Smartphone OSs

Android vs. iOS

Android vs. iOS

	Android	iOS
Developer	Google	Apple
OS family	Linux	OS X, UNIX
Customizability	High	Low
Initial release	Sept. 23, 2008	July 29, 2007
Programming Language	C, C++, Java	C, C++, Objective-C, Swift

Android vs. iOS

	Android	iOS
Source model	Open Source	Closed but has Open Source components
Internet Browser	Chrome	Safari
Voice Commands	Google Now	Siri
App Store	Google Play & other app stores (e.g., Amazon)	Apple App Store

Android vs. iOS

	Android	iOS
Latest Release	Android 8.0 (Oreo) August 2017	iOS 11 September 2017
Device Manufacturer	Google, LG, Samsung, HTC, Sony, ASUS, Motorola, etc.	Apple
Website	android.com	apple.com

Android vs. iOS

❖ **Apps Available on iOS vs. Android**

- Most popular apps are available on both Android & iOS

- Google's app store is more open and tends to include some apps that are not available in iOS

Android vs. iOS

❖ **Apps Available on iOS vs. Android**

- iPad has an advantage in tablets, as many apps are designed specifically for iPads
- Many Android tablet apps are scaled up versions of apps that were made for Android smartphones
- Developers at smaller companies may first develop their app for an iPhone or iPad and then conduct development in Android

Android vs. iOS

❖ **Building & Publishing Apps**

- Android
  - Android apps are programmed in C, C++, and Java
  - Free download of Android source code and Android SDK
  - One-time $25 registration fee for app developers that need to publish an app

Android vs. iOS

❖ **Building & Publishing Apps**

- iOS
  - iOS apps are programmed using Objective-C and Swift
  - Developers need to annually pay $99 for access to the iOS SDK and publish in Apple's App store
  - iOS SDK is only available for the Mac platform

Android vs. iOS

❖ **Android Pros & Cons**

- Variety in Hardware selection
  - Various Android devices are available
  - Various hardware capabilities, screen sizes and features
  - Various prices

- Customizable User Interface
  - Easy to customize Home screen
    - Adjustable app icons and widgets

Android vs. iOS

❖ **iOS Pros & Cons**

- Massive App Ecosystem
  - Very Large Apple App store
  - App quality check

- Locked Down Interface
  - No third-party apps can be pre-installed by the mobile operator
  - Limited home screen customization options
    - Rows of app icons

Android vs. iOS

❖ **iOS Pros & Cons**

- Software Upgrades
  - Very good software upgrade system
  - Good upgrade notifications and reminders
  - Device capability considered in upgrades

- Privacy Control
  - iOS provides good control of user private information (e.g., contacts and location)

Smartphone OSs

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