**Topic: Handling UI Events**   
(Previous topic: Into to Mobile Development)

Intro

* Look at due dates on Moodle
  + Lab 1 Beta due today, ask how everyone is doing
  + Quiz 2 closes tomorrow, covers
    - Chapter 3,Pages 51 - 56 and 83 – 86,
    - [Auto Layout with the Xamarin Designer for iOS](http://developer.xamarin.com/guides/ios/user_interface/designer/designer_auto_layout/)

Events

* Review
  + Look at event handlers in PhoneWord, ViewController.cs, ViewDidLoad
  + Look at the Button Fun example
* FirstResponder, responder chain – events bubble up the hierarchy to the screen.

UI Constraints

* Adaptive layout, or Auto Layout
  + Aka responsive design
  + This is adaptive layout “lite” using just auto layout constraints – no size classes (Maskrey Ch. 5)
  + Relative control placement using
  + Adapts to different screen sizes and orientations
* Auto Layout constraints
  + Auto Layout mode enabled by default in Xamarin Studio (setting of the storyboard)
  + Toolbar at top of storyboard has constraint controls
    - Add constraints- adds default constraints
    - Remove constraints- removes them all
    - Update frames based on constraints. This fixes the problem of the rendering in the storyboard not being in sync with new constraints
  + Mathematical relationship between UI elements
    - Look at some constraints
  + Pin Spacing controls
    - T shaped handles on the UI elements
* 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
    - xCode and iOS SDK required
  + Testing
    - Simulator
    - Actual device
* Build Hello iOS (Phone Word) and run it on the simulator (we’ll use iPads later)