





MOBILE DEVICES







- Mobile Devices
- Mobile Operating System Features
- Mobile Operating Systems
 - Android
 - iOS
- Mobile Network Operators
- Establish Connectivity
- Secure Mobile Devices
- Comparison to Laptops
- Mobile Device Sync



- Portable computing devices enabling near instant wireless communication
- Smart-phone Higher end phones offering media players, video and picture cameras, GPS, touch screens, high speed data, web browsers, and phone service
- Tablet PC Similar to smart-phones with a larger screen. May have some features of a desktop OS
- Carputers Computing devices designed to be used in cars
- PDA Personal Digital Assistant manage personal information (i.e. address books, calendars, and email)

Mobile Operating System Features



- Touch screen
- Accelerometer/gyroscope
 - Used to automatically adjust screen orientation (portrait to landscape)
 - Control and user input (games)
- GPS and Geotracking
 - For mapping applications
 - To make apps location aware to facilitate finding and using products and services



Android

- Created by Android Inc
- Bought by Google Inc in 2005
- Free and open source software
 - Source code can be downloaded, modified, and redistributed





Android

- Multiple hardware manufactures: Samsung, HTC, LG, Motorola, ZTE, many more
- Linux based
- Most widely used mobile OS
- App store Google Play





iOS

- OS that runs iPhone, iPad, iPod Touch, Apple TV
- Created by Apple, Inc in 2007
- Apple does not license iOS
- Apple is the only company offering iOS and iOS devices
- iOS is based on OS X (which is based on Free/Net BSD)
- Closed source
- Strong ties to OS X software and iTunes
- App store Apple App Store



Mobile Network Operators



- Major
- Verizon Wireless
- T-Mobile
- AT&T
- Sprint



- Cellular Data Network
- Bluetooth
 - Pairing
 - PIN codes
- Email
 - IMAP
 - POP3
 - Exchange
 - Gmail

Secure Mobile Devices



- Passcode Lock
- Remote Wipe
- Location apps
- Remote backup
- Failed login attempt restriction
- Antivirus
- OS Updates/Patching

Comparison to Laptops



- Not field serviceable
- Generally not upgradeable
- Touch interface
- · SSD



- Synced data
 - Contacts
 - Apps
 - Email
 - Pictures
 - Music
 - Videos
- IOS iTunes for sync
- Android via Google Account sync, Internet



THANK YOU