Mobile Application Programming: Android

Introduction
My Interests

- Computer Graphics
- CTO Pixio Software
- Wrote MobileFinder for the iOS 1.4 jailbroken SDK
- Lived in Brazil and speak Brazilian Portuguese
- Send balloons to 100,000 feet and take pictures
- Read US revolutionary biographies, fantasy, and sci-fi
- Current obsessions: NASA, Space, Warhammer 40k
Course Website

http://www.eng.utah.edu/~cs4962
Cheating Policy

Cheating in the context of this course is generally, but not limited to, sharing and copying of code from other students or the Internet. Any code making up your solution should be written and understood by you. Small quantities of template code will at times be provided by the instructor. You can use this code in submissions but should still be able to fully explain the function of all template code you use. Refer to but do not copy code from the examples given in class.
C++/Java/WRT

HTML5/JavaScript/CSS

Objective-C

Java

Java

.NET (C#)
Why Android?

- **Number of new Android-compatible devices** dwarfs other platforms in the smartphone market.
- Companies looking to build mobile applications typically focus on **iOS and Android first**, and other platforms later.
- Android’s use of **Java** allows for development using modern OOP in a managed memory environment.
- The Android NDK allows use of **C/C++ codebases**.
Why Not Android?

- Small percentage of Android device owners actually purchase software from the various markets.
- Fragmentation in the hardware and software makes development for many devices more difficult than iOS.
- Companies overwhelmingly prefer to target iOS platforms before they target Android.
- Hardware running Android arguably inferior to that of other companies, mostly due to price of units.
Environment: Android Studio
Activities

- Apps are composed of activities
- Activities are self-contained tasks made up of one screen-full of information
- Activities start one another and are destroyed commonly
- Apps can use activities belonging to another app
- Much more to come...