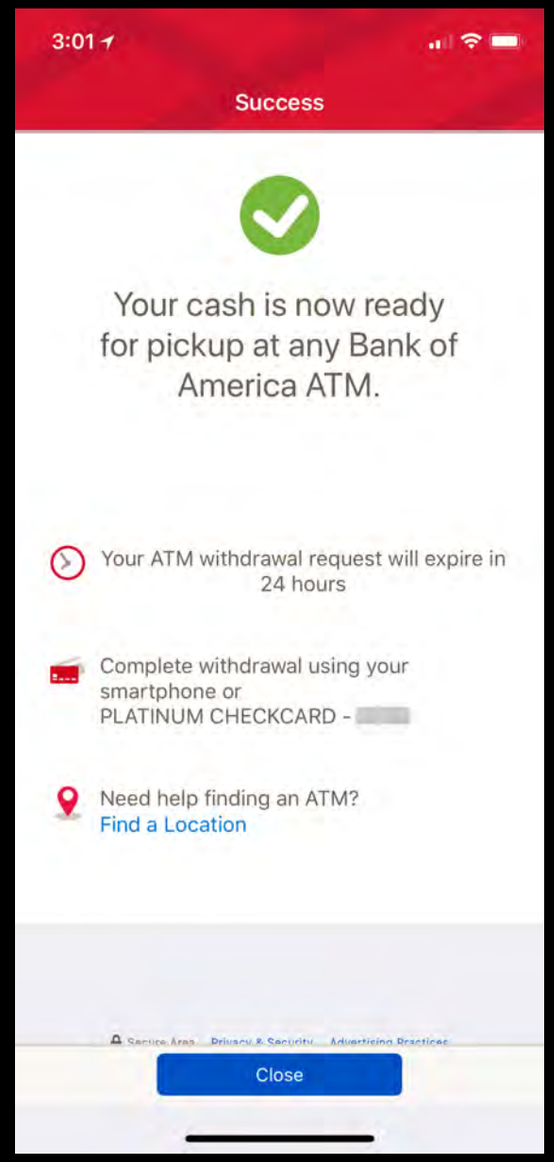
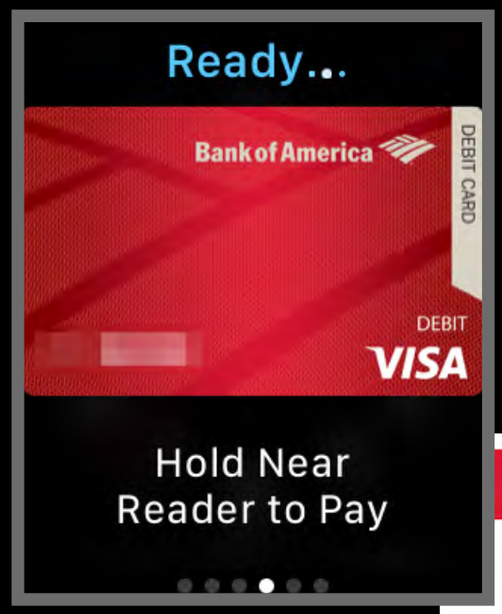
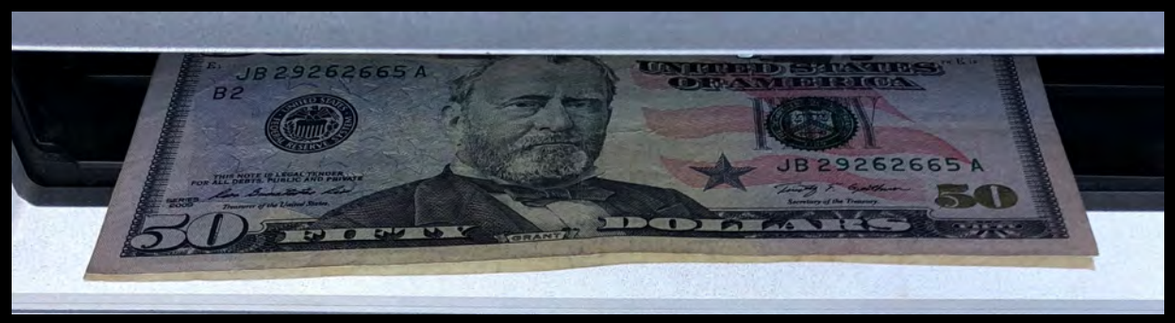
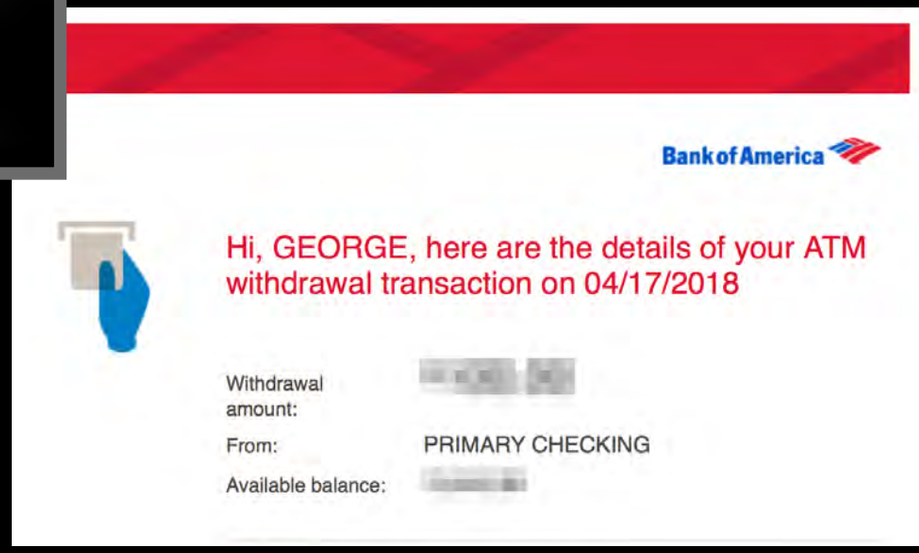
Complete Deposit & Get Receipt

ATM Withdrawal Setup Using Mobile Banking









ATM Withdrawals with Apple Pay