ATLS 4120/5120: Mobile Application Development
Day 1: Course Overview and Introductions

Class Introductions

Introduce the class http://creative.colorado.edu/~apierce/MAD/
- Two semester course sequence

Go over Syllabus
- Undergrad vs. grad
ATLAS building access

Mobile platform overview
- What do you think of when you hear "mobile"?
- 2.8 million apps in the Google Play store, and 2.2 million in Apple's app store
- Apple https://developer.apple.com/develop/
  - o iOS is Apple's operating system that runs on the iPhone, iPad, and iPod touch
  - o Xcode (app store download)
    https://itunes.apple.com/us/app/xcode/id497799835?ls=1&mt=12
    - Integrated Development Environment (IDE) to create and manage development projects
    - Interface Builder
      - o Tool to build your application user interfaces
    - Frameworks
      - Software libraries that provide specific functionality
    - Simulator
      - Simulates running your apps on your Mac
    - Instruments
      - Gather and analyze data on your apps behavior
  - o Requirements
    - Runs on a mac and only a mac
    - Sierra OSX 10.12 or later
    - Xcode and the SDK is installed on all the ATLAS computers and in Norlin
  - o Swift released in 2014 https://developer.apple.com/swift
    - Objective-C
  - o Developer programs https://developer.apple.com/programs
    - Free program
      - Unlimited apps in the simulator
      - Limited apps installed on a device at one time
      - Can't submit it to the app store
      - No access to some advanced capabilities
    - University Program (CU is a member)
      - Unlimited apps installed on a device
      - Can't submit it to the app store
      - No access to some advanced capabilities
    - $99/yr Standard Developer Program https://developer.apple.com/programs/whats-included/
      - Allows you to distribute your apps in the Apple App Store

- Access to advanced capabilities
  - You can use your existing Apple ID and join the developer program
- Google https://developer.android.com/index.html
  - Android runs on Google and third party phones such as Samsung, HTC, LG
    - Android Studio
    - Google's Software Developer's Kit is included
    - Java or Kotlin
- Native vs Hybrid development

Class list
- Why are you taking this class? What do you want to accomplish in this class?
- What is one thing you'd like to tell me about yourself?

Thomas Suarez TED talk 4:41 (iTunes podcast)

For Thursday
- Install Xcode on your Mac if you have one. After installing it, start Xcode as it will then install more components.
- Purchase/download the iOS book if you haven't already and read the first two chapters
- Download Swift 3 for Absolute Beginners
- Play with an iOS device if you're not familiar with one (you can check one out)