

CPET 565/CPET 499
Mobile Computing Systems
Lecture 3
Mobile Devices & Technologies

Fall 2012

A Specialty Course for Purdue University's M.S. in Technology
Graduate Program

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**Mobile Computing Device
Technologies**

- Mobile Devices – Hardware
- Mobile Service providers
- Application Categories
- Mobile Peripheral Devices
- Operating Systems
- Development Tools

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Mobile Device Hardware

- SmartPhones
- Tablets, iPad
- Rugged Laptop for Enterprise Solutions
- Wireless Smart Sensors

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Mobile Device Hardware

- Hardware Features
 - Camera
 - Speakphone
 - GPS
 - Communications
 - Cellular Connectivity
 - Bluetooth
 - Near Field Communications (NFC) Enabled Cell Phone,
 - A definitive List of NFC Phones,
<http://www.nfcworld.com/nfc-phones-list/>
 - HTC Desired C
 - Nexus S, Galaxy Nexus, Nokia N9
 - Acer E320 Liquid Express
 - BlackBerry Bold 9790/9900/9930/ ...
 - More
 - Wi-Fi

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Operating Systems for Mobile Device

- iOS
- Android
- Microsoft Mobile 7, 7.5, 8?
- RIM

Mobile Device Hardware – Smartphones (cont.)

- Smartphone Manufacturer Share by Operating System (July 12, 2012), Nielsenwire, http://blog.nielsen.com/nielsenwire/online_mobile/two-thirds-of-new-mobile-buyers-now-opting-for-smartphones/
 - Apple iOS 34.3%
 - Android (51.8%)
 - Samsung 17%
 - HTC 14%
 - Motorola 11%
 - RIM Blackberry 8.1%
 - Other 5.9%

Mobile Device Hardware – Smartphones (cont.)

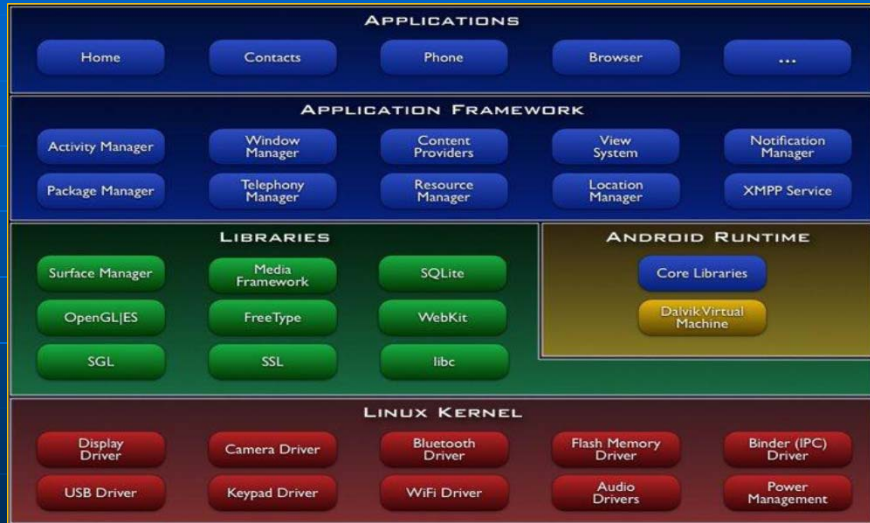
- Mobile/Tablet Operating System Market Share, (August 2012), NetMarketShare, <http://www.netmarketshare.com/operating-system-market-share.aspx>
 - Apple iOS 65.94%
 - Android 20.93%
 - Others

Development Tools for Mobile Computing Devices

- Android Smartphone
 - Android SDK
 - Eclipse IDE
 - Java SE
- Apple
 - iOS
 - Objective C
- Windows Mobile
 - 7, 7.5, 8

Android Architecture, Source

http://elinux.org/Android_Architecture



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