

Apple User Group

June 27, 2016 Episode 64*



Next Meeting

Monday 9:30

July 25, 2016



Today's Setup!





Apple News!

Apple News



- Apple has opened registration for it's annual Apple Summer Camp, for kids aged 8 to 12. Here they will learn how to create interactive books and movies using Apple products and software
- In this years back to school special, Apple is giving away a set of wireless Beats headphones when you buy an eligible Mac, iPad, or iPhone for college
- Apple is discontinuing sales of the Thunderbolt monitor. Although it's still available, until current inventory is sold out

Apple News



- Kentucky Fried Chicken (KFC) announced that it has begun supporting Apple Pay
- We also recently found out that Bob Evans and Sketcher's also take Apple Pay
- Bank of America is ramping up support for Apple Pay at its ATMs, allowing users to withdraw money using their iPhone
- Bluetooth 5 was announced and will quadruple range and double speed. It is projected for release in late 2016 to early 2017

The Big News!!



WWDC 2016



- The 27th WWDC was held 6/14 in San Francisco with 5000 attendees from over 74 countries
- There were 100 developers under 18 years old with the youngest being only 9!
- Apple announced new versions of macOS, watchOS, iOS, and tvOS
- All new versions are free and will be available in the fall (usually around September)

WWWDC 2016 My overall observations



- The 2016 upgrades appear to me to non-disruptive upgrades while still bringing significant improvement
- Siri was a common thread across all devices
 - "The age of touch could soon come to an end..."
 - Keyboard → Mouse & GUI → Touch → Voice
- Home automation was another major thread
- Apple is also putting a lot of emphasis on 3-D touch in iOS

WWDC 2016 My overall observations



- Apple is opening up much more of it's software to 3rd party developers (Siri, Maps, Message, Phone)
- Another area of emphasis is improving how their devices work together. This is a key competitive advantage for Apple.
- No hardware was announced. Hardware announcements Fall
- Apple CEO Tim Cook continues to bring diversity to the Apple keynotes, this year four women participated in the presentation.

watchOS 3



watchOS - Performance

- Your existing Apple Watch will run much faster in the fall
 - Much faster app launch time
 - Favorite apps will stay in memory with background updates
- "Feel's like a whole new Watch"
- On stage, they pulled up an app on WatchOS 2 and it took 7 seconds. Same app on WatchOS 3 was instantaneous.



watchOS SOS

- There will be a new feature called SOS.
- Holding down the Apple Watch's button will alert local emergency services without you needing to know your current country's version of 911.
- This is great for travelers who don't know how to get help wherever they are, and could also be used to quietly alert the authorities during dangerous situations.
- SOS can be set up to ping preset contacts and send them a map of your current location.
- SOS also pulls up the user's Medical ID from the Health app to display data and known health conditions for emergency responders.



watchOS Dock

- Apple will improve the way you access apps.
- In addition to the current app screen, you'll now have an all-new Dock that you access by clicking the side button.
- You choose which apps to display, and can move through apps one at a time or swipe through them quickly
- Also new, swiping from the bottom of the watch face reveals a Control Center for your most used settings (like iOS).



watchOS - Watch faces

- Several new watch faces are available
 - Customizable Minnie Mouse Watch face, matches your band color
 - Activity Watch face to see your rings throughout the day
 - New Numerals Watch face with different fonts for a simple display
- You just swipe to switch Watch Faces and more complications can be added



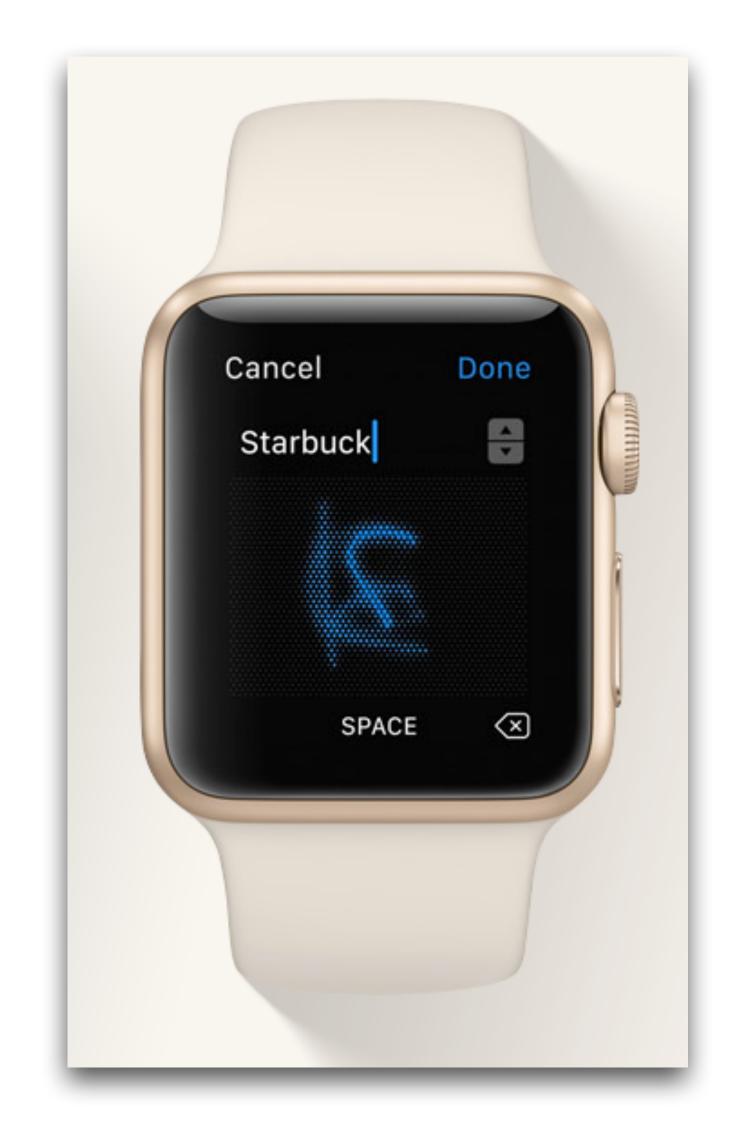
watchOS - Other

- A new Breathe app guides you through a series of deep breaths that can help you better manage everyday stress
- The Activity app can be optimized for wheelchair users, taking into account different pushing techniques for varying speeds and terrain.
- There are also two wheelchair-specific workouts and a new "Time to Roll" notification.



watchOS - Other

- You can reply to messages in your own handwriting or scribble letters on the display and let Apple Watch turn it into text.
- You can use a new Home app to manage all your HomeKit-enabled devices from your watch.
- You could adjust lighting, see who's at the front door, or check your thermostat
- Here's a video overview of watchOS 3



tvOS





tvOS Single Sign-on



- Today with most network and live TV apps, you have to: go to a web site on another device, sign on with your cable credential, get a code, and then enter it on the Apple TV. This is a real pain!!
- This process will be eliminated with a new Single Sign-On feature 👄
- With Single sign-on, you just sign in once on your Apple TV with your cable account credentials and you'll get access to all network TV apps.
- tvOS will even show you all available network TV apps that you can access with your cable provider
- This feature will also be available in iOS.

tvOS - iOSApp



- The iOS remote app will be upgraded to completely duplicate the functionality of the Siri Remote for tvOS. For example:
 - The app will support touch gestures
 - You can play games with gyroscopic motion controls with your iOS device
 - The app will have the same Siri integration
- In addition to this, you will also have a keyboard to enable faster typing for searches and logins.
- The app will have a new splash screen during music playback, displaying large cover art alongside podcast-style play/pause, jog, fast-forward, and rewind controls.

tvOS - Siri



- With the new tvOS, Siri not only lets you search for a specific topic, it allows you to combine multiple criteria in the same search.
 You could ask Siri to "Show me spy movies from the 1960s".
- Siri will now be able to search YouTube. You could ask Siri to "Search YouTube for parrots that sing opera" and it will bring up the YouTube app with complete search results.
- Siri will also have the ability to tune in to live television. Just say "Watch ESPN2" and the app will instantly pop open and show you what's on right now.

tvOS Other



- There's a new Dark Mode that allows you make watching TV at home feel more like going to the movies.
- Apps will now automatically download to your Apple TV when you get them on iOS.
- You'll have the ability to use an Apple TV to control home automation products like dimming lights, or controlling your thermostat.
- Apple is also opening up more of tvOS to developers to improve their apps



iOS 10



- Compatibility: iOS 10 will not be compatible with some older devices:
 - iPad 1, 2, 3
 - The original iPad mini
 - iPod touch 5th generation and older
 - iPhone 4s and older models
- My iPad minis will be left behind. @

iOS 10 Compatibility

iPhone



iPhone 6s

iPhone 6s Plus

iPhone 6

iPhone 6 Plus

iPhone SE

iPhone 5s

iPhone 5c

iPhone 5

iPad



iPad Pro 12.9-inch iPad Pro 9.7-inch

iPad Air 2

iPad Air

iPad 4th generation

iPad mini 4

iPad mini 3

iPad mini 2

iPod

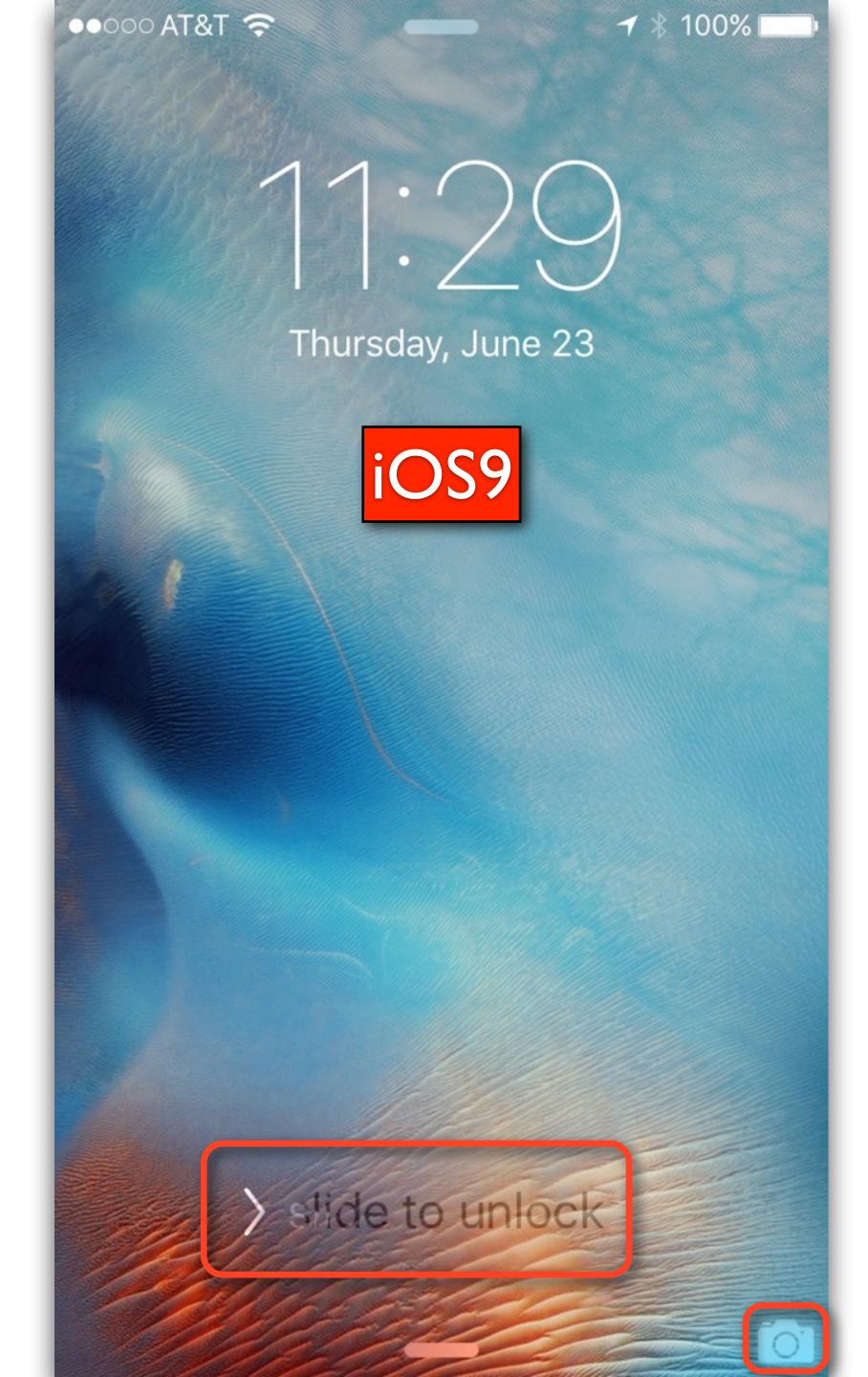


iPod touch 6th generation

iOS Lock Screen



- The Lock screen has been redesigned
- Slide to Unlock (formerly done with a right swipe) is gone and has been replaced by "Press Home to open".
- A swipe to the right will now give you access to your widgets which were formerly located in the "Today" view of the Notification Center
- Quick access to your camera, which was done by swiping up on the camera icon on the lock screen, has been replaced by a swipe to the left.



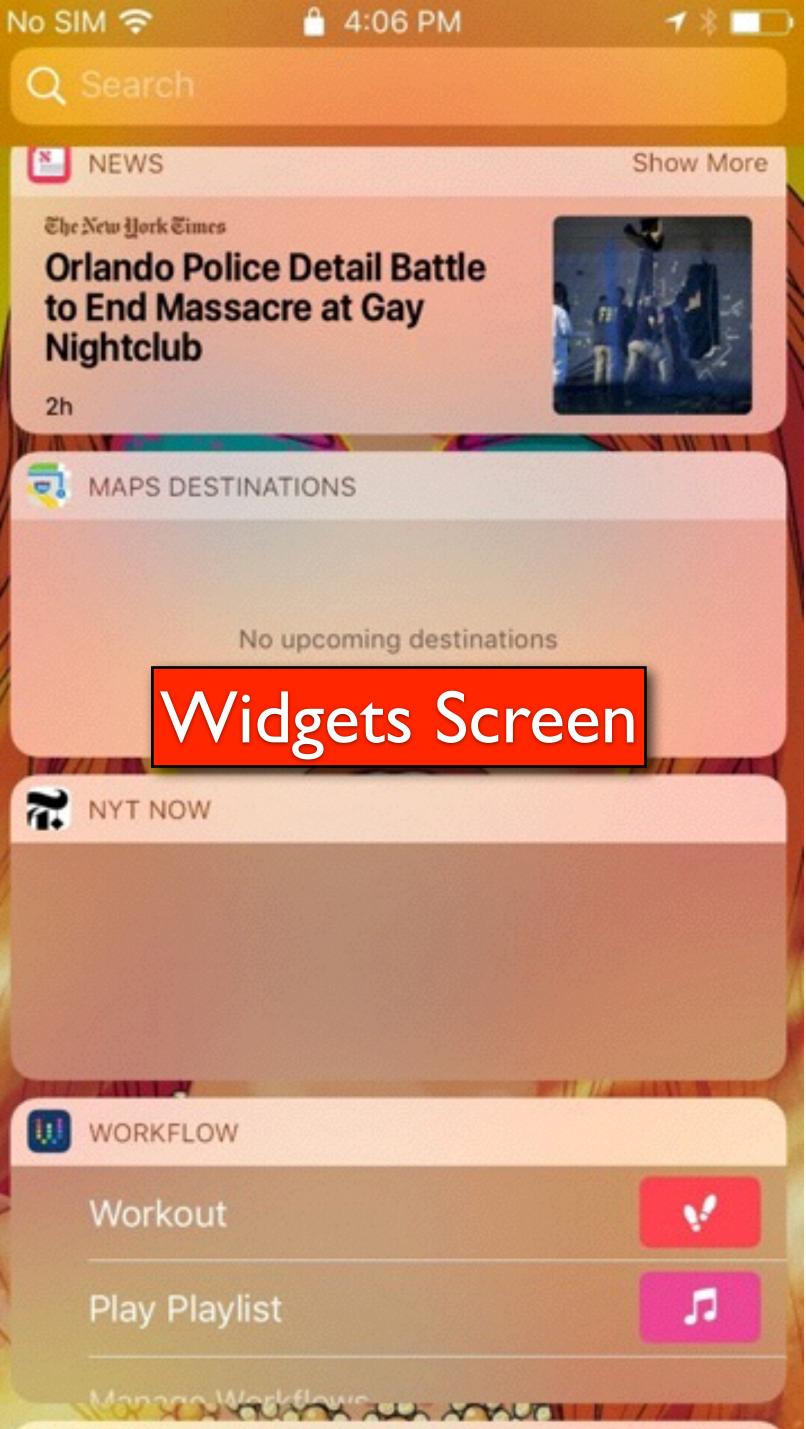


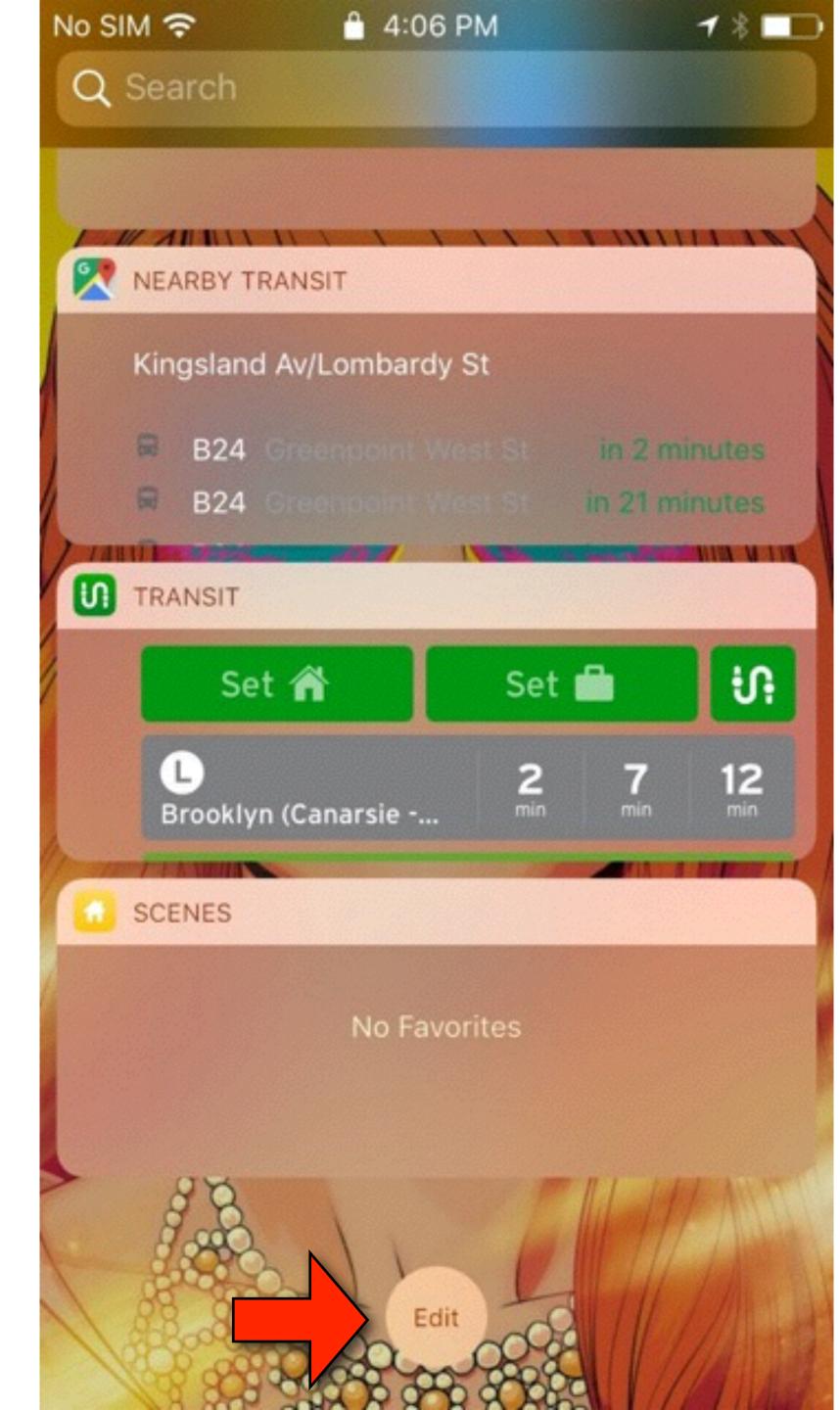
iOS Home Screen

- 11:33
 Thursday, June 16

 Press home to open
- Apple's has added a number of new widgets from it's own apps:
 - The Weather app
 - "Up Next" from Calendar
 - Siri App Suggestions
 - Apple News
 - Maps
- Widgets will work the same on the iPad but will be in two columns utilizing the larger screen

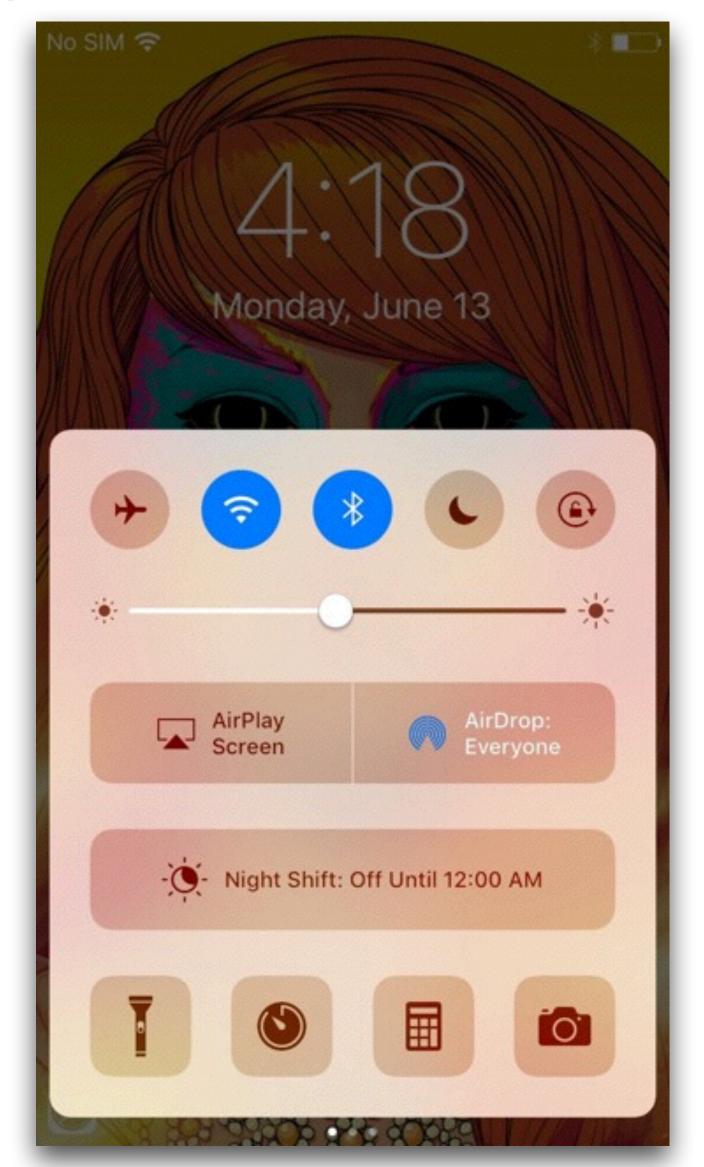




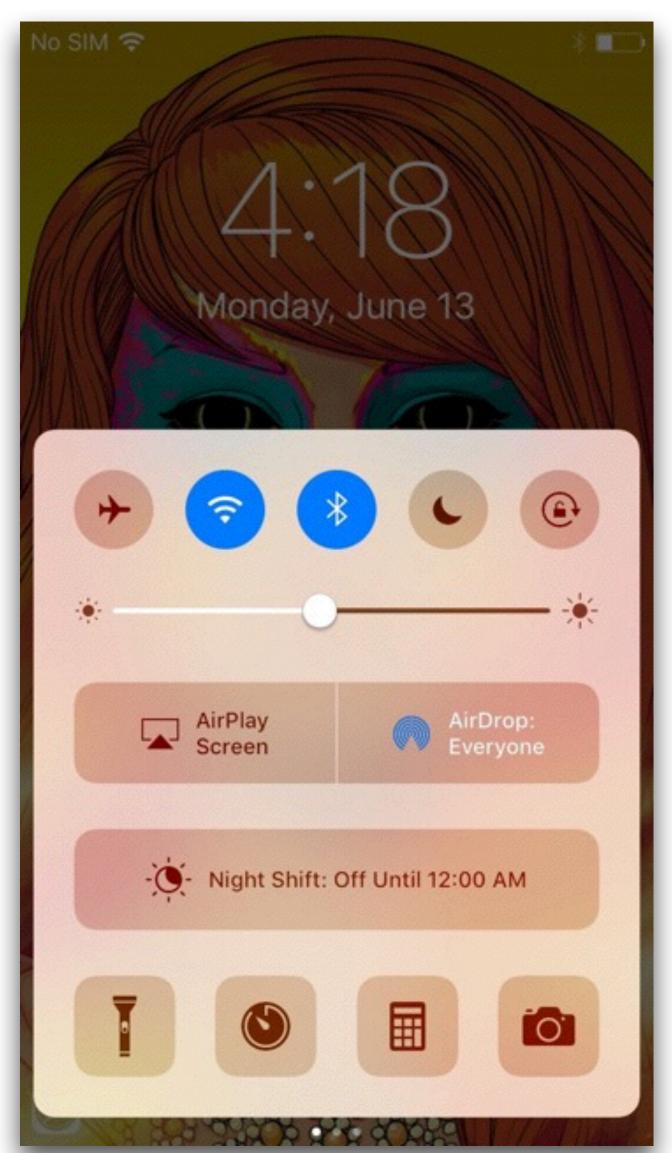




- Swiping up will show you the redesigned control center
- Five buttons for airplane mode, Wi-Fi, Bluetooth,
 Do Not Disturb, and orientation lock are on top
- A brightness slider also remains and an option has been added to control Night Shift mode
- Finally, there is a bottom row of controls for flashlight, timer, calculator and camera. All of these are 3D Touch enabled for more advanced control options



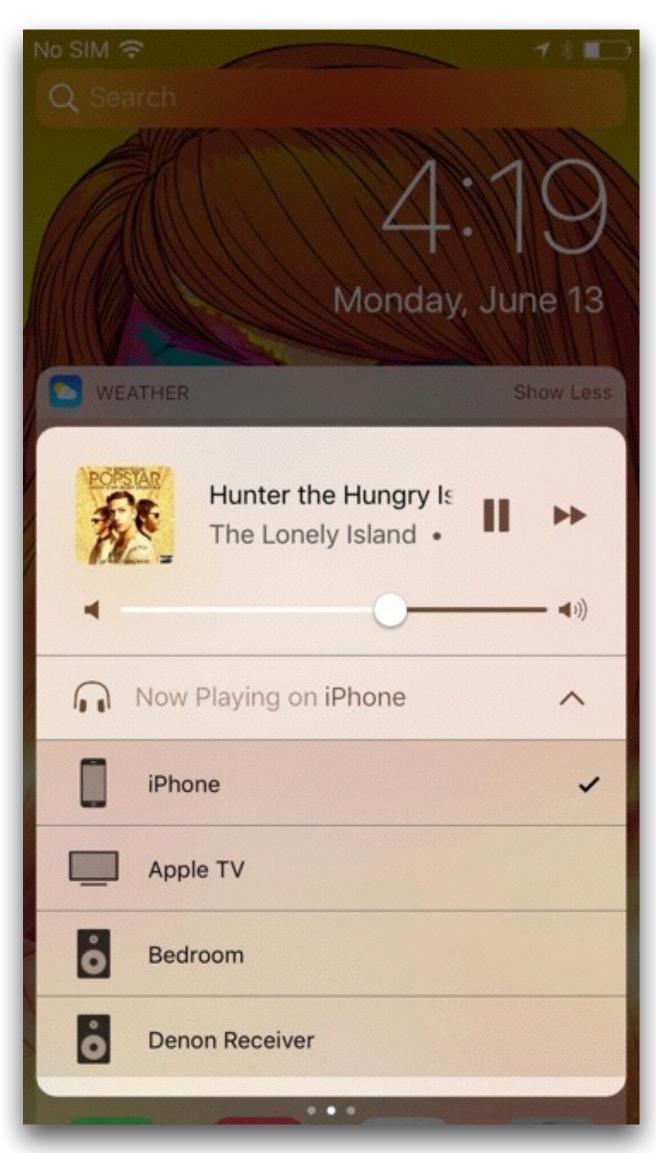
- The AirDrop button remains as before
- The AirPlay button on the main Control Center view has been renamed to "AirPlay Screen."
 Tapping it provides the option to mirror the iPhone or iPad display onto an Apple TV.
- Audio AirPlay controls have been separated completely, moved to the new music Control Center view which you access by swiping to the left

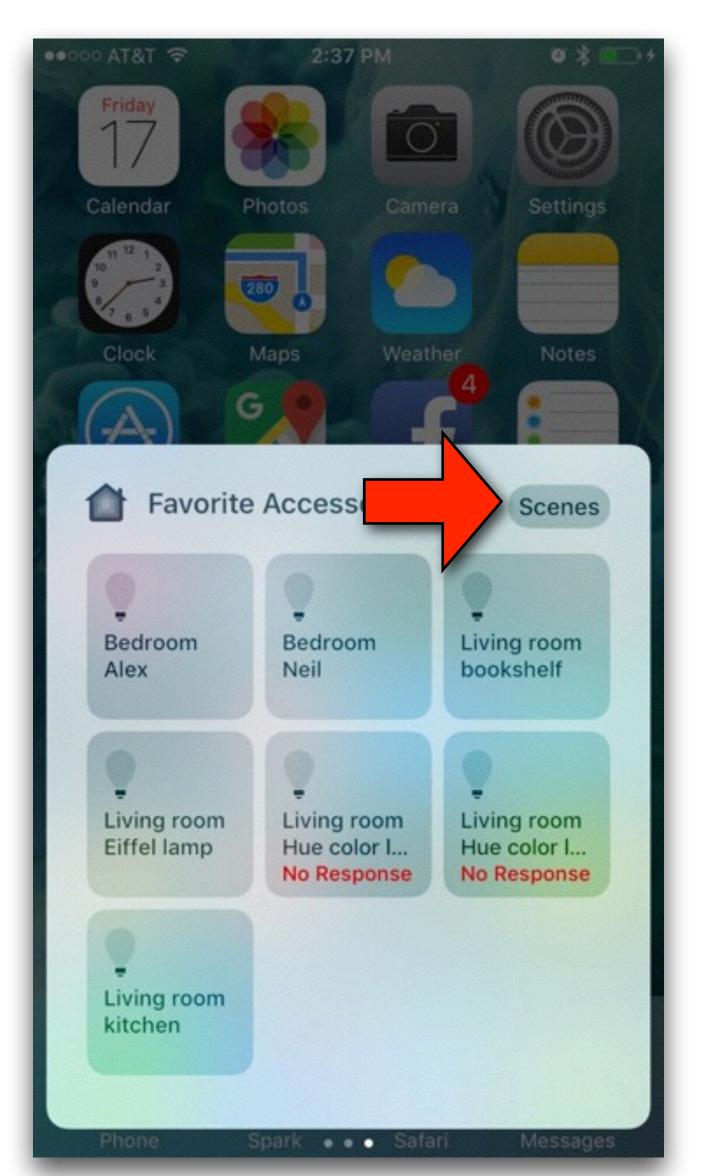


- The new music controls view which includes:
 - Album art, song title, artist, and album title
 - A scrubbable timer
 - Skip forward/back and pause controls
 - Volume controls
 - An expandable menu for AirPlay

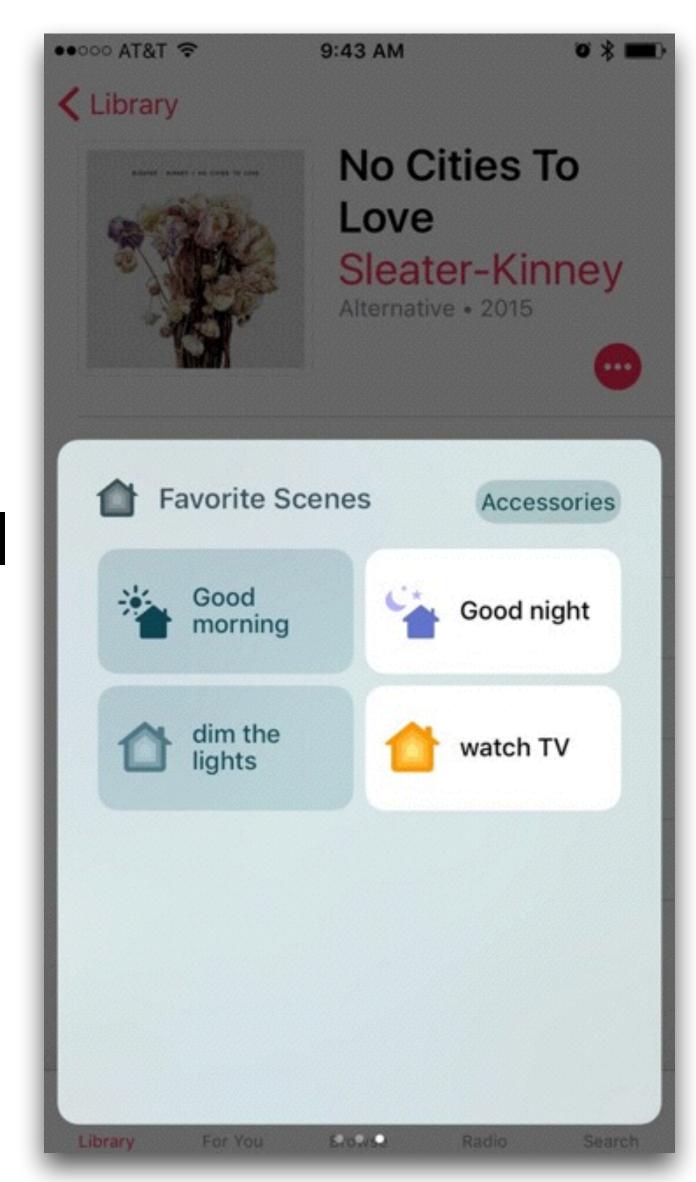


- Tapping the AirPlay button will allow you to select an external device to play your music
- Possible devices include:
 - Apple TV
 - AirPlay devices
 - Connected Bluetooth speakers or headphones





- Finally, swipe toward the left one more time to access the new HomeKit Control Center.
- There are two HomeKit views:
 - "Favorite Accessories" to control your gadgets
 - A "Scenes" option is accessible from the upper right corner
 - This allows controlling multiple devices for specific scenarios



iOS Lock Screen

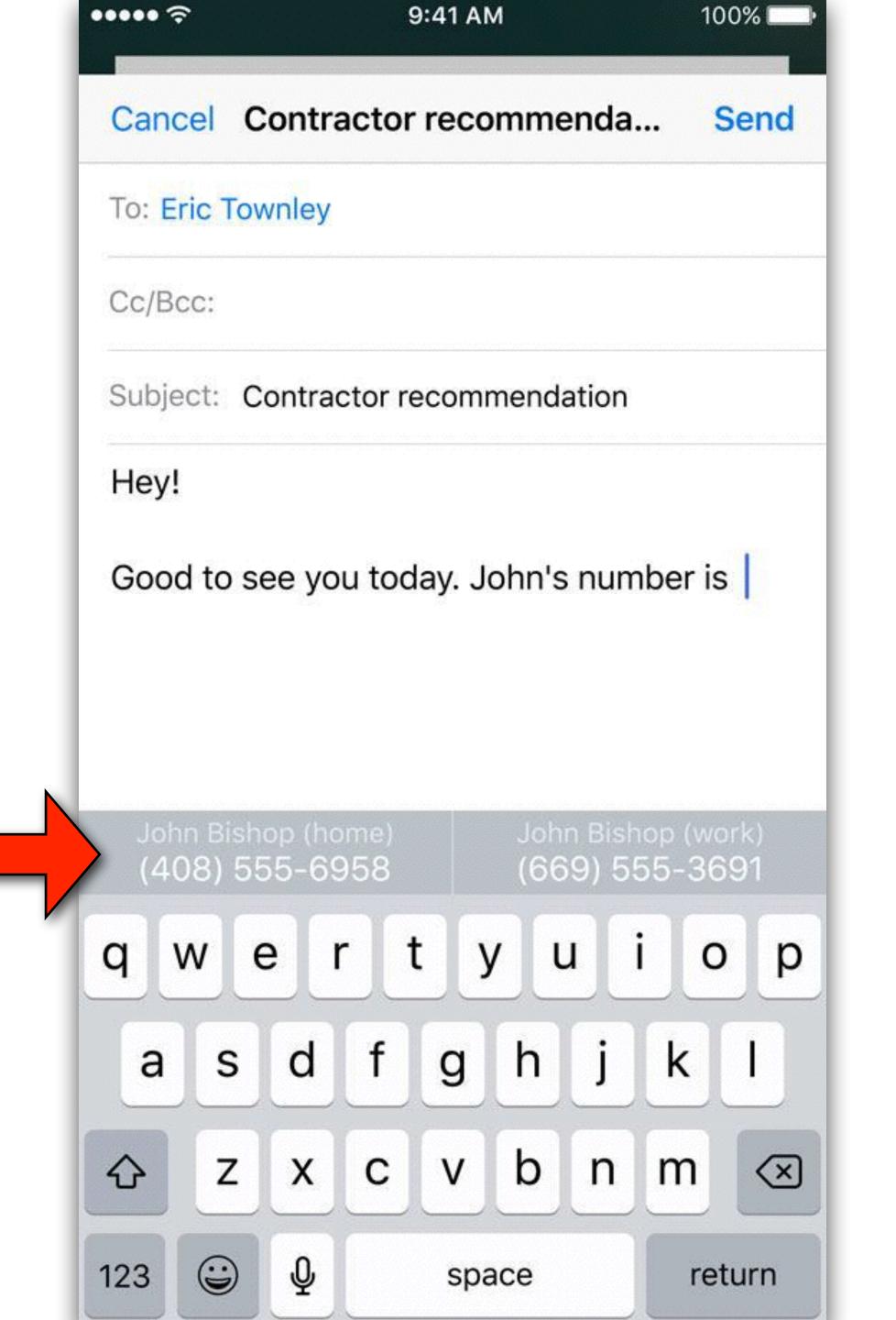


- Swiping down from the lock screen will still show you your notifications but now there will be a new feature to clear all notifications with one button push.
- There is a new Raise to Wake feature for iPhone 6s/6s+ and iPhone SE users which turns on the phones screen when you raise it (Much like the way the Apple Watch works)
- This solves an issue that the second-generation Touch ID sensor on those handsets was so fast to recognize a fingerprint that many times users weren't able to view their notifications before the device unlocked.
- Here's a video explaining some of the changes

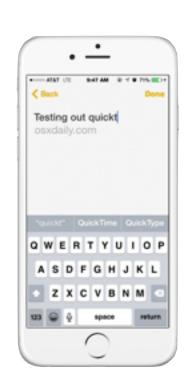
iOS - Quicktype



- The iOS on screen keyboard Quicktype has also been improved with enhanced recommendations.
- Instead of just suggesting the next best word, it will now intelligently recommend dates, locations, contacts and more.
- Apple calls this "Siri intelligence". iOS 10 can analyze content and suggest a specific kind of information a person is looking for.
- For example, if someone asks "Where are you?", QuickType will offer to share your current location.
- If the person asks for someone's email address, QuickType can recommend possible options from your contacts.



iOS - Quicktype



- The technology can also create new calendar events based on context.
- During the keynote, there was an example of a conversation in which the terms "dim sum," "Sunday," "ITAM" and "IOT Spear St." were detected. These were combined to allow creating a "Brunch" event, with time and address info already populated.
- There will also be the ability to use multiple languages in the same conversation. In iOS 9, trying to type in a language other than the system default will often result in QuickType trying to "fix" each word. iOS 10 makes it possible to use languages like English and Spanish in the same sentence without changing keyboards.

iOS - Photos



- The new Photos App uses a new technology Apple refers to as Computer Vision
- The app will scan a user's entire photo library, detecting people, animals, places, objects, etc...
- This enables powerful searching capabilities, allowing users to search for "cats" to bring up their images of cats, or "mountains" to find all images taken of mountains.
- The scanning capability will scan for 4200 type of objects

iOS Photos



- Photos will have a "People" album consisting of people grouped based on facial recognition, and it will have a world map that shows the physical location where each photo was taken.
- Photos will also have a new "Memories" tab that uses the technology to automatically group photos based around certain days, vacation trips, family events, etc...
- With Memories, there are options to watch quick video montages of photos set to music
- Let's look at a video showing some of this

iOS Apps

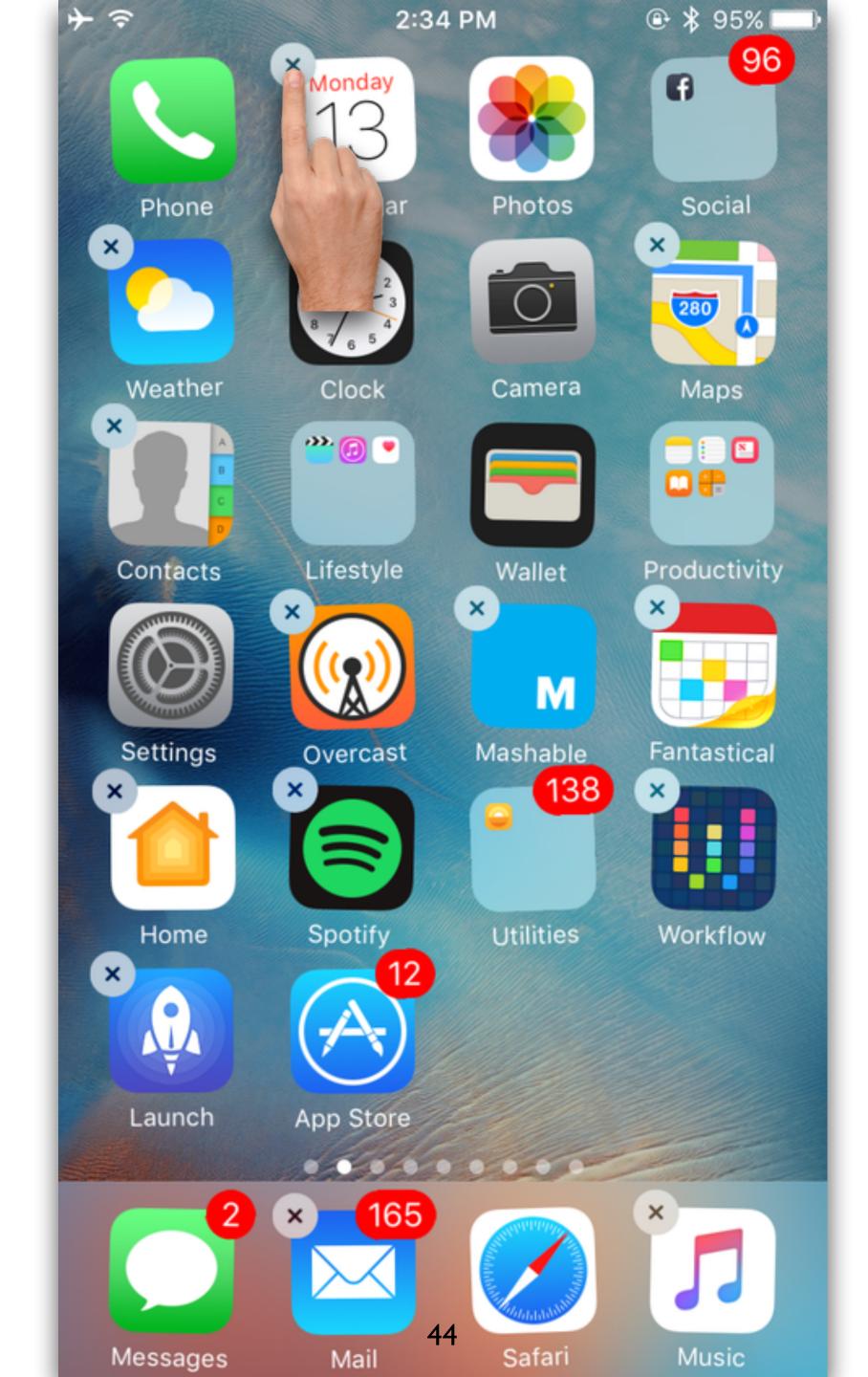


- Apple, for the first time, will allow you to remove some Apple apps from your screens if you wish.
- You remove them using jiggle mode and can add them back later from the App Store just like 3rd party apps.
- Removable apps: Podcasts, Maps, Compass, Tips, Calculator, Watch, Voice Memos, Contacts, Stocks, Weather, iCloud Drive, Calendar, Mail, Music, Reminders, Videos, FaceTime, and Notes

iOS Apps



- If you remove a stock app, the following will happen:
 - User data associated with that app will be removed
 - That app is no longer accessible by other parts of the operating system. This means that if you removed, say, the Calendar app, your phone will no longer consider that app when interacting with other apps (i.e. Mail).
 - The code for the app however remains on your system. So if you go to the App Store to download it anew, you're really just reactivating these hooks and revealing the app on the home screen.



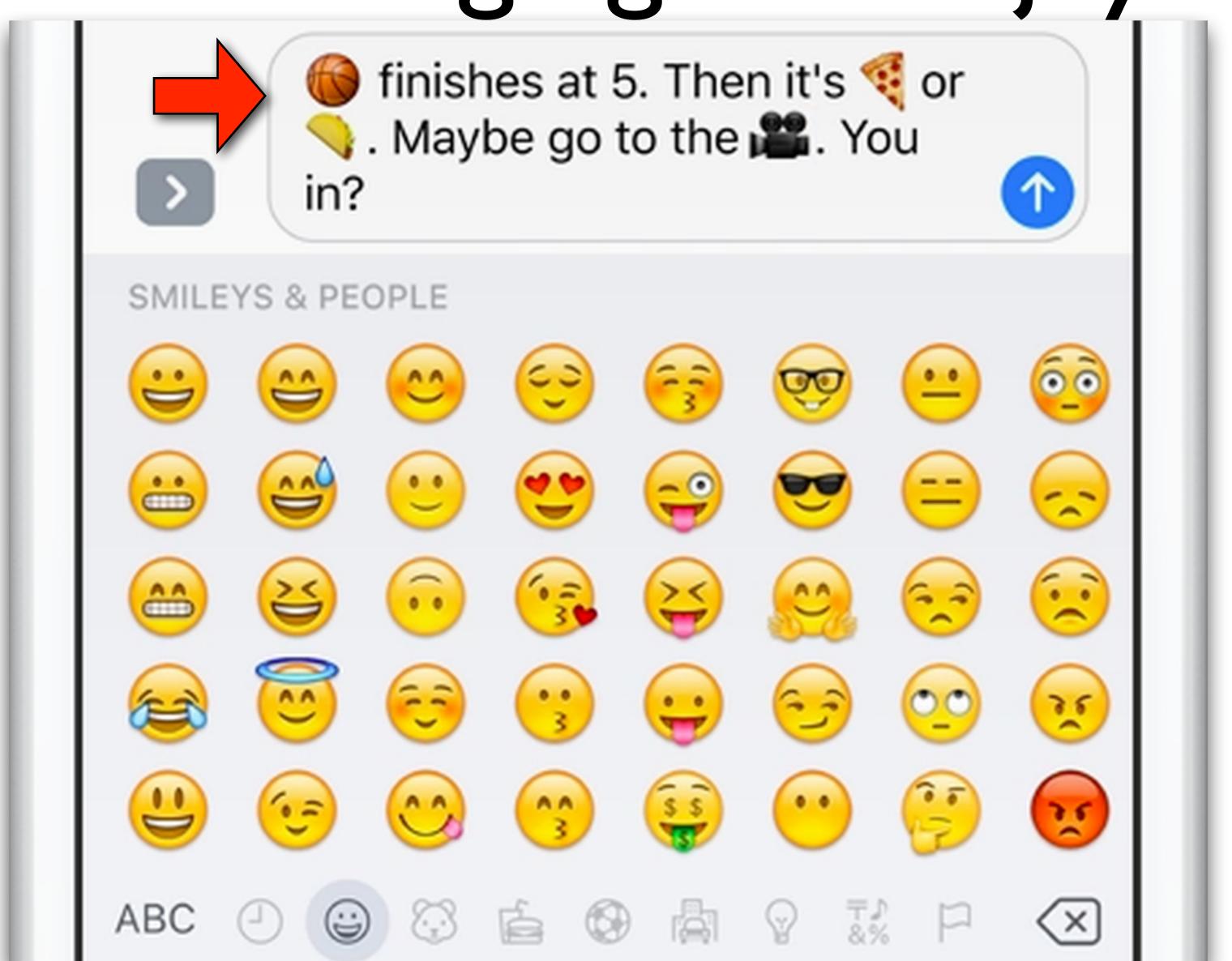
To remove an Apple app, use "Jiggle" mode and tap the "X".

iOS Messaging



- A lot of work went into the iOS Messaging app bringing it up to par with it's major competitors.
- Emojis appear three times larger than before. 👳
- Apple is also integrating an emoji search engine directly into Messages' keyboard. The keyboard will automatically notice and highlight "emojiable" words so you simply tap on the word to replace it with an emoji.

iOS Messaging - Emojifying



iOS Messaging



- You can add live video feeds in messages
- You'll be able to add rich links which will show content from the link vs. just a URL.
- You'll be able to add scalable "bubble effects" that adjust the font size of your text, simulating whispers and shouts.
- You can add invisible ink, which hides the content until the person swipes on it.

iOS Messaging

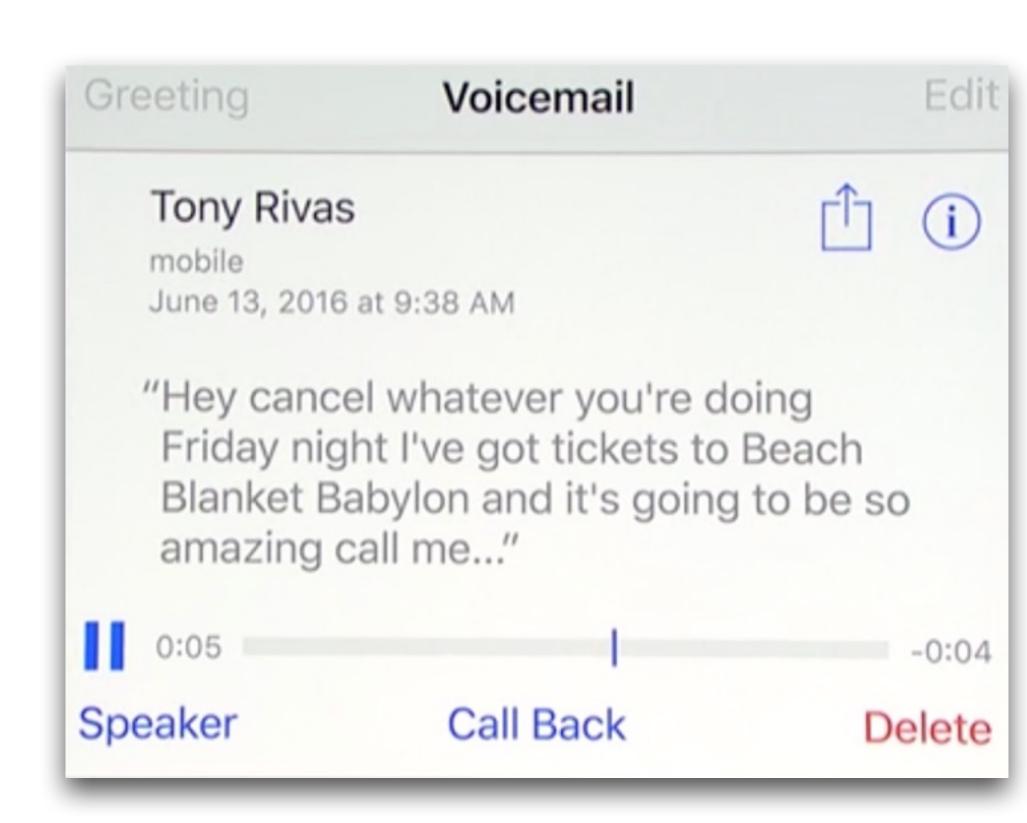


- You will also be able to add your own handwriting
- You can add small special effects (i.e. fireworks or strobe lights)to individual texts that briefly take over the screen.
- You'll be able to overlay text atop images.
- Apple is also opening up the Messages platform to developers.
- Video demo...

iOS Phone



- The Phone app adds a new feature called voicemail transcription.
- When someone leaves a voice message, you will now get a transcript of the message in text form.
- You can still listen to the message visual voicemail-style, call her back or delete the message.





- HomeKit, announced in 2014, is a hardware certification platform and software that allows developers to integrate their home automation products with iOS
- This provides for easy discovery, management, and communication between a wide variety of automation products like locks, lights, security equipment.
- With HomeKit you can set up your home so the lights turn on at a set time every morning to wake you, the thermostat cranks the AC up when you're driving home on a hot day, and at the end of that day you can tell your iOS device to shut the house down for the evening.



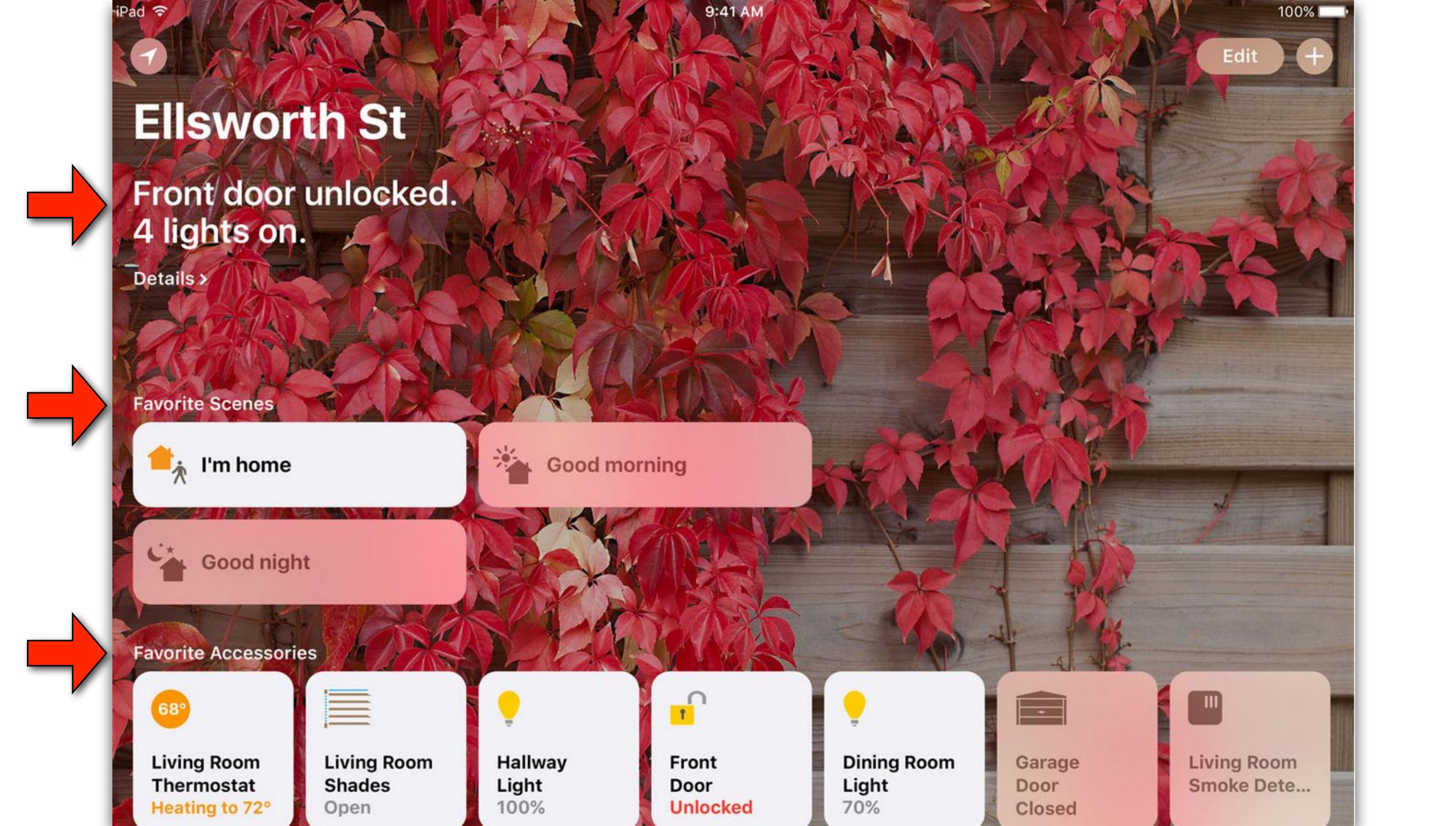
- The problem so far is that anyone who bought a HomeKit product had to find a third-party app to use it with. But not all third-party apps offered the same features; some didn't even support all HomeKit products.
- To solve this problem, Apple will now provide a dedicated "Home" app providing a universal interface for HomeKit accessories to iPhone, iPad and Apple Watch.
- It's integrated into Control Center, and Apple hopes it will be your home automation hub.

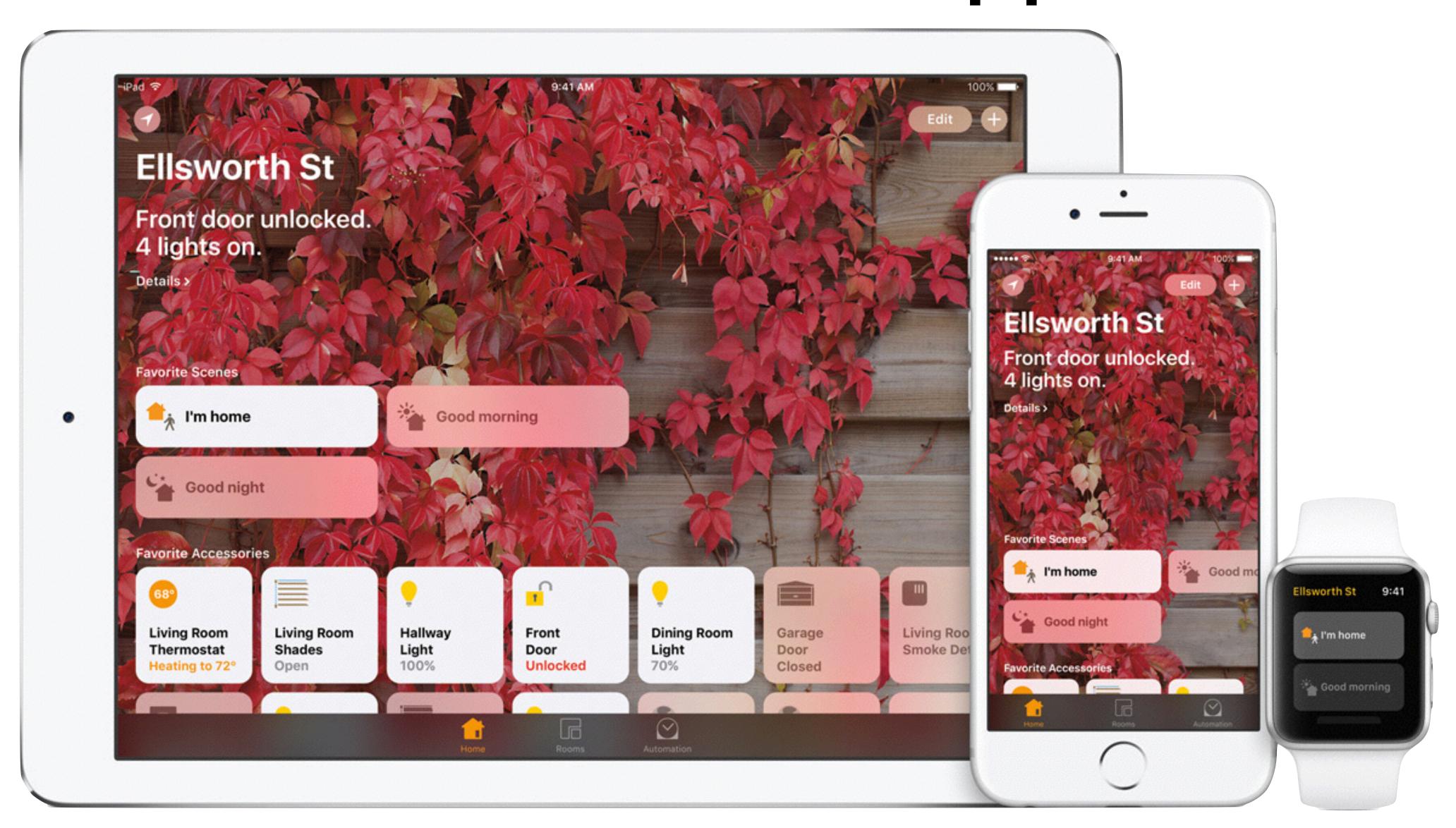


- Home can control devices individually or in group called "scenes"
- For example, a scene like "I'm home" might open the garage door, unlock the front door and turn on house lights
- A "Good night" scene might lock all house doors, lower window shades and dim or turn off lights
- Aside from scene control, users have access to individual devices from the "Favorite Accessories" menu



- The Home app can work with the Apple TV to give rough proximity awareness. This can automatically detects when a user connects to a shared network to trigger scenes like "I'm home"
- Home is integrated into the Lock Screen for viewing alerts and device status without having to unlock an iPhone.
- Users with appropriate hardware, such as a front door camera doorbell, can interact directly with hardware through the Lock Screen.





iOS News App



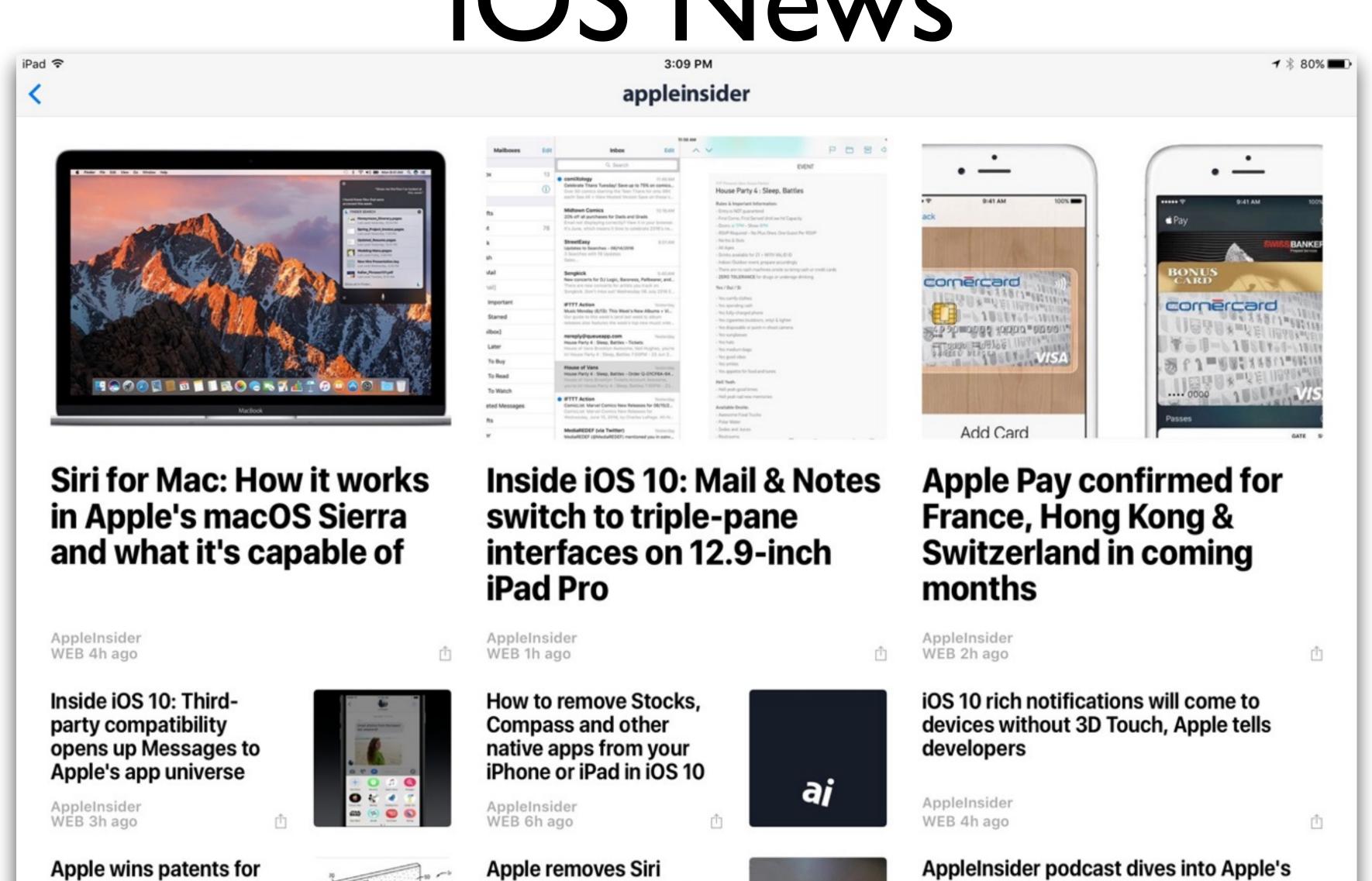
- I'm using Apple News more and more as time goes on.
- It aggregates news articles from blogs and news services and you tailor it just for information that you find interesting
- In iOS 10, it also has been redesigned
- Articles from about 2000 publishers will now be organized into categories and topics, and you'll get new recommended topics based on what you read.

iOS News App



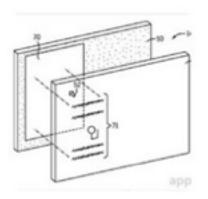
- There will also be new Featured Stories that are handpicked by the editors, bringing you the top stories on the Web.
- Subscriptions: Now you can subscribe directly to publishers, such as National Geographic and Wall Street Journal
- Apple News can now also bring you Breaking News notifications

iOS News



Apple wins patents for transparent AR device, device with wrap-around display

AppleInsider WEB 10h ago



Apple removes Siri Remote requirement for gaming apps in latest

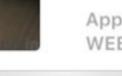
AppleInsider WEB 12h ago



WWDC 2016 keynote

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tvOS beta

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For You









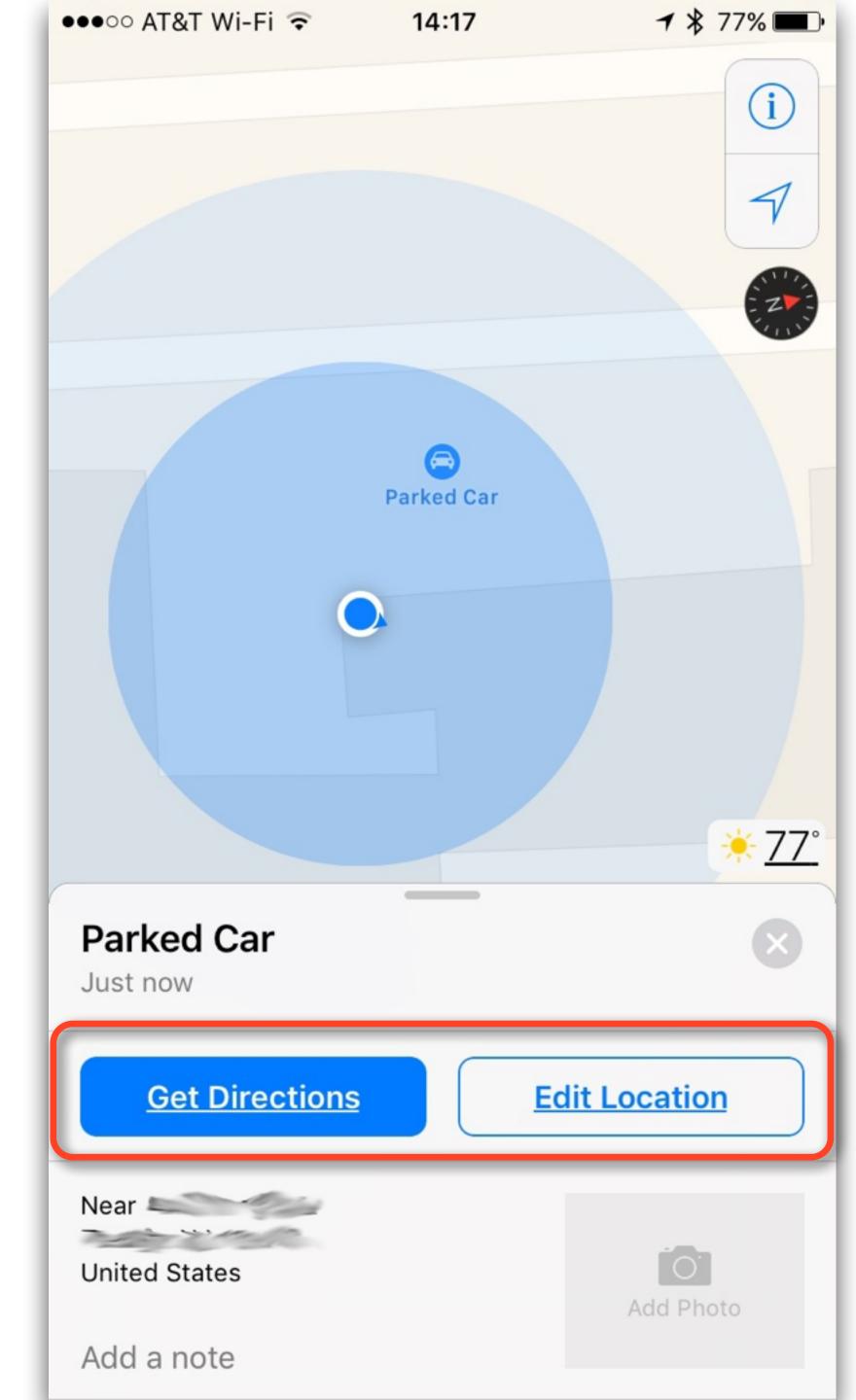
- With iOS 10, Maps will be also opened to developers, allowing third-party extensions
- This could allow you to search for restaurants, book a reservation, request a car, and pay for the car all within Apple Maps
- The look of Apple Maps will give you the ability to see traffic on their route with a dynamic view that will adjust based on current driving conditions.



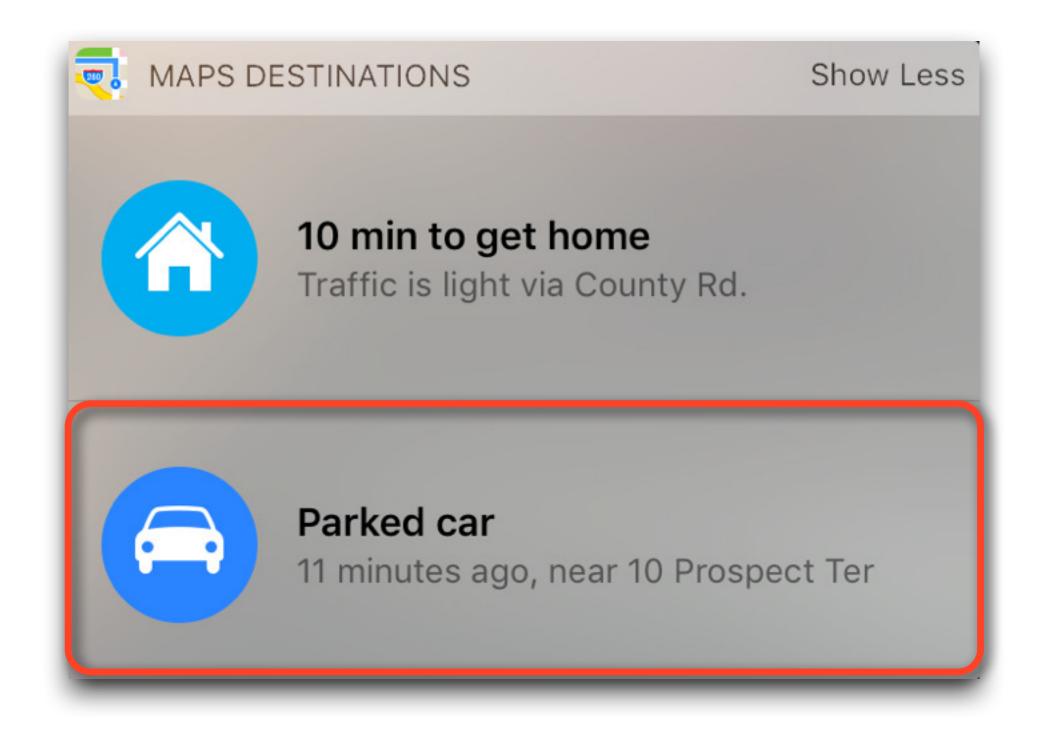
- For example, in a city, the Maps will zoom in to show street detail. Then when driving on a long straightaway, it will automatically zoom out to give a better view of the road ahead.
- Users will be able to pan and zoom ahead to see upcoming traffic conditions.
- And there are quick controls to see route details, or the ability to search for stops along the current route.



- A new feature will allow Apple Maps to remember where users park their cars
- In the Maps app, a small Parked Car icon appears where you left your car
- A parked car also shows up automatically as a recommended destination in Apple Maps and on the "Apple Maps lock screen widget"
- Users can get directions to their parked car
- You can also edit the location to pinpoint and add details like a photo of the car's location and even a note with a description like the level of the parking garage.



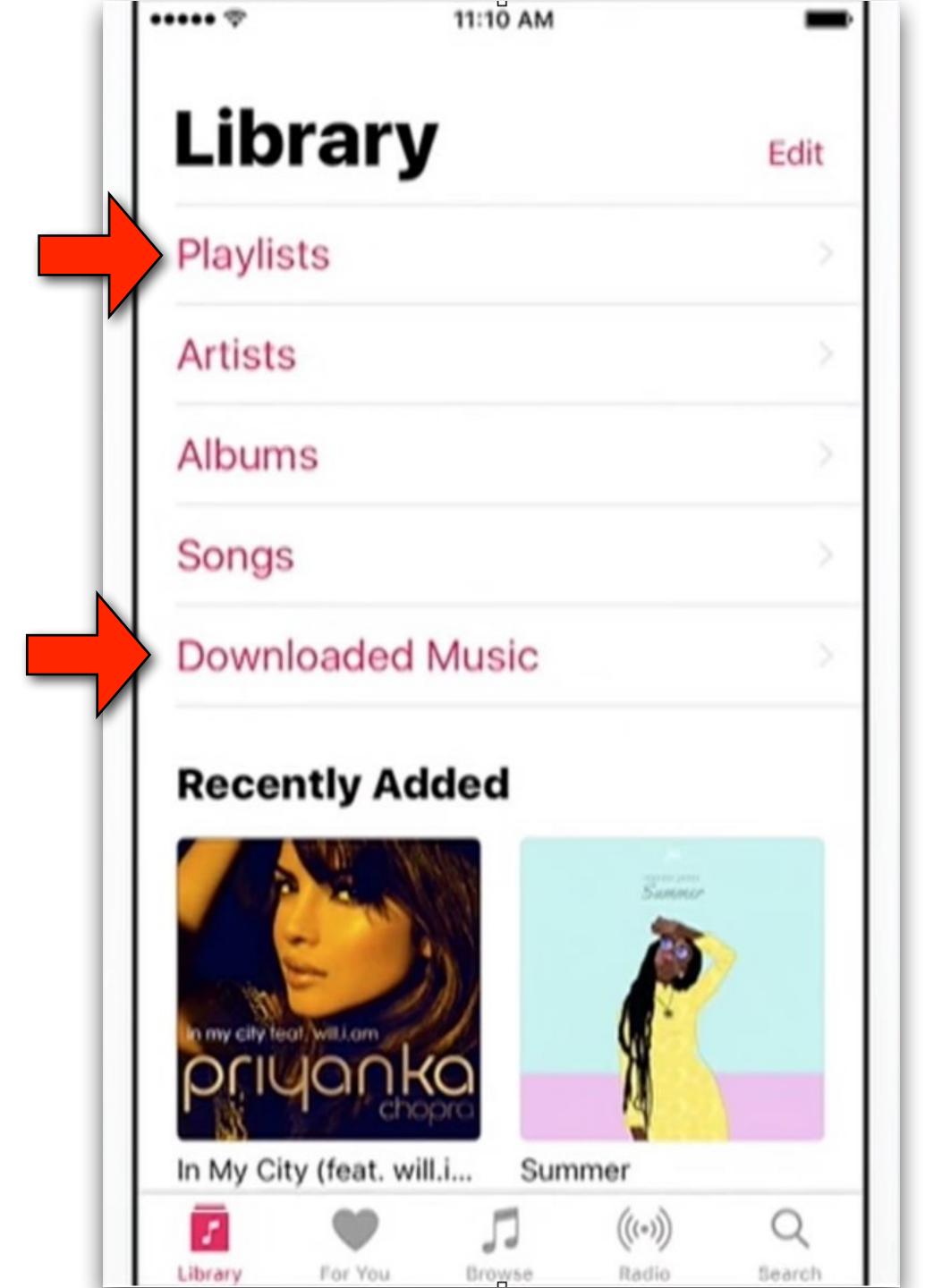


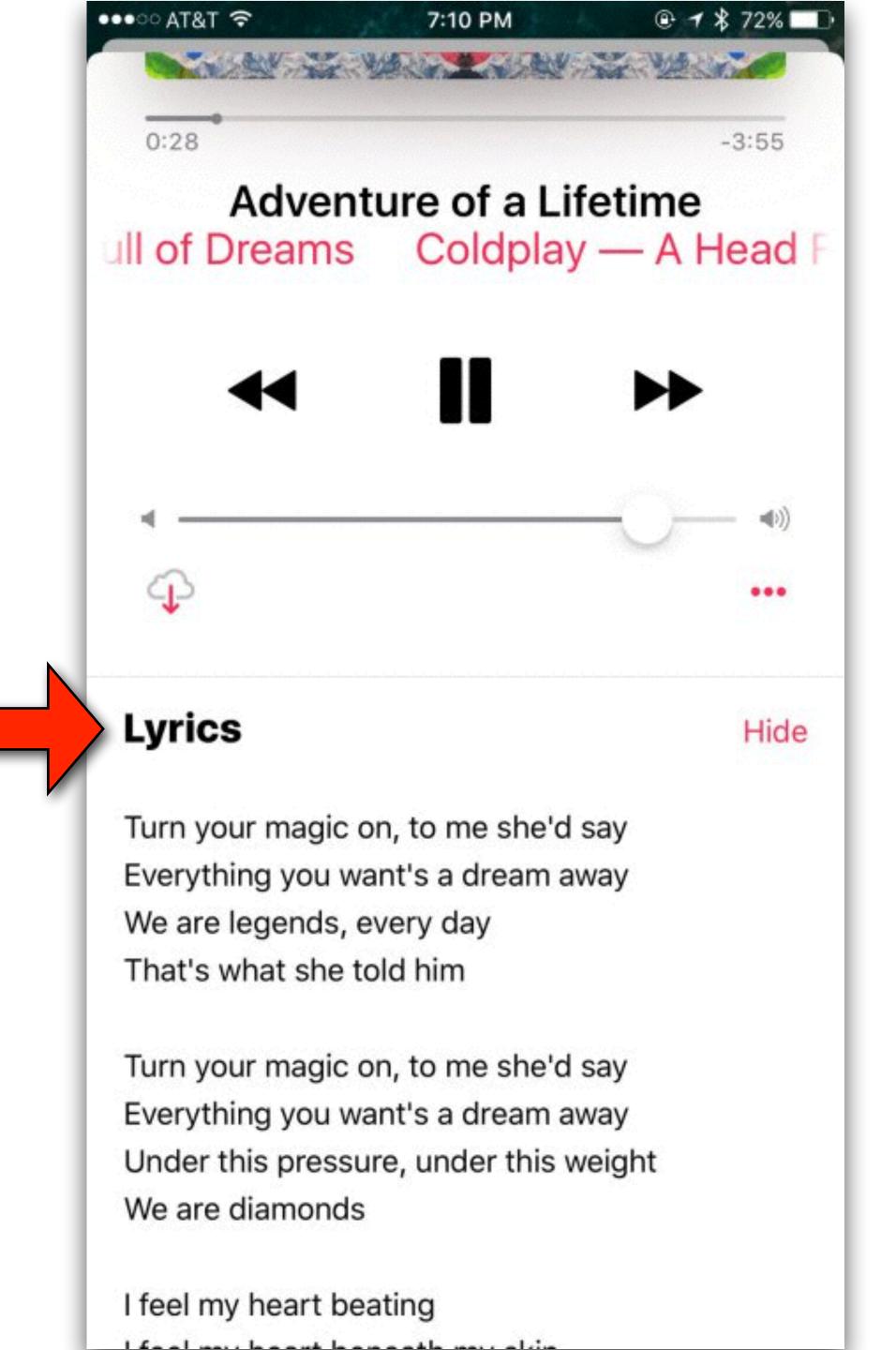


Apple Music



- Apple Music has been also been redesigned for easier use and content discovery in iOS, Mac, PC and Apple TV.
- The music library now has a section called "Downloaded Music," where users can see all of the songs stored directly on their device.
- Playlists are on the Library page vs on a separate tab
- Lyrics have been added at the bottom of the "now playing" page





Swift Playground



- Tim Cook feels strongly that programming should be taught to everyone in school.
- To facilitate this, Apple has created a new app called Swift Playground that will be available for free in the fall.
- Learning to code with Swift Playgrounds requires no previous coding knowledge and comes with a complete set of Apple designed lessons.
- You play your way through the basics in "Fundamentals of Swift" using code to guide a character through a 3D world. Then you can move on to more advanced concepts.

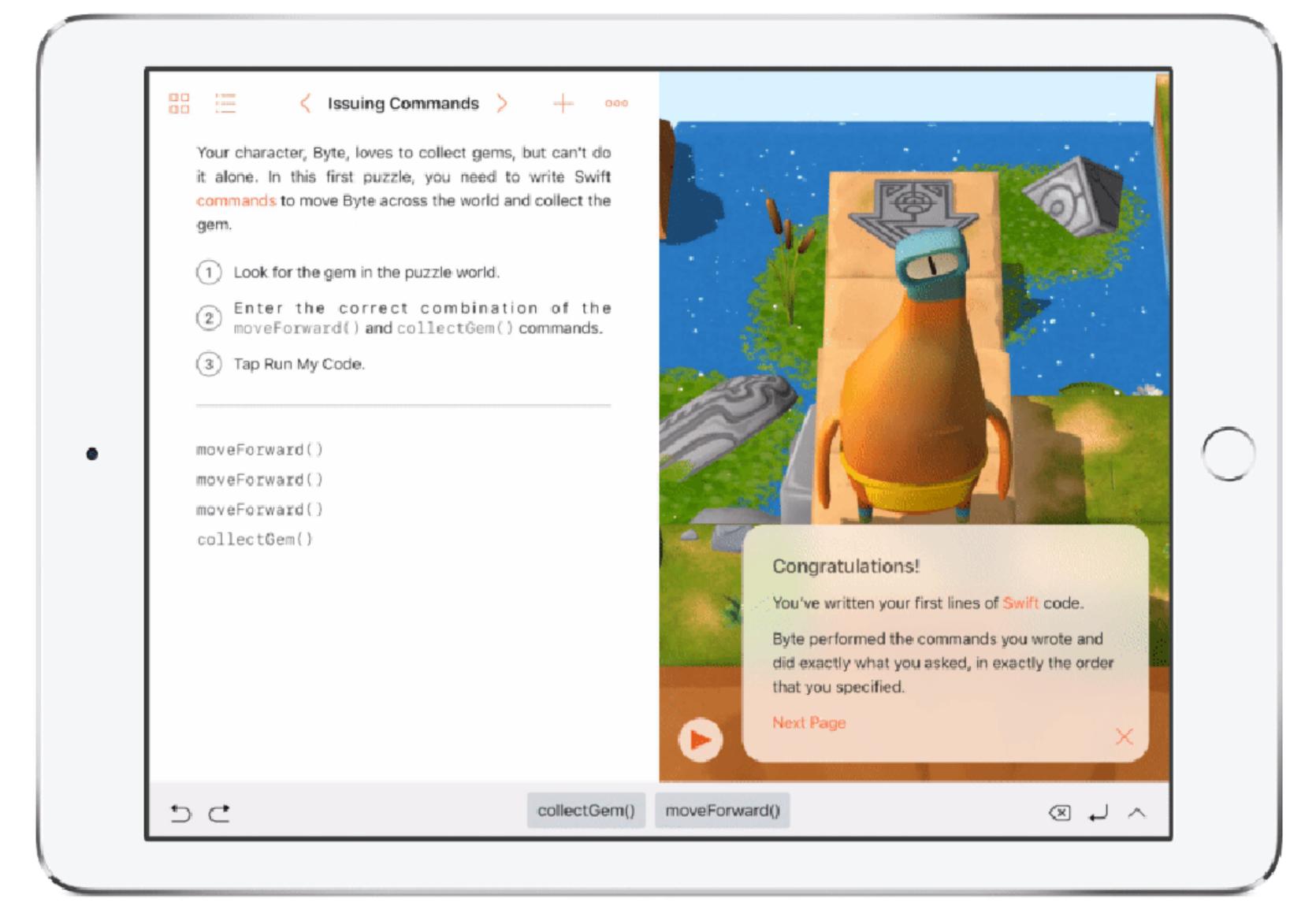
Swift Playground



- Swift Playgrounds also comes with templates that are pre-loaded with advanced code to help users integrate iPad technologies like accelerometer, gyroscope, and Multi-Touch into their programs.
- Students can add their own graphics and audio to these templates
- You can share your completed code over Mail, Messages, or AirDrop, and you can also post video to Youtube of their programs in action.
- It's been a while since I've done any coding, but I'm thinking I might take a crack at this

Swift Playground





MacOS Sierra



macOS 10.12



- OS X has been renamed macOS consistent with Apple's other operating systems (tvOS, iOS, watchOS). This version will be called macOS Sierra or macOS 10.12.
- Sierra will drop support for some older models. Models capable of running MacOS Sierra are:
 - MacBooks and iMacs made in late 2009 or later
 - MacBook Air, MacBook Pro, Mac Mini or Mac Pro, made in 2010 or later
- Two of my three Macs (2008 iMac and 2009 MBP) will not be able to run MacOS Sierra.



Universal Clipboard

- Copy images, video, and text from your iPhone, then paste to your nearby Mac — or vice versa. There are no extra steps.
 Just copy and paste as you normally do.
- For example, if you find a great recipe while browsing on your Mac, you can paste the ingredients right to a grocery list on your iPhone.

Universal Clipboard

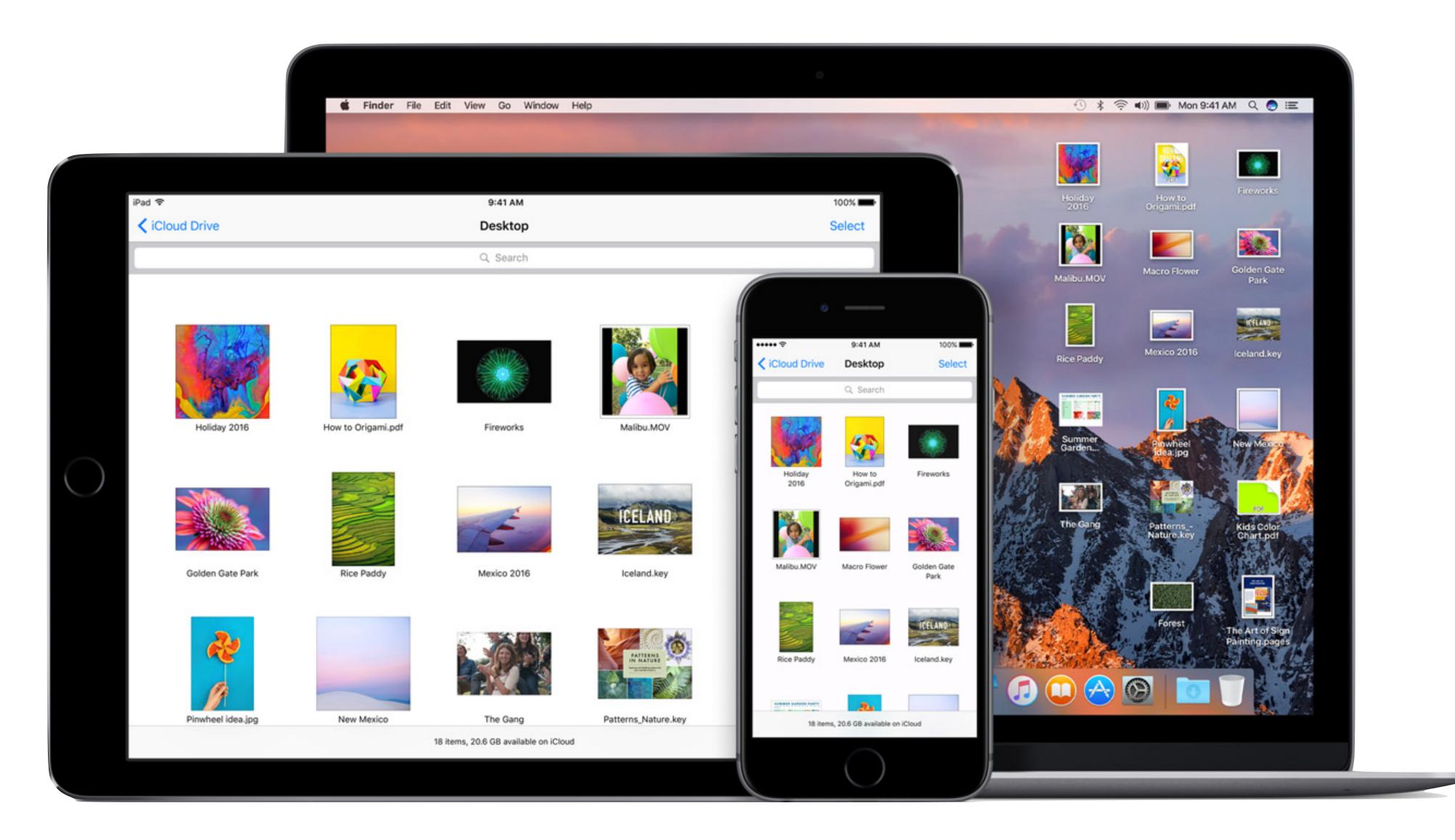




macOS Features

- Auto Unlock: If you have an Apple Watch, you can have your Mac unlock whenever you are in close vicinity to your Mac saving you from having to type your password.
- iCloud Drive:
 - Your Desktop and Documents folder, where most files are saved, can be automatically stored and updated in iCloud Drive.
 - You'll then be able to access these files from a second Mac or any iOS device.
 - Note: Watch to not exceed your iCloud storage limit

iCloud Drive

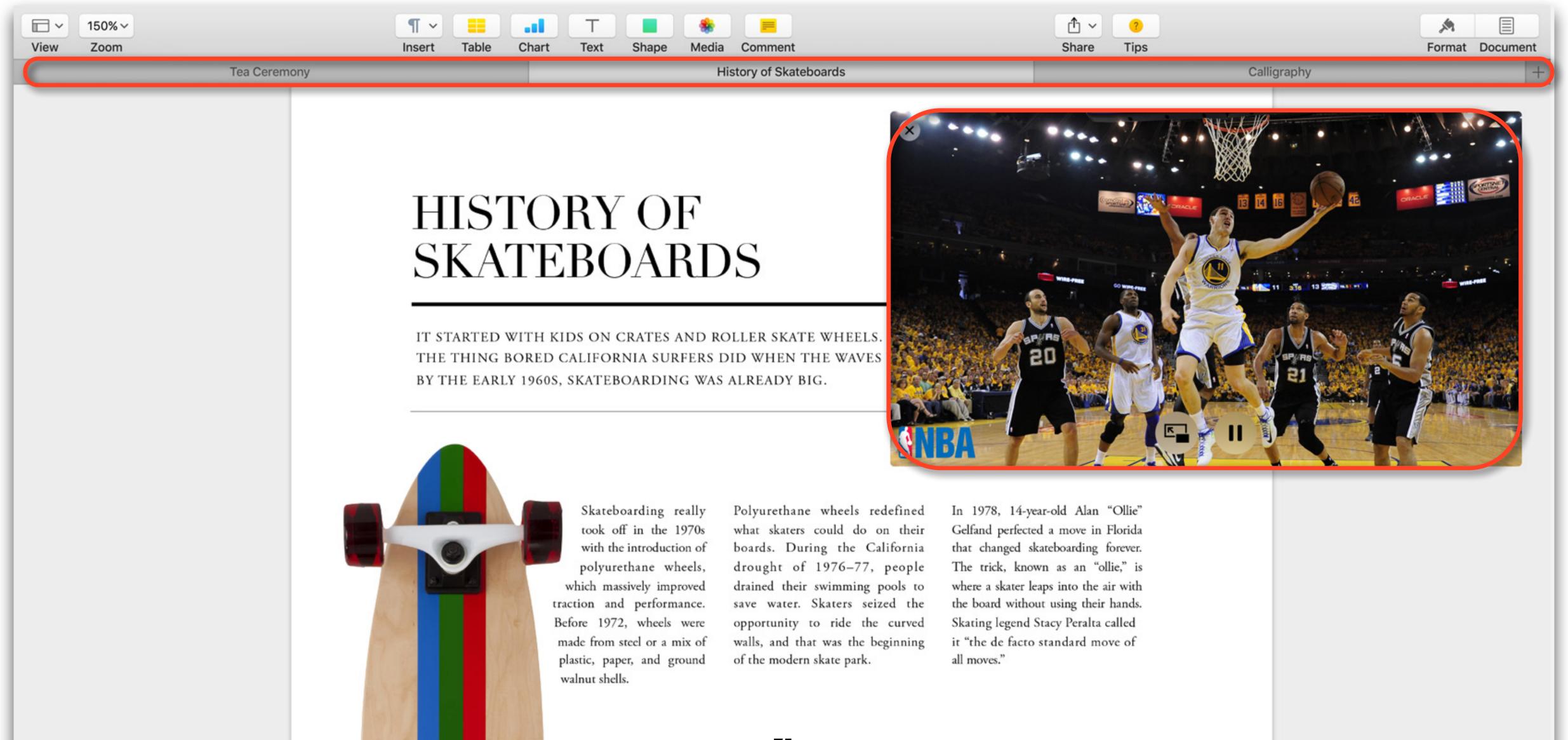




macOS

- macOS Sierra will feature a picture-in-picture mode, similar to the iPad. For example, you could watch HBO in a corner of your screen while reading your mail.
- All Apple applications in macOS Sierra will be multi-tab capable like Finder and Safari tabs.
- Third Party developers also now have the ability to add tabs to their applications when it makes sense.

macOS - MultiTabs and PIP





macOS - Messages

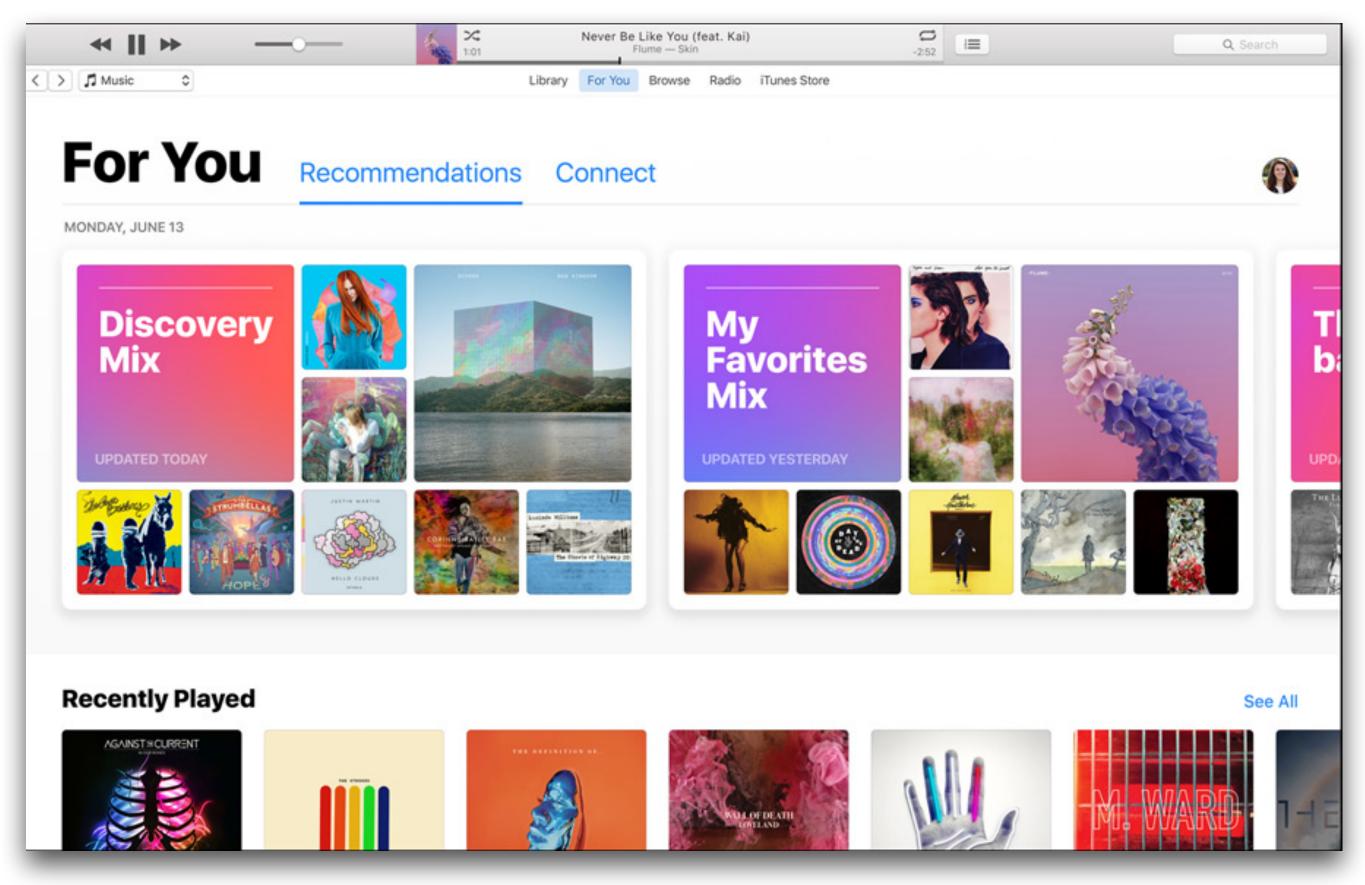
- There are several new features in Messages, similar to those found in iOS 10
 - Emojis 3 times bigger
 - Respond back with a heart or a thumbs-up on a friend's message bubble
 - Play videos and preview links right in the conversation



macOS - Apple Music



- Apple music inside of iTunes will reflect many of the changes in iOS
- The revamped For You makes it easier to discover new music and playlists
- A new Browse section lets you see what's available on Apple Music, from exclusives and new releases to playlists and top charts.
- And you can view lyrics while you listen in the refined MiniPlayer.





macOS- Photos

- Like iOS, Memories automatically creates slideshows and shareable collections of your best photos based on people, places, holidays, and more.
- Advanced computer vision technology can identify objects and scenes within your images so you can search your photos by what's in them.
- Find all your shots of your grandchildren, the beach, sunsets, or every image with a birthday cake.
- There will also be a people album and a places albums

macOS- Memories





macOS Apple Pay

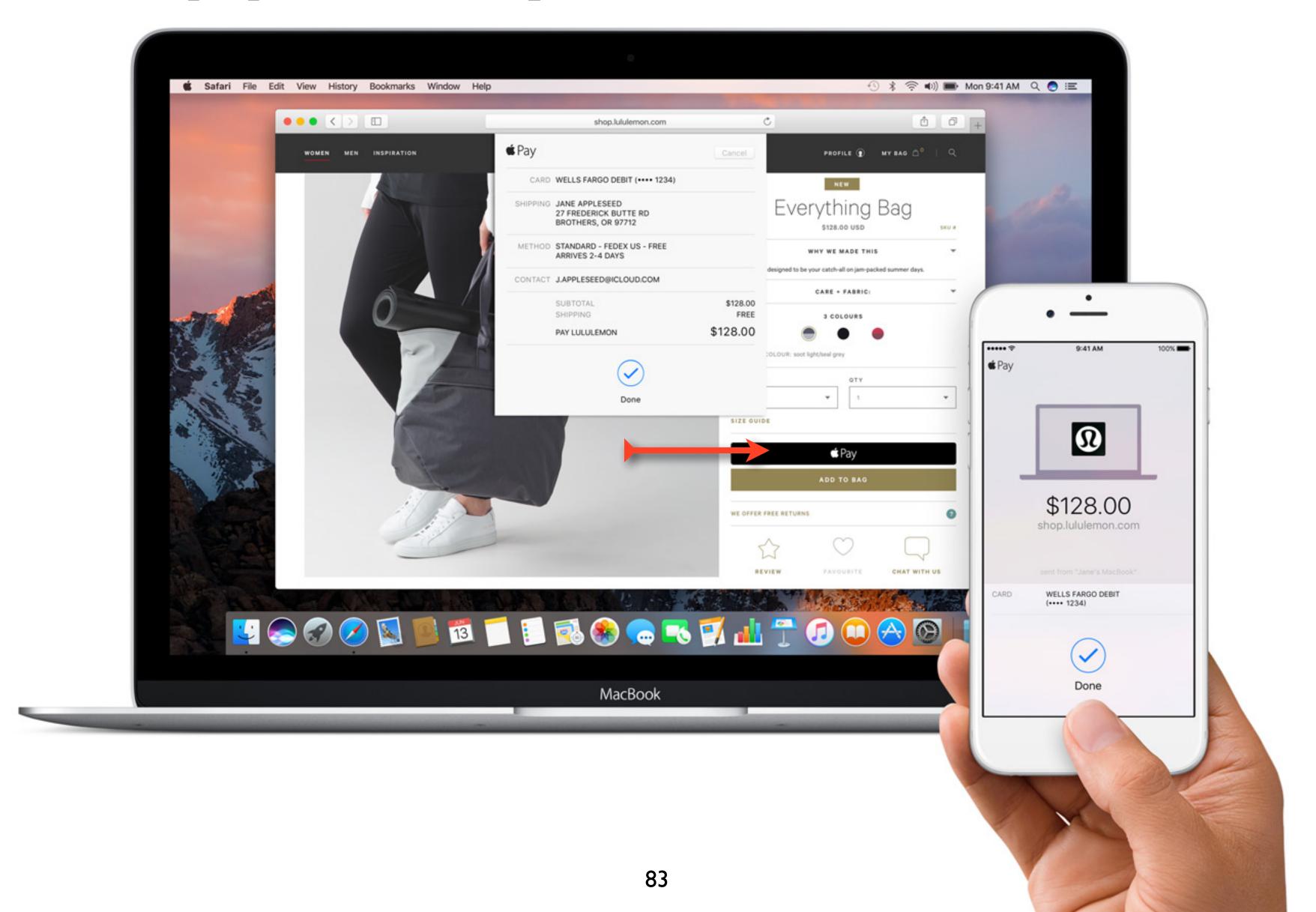
- Apple announced that it will be expanding its Apple Pay system to be able to make purchases online this fall
- Until now, you only had two options with Apple Pay:
 - You could pay for stuff in person using special terminals. Or...
 - You could pay using an app that supported Apple Pay (i.e. Best Buy, Crate and Barrel, etc...)
- Now however, you'll be able to pay using Safari on any site that supports Apple Pay. (20 of the top 100 online retailers have already signed up)



macOS Apple Pay

- Users will see an Apple Pay button during checkout and simply authorize the transaction via Continuity using Touch ID on their iPhone, iPad, or Apple Watch
- It will be available on any Mac running macOS Sierra
- This is a very secure method to pay online. Your credit card details are never shared when you use Apple Pay.
- Early adapters: Target, Best Buy, Crate and Barrel...
- This will compete directly with PayPal

Apple Pay on the Web





macOS - Siri



- Siri is coming to the Mac
- You can trigger it from the Dock, menu bar or activate it with a keyboard shortcut
- Siri will function similar to the way it does on iOS devices
- You'll be able to use Siri to open apps, and work with reminders, photos, Apple Music, FaceTime, restaurant reservations, movie times, sports scores...



macOS - Siri



- In addition, Siri will also integrate with the Finder
- You will be able to do searches according to criteria like when files were last opened or who sent them
- The system will also support contextual follow-up commands to further narrow down results
- For example: Ask Siri to search for the documents you opened this week, then refine your results to just the ones with the word "annual" in the title.



macOS - Siri



- People will also be able to export Siri content for the first time
- You can search the Web for an image or a Maps location, and that content can be dragged and dropped directly into another application like Pages or email.
- Siri results can additionally be pinned in the Notification Center. Here it will be updated automatically if there are any changes. (Think sports standings)
- You'll also be able to ask Mac-specific commands such as how much free storage space is left



macOS Optimized Storage



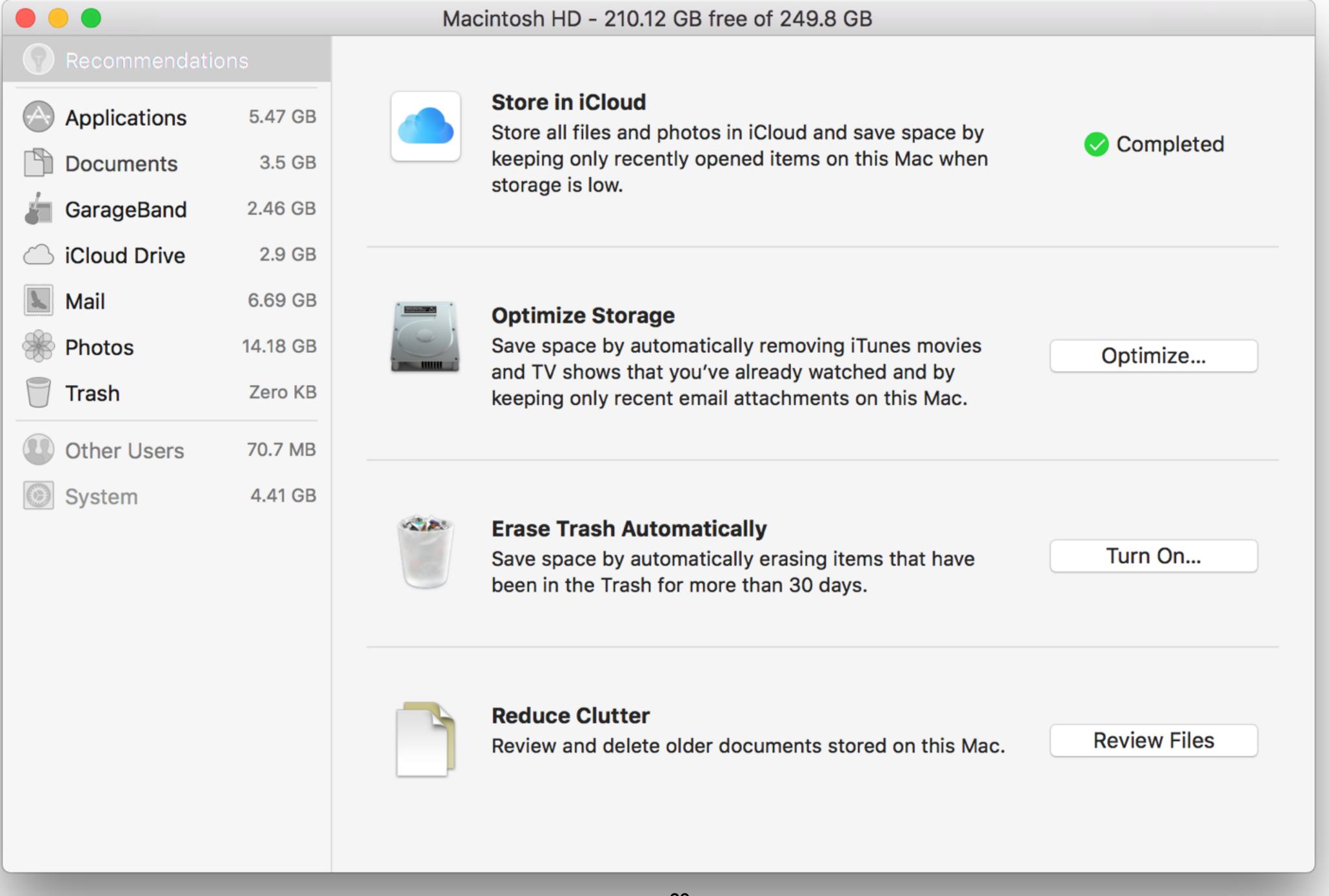
- Sierra will have some new tools to manage disk space
- These tools are collectively referred to as Optimized Storage
- If you need more space, you can store infrequently used documents, mail attachments, photos, and previously viewed iTunes movies in the cloud
- It leaves download icons in their place, so that you can retrieve them if you need them.



macOS Optimized Storage



- Remember: These files will count against your iCloud storage
- Optimized Storage will also remind you to delete used app installers
- It can clear out duplicate downloads, caches, logs, and other unnecessary stuff
- There's an option to delete items that have been in the Trash for 30 days that I think everyone should turn on





Apple File System



- Warning: Techie stuff ahead!!
- Apple announced that it will be moving from it's HFS+ file system to a new "Apple File System" or APFS
- A file system organizes the files on storage medium and provides an index so the computer can find the files when needed
- APFS will be used across the board on all Apple devices, from the Apple Watch all the way to the Mac Pro.



Apple File System



- APFS will be optimized for flash storage, and will include even tougher encryption
- It will use extremely fine-grained time stamps (down to the nanosecond) and supports 9 quintillion files on a single volume
- It also supports "snapshots": read-only instances of the file system which makes Time Machine-style backups easier.
- The new file system will be available for testing with Sierra, but won't be shipped until 2017.



macOS Security

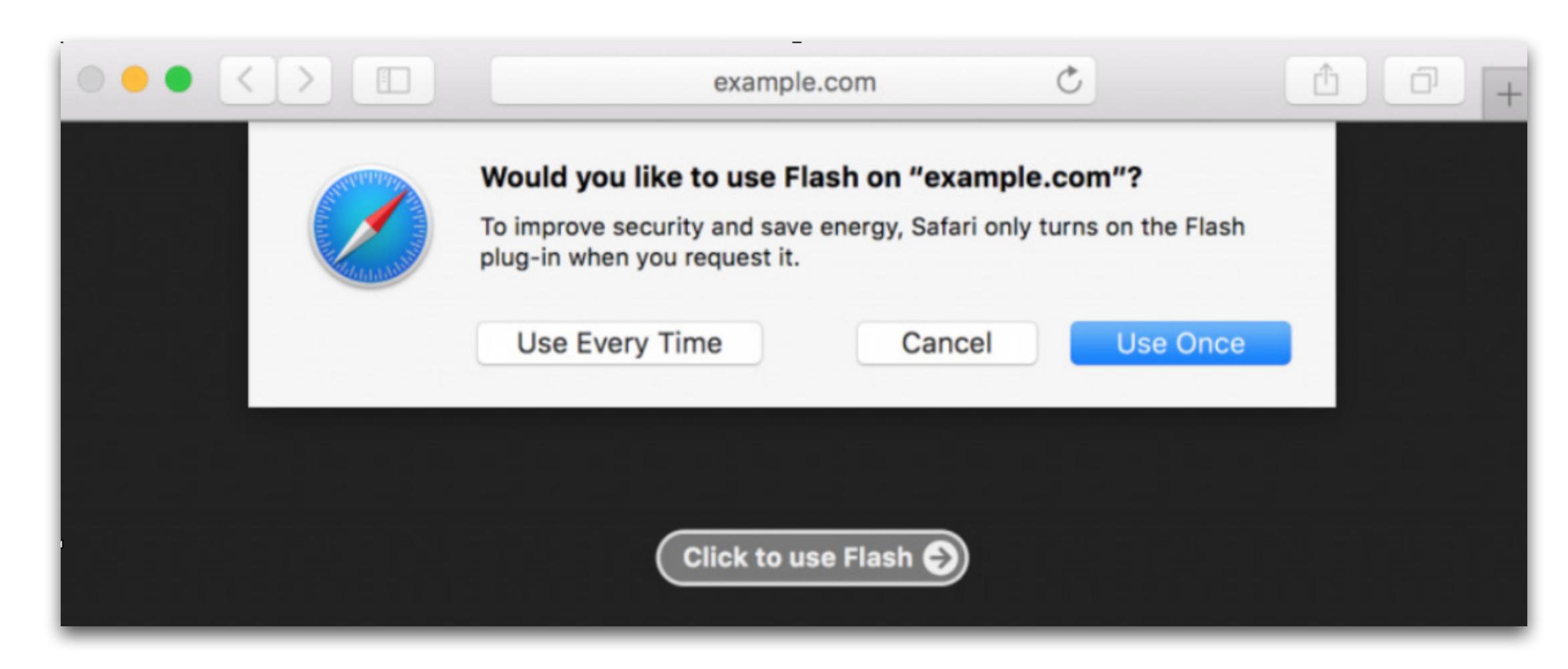


- macOS's Gatekeeper removes the option to run unsigned applications by default. This reduces the possibility of installing malware by mistake
- Starting in 2017, all iOS apps must communicate via HTTPS.
- Whenever available, Safari will opt for HTML5 content rather than plug-ins such as Flash, Java, Silverlight, or QuickTime.
- Flash won't run at all unless the user explicitly turns it on for a web site. Apple will provide options to use Flash every time on a specific web site or just once.



macOS







Any Questions?

Thank You!

