

Smartphone OSs

iOS Evolution

iOS Evolution

❖ iOS

- Steve Jobs introduced the iPhone on January 9, 2007
- The iPhone and iPad started a new era of smart devices, mobile apps, and mobile computing

iOS Evolution

❖ iOS 1

- Released in June 2007
- OS of the first iPhone
- Core iOS user interface
 - Capacitive touchscreen
 - Pinch-to-Zoom
 - Inertial Scrolling
- Mobile Safari web browser
- Visual Voicemail
- Google Maps



iOS Evolution

❖ iOS 1.1

- Released in September 2007
- iPod Touch compatibility
- iTunes Wi-Fi Music Store



iOS Evolution

❖ iOS 1.1.3

- Released in January 2008
- Web clips on home screen
- Icon rearrangement feature
- Multi-Touch keyboard
- Improved Location finding
 - Approximates position using data from mobile cellular BSs (Base Stations) and Wi-Fi APs (Access Points)



iOS Evolution

❖ iOS 2

- Released in July 2008
- App Store
 - Improved app browsing and installation
 - Revolution in mobile app distribution
- iOS SDK (Software Development Kit)
 - More functional apps
 - Improved appearance



iOS Evolution

❖ iOS 2

- Contact Search
- Microsoft Exchange support
- MobileMe



iOS Evolution

❖ iOS 2.1

- Released in September 2008
- Battery life and speed fixes
- iTunes Genius playlists
- Dropped call fixes

❖ iOS 2.2

- Released in November 2008
- Google street view
- Podcast downloads



iOS Evolution

❖ iOS 3

- Released in June 2009
- Cut, Copy, and Paste
 - New text-selection metaphor that works well with touch
- Push notifications for 3rd party apps
- Voice Control



iOS Evolution

❖ iOS 3

- MMS (Multimedia Message Service)
- USB & Bluetooth tethering
- Landscape keyboard
- Find my iPhone



iOS Evolution

❖ iOS 3.2

- Released in April 2010
- Support for iPad resolution
- New app views for iPad
- Location based on Apple data
- Bluetooth keyboard support
- iBooks



iOS Evolution

❖ iOS 4

- Released in June 2010
- Multitasking
 - Fast App Switching/Saved State
 - Allows apps to save current status for easy reuse when returning to an app after multitasking
- Retina Display support



iOS Evolution

❖ iOS 4

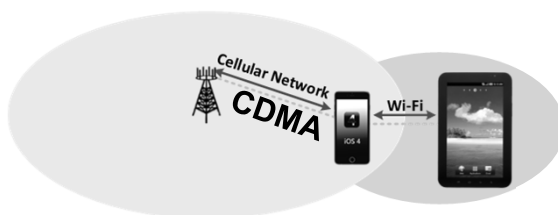
- FaceTime video chat using Wi-Fi
- Home Screen Folders
 - Drag and drop an app icon on top of another app icon on top of another app icon to form an app folder



iOS Evolution

❖ iOS 4.2.5

- Released in February 2011
- Personal hotspot using CDMA



iOS Evolution

❖ iOS 4.3

- Released in March 2011
- Personal hotspot using GSM



iOS Evolution

❖ iOS 5

- Released in October 2011
- iCloud
 - File backup
 - Multiple device sync
- Siri
 - Siri virtual assistant replaces Voice Control



iOS Evolution

❖ iOS 5

- iMessage
 - Free multimedia message exchanges
- No More PC Activation Requirement
 - iOS 5 devices do not need to be physically tethered to a computer via USB when activated



iOS Evolution

❖ iOS 6

- Released in September 2012
- Maps
 - Departure from Google Maps
- FaceTime over mobile cellular networks
- Improved Apple ID integration



iOS Evolution

❖ iOS 6

- Passbook
 - Mobile payment (tickets, coupons, boarding passes, etc.) and rewards cards
- Siri enhancements
 - Sports scores, schedules, player data
 - Restaurant reviews from Yelp
 - Reservations from OpenTable
 - Siri car control (future development)



iOS Evolution

❖ iOS 7

- Released in September 2013
- Touch ID
 - Fingerprint biometric sensor to unlock phone
 - Password-less purchases from the App Store
- AirDrop
 - Ad-hoc sharing of images, videos, and files



iOS Evolution

❖ iOS 7

- FaceTime Audio
 - Audio-only version of FaceTime between Apple users via Wi-Fi, 3G, or LTE



iOS Evolution

❖ iOS 8

- Released in September 2014
- Continuity
 - Works with Apple's new Mac OS X 10.10 Yosemite for enhanced interactivity between iPhone or iPad and Mac computer
 - Send and receive text messages from a Mac
 - Take phone calls from a Mac



iOS Evolution

❖ iOS 8

- Third party keyboard support
- HealthKit
 - Hub for third-party fitness trackers data
- HomeKit
 - Home automation (future development)
 - iPhone can serve as a remote control for the entire home



iOS Evolution

❖ iOS 9

- Released in September 2015
- 3D Touch (iPhone 6S, 6S Plus, 7, 7 Plus)
 - When pressing (or holding) the iPhone screen, it will trigger a pressure-sensitive capability that will open up menus and actions
- News, Spotlight Search
 - Provide information based on user's experience



iOS Evolution

❖ iOS 9

- Wallet
 - Replaces the Passbook app
 - Enhances the features of Apple Pay with support for Discover credit/debit cards, store reward programs (Walgreens and Kohl's Department Stores, etc.)
- Move to iOS
 - Data migration support from an Android device to an iOS device



iOS Evolution

❖ iOS 10

- Released in September 2016
- Allows hiding home screen icons of built-in apps
- Lock Screen features added
 - Swipe left to open Camera
 - Swipe right for Today view
 - Press home button to unlock device



iOS Evolution

❖ iOS 10

- Home
 - New Home app to securely manage and control HomeKit-enabled accessories



iOS Evolution

❖ iOS 11

- Released in September 2017
- Files
 - File manager for iOS devices include cloud storage
- Dock (for iPad)
 - App control center to quickly open and switch apps



iOS Evolution

❖ iOS 11

- Multitasking (for iPad)
 - Use two apps at the same time
 - Slide over / Split view mode
- Drag and Drop (for iPad)
 - Move text, photos and files from one app to another using Drag and Drop gestures



iOS Evolution

❖ iOS 11

- Apple Pencil functions
 - Instant Markup
 - Instant Notes
 - Inline Drawing
 - Scan and Sign
- ARKit (Augmented Reality Kit)
 - Augmented Reality Platform for iOS devices
- Control Center customizing



Smartphone OSs

References

References

- Apple, <http://apple.com>
- The Verge, iOS : A visual history, <http://www.theverge.com/2011/12/13/2612736/ios-history-iphone-ipad> [Accessed June 1, 2015]
- Wikipedia, <http://www.wikipedia.org>