**Topic: Your first iOS App**

Condensed version of Day 1

* Introduce myself
  + Why I like to program
  + Job history
* Student’s introduce themselves
  + What programming languages do they know? How many know C#?
  + Have any done mobile app dev before? (Android, App inventor, Unity, etc.)
  + What degree and/or certificate are they pursing?
* Why do mobile development?
  + Mobile apps deliver a personal, immediate experience to users
  + Mobile app developers are in demand.
* Differences between desktop and mobile development
  + Low power devices require apps that use less memory, processor power and battery.
  + Multiple screen sizes, densities and form factors + screen rotation require flexible UI designs
  + Pre iOS 9: Lack of true multi-tasking requires different app life-cycle management
  + A wide variety of sensors can be used by the app.
  + Connectivity to the Internet is not always assured- apps need to handle intermittent connectivity.
  + Users have higher expectations for responsiveness of the UI.
* Development environments
  + iOS: Swift or Objective C using X-Code
  + Android: Java using Android Studio (intelliJ)
  + Cross-platform using HTML5 & JavaScript: Apache Cordova or ReactJS
  + Cross-platform native code: Xamarin. All code except the UI is portable across Windows, Linux, Mac, iOS, Android, Windows Phone, and Windows RT.
* Review Syllabus
* Discuss weekly cycle of assignments and code reviews
* iOS app architecture
  + MVC
    - Model: A class or set of complex classes that just hold data
    - View: Just presents the information (like a web page)
    - Controller: Responds to user input and does processing
* Development Environment for Xamarin iOS
  + Xamarin Studio or Visual Studio
    - Based on MonoDevelop (Windows, Linux, OS-X)
    - Uses Mono framework, Open-source port of .NET
      * Mono and .NET core are currently separate, but hopefully will be mreged
    - XCode and iOS SDK required
      * Who doesn’t have a Mac? Talk about MacInCloud
  + Testing
    - Simulator
    - Actual device

“Real” Day 2 Topics

Look at the lab assignment

Talk about licensing

* University license lets you:
  + Run apps on a simulator or device
  + Share apps with others in the class
* Developer license lets you:
  + Deploy beta apps via ITunes and TestFlight
  + Put apps in the app store
* Apple Developer web site: <https://developer.apple.com>