# Frameworks / ViewControllers

CS112 Unit 7 Max Luttrell, Fall 2016

## frameworks

- until now, we have created playgrounds with our own code (and used "print" function to get info)
- to write apps, we will use frameworks which other people have written to do the heavy lifting

Foundation

**UIKit** 

MapKit

SpriteKit

## UIKit

- UlKit is the framework to control the user interface (UI)
   of our app
  - construct and manage UI
  - respond to user interactions
  - access device resources

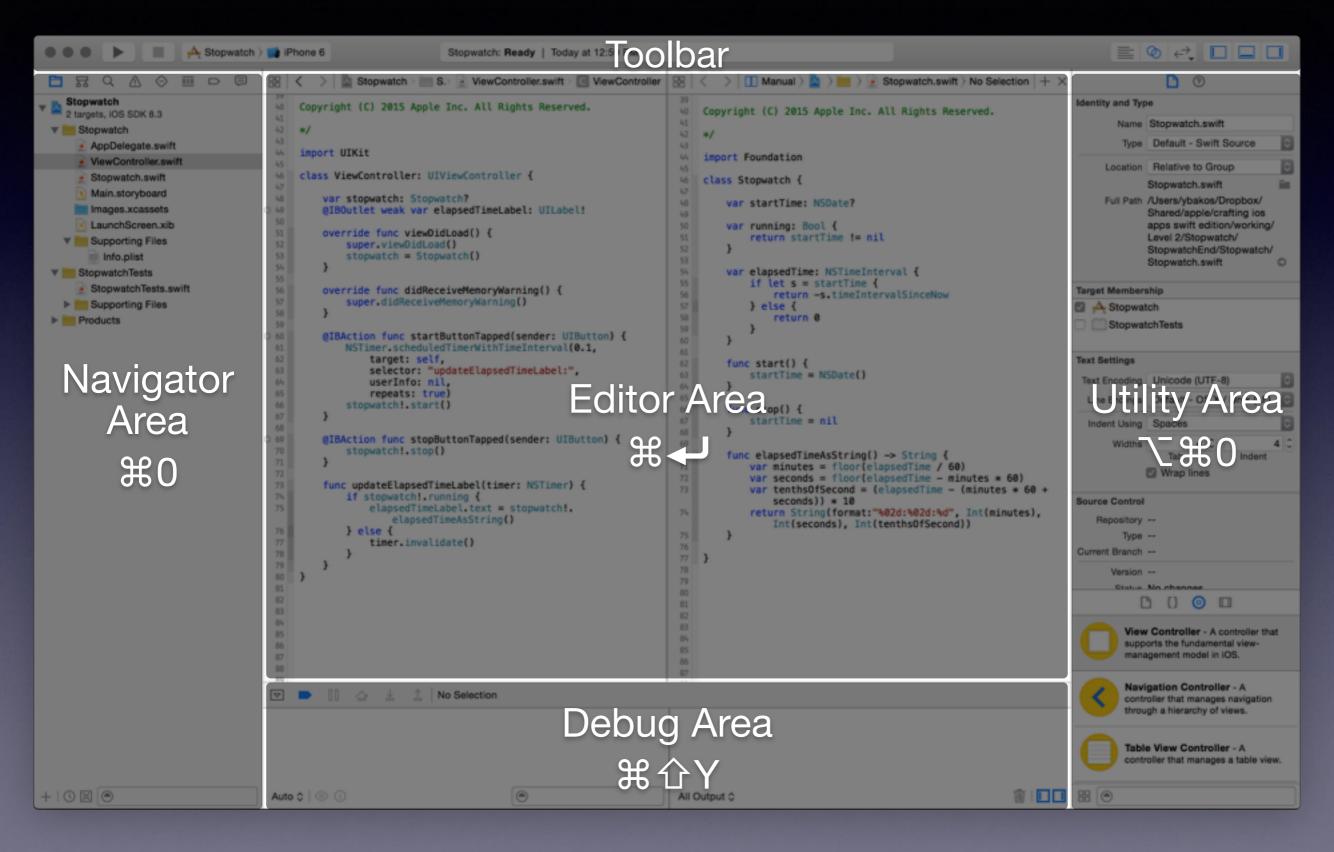
#### UIViewController

- UIViewController is a class to control the user interface (UI) of our app
  - manages views displayed to user
  - responds to user interactions to load and dispose views as necessary
- we can derive our own custom subclass of UIViewController

## interface builder

- interface builder is a tool included in Xcode to design a complete UI
  - create and connect multiple views
  - use buttons, text fields, windows, and others
  - connect with our code

## Xcode III Basics



## demo - build first app

## Exercise 7

- during class, we overrode the viewDidLoad()
  method in ViewController in our first app. if you
  haven't already, finish this
- override the viewDidAppear() method and add a print statement saying that viewDidAppear was called. notice which message gets printed out first
- add a property numTimes to the ViewController class and initialize it to zero
- in both viewDidLoad() and viewDidAppear(),
   increment numTimes and print it out to debug area