

# Mobile Apps Development for Journalists

Week 5, Tuesday - Fall 2016  
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# Agenda

- Outlets
- Actions
- Tab Bar Controllers

# Outlets

- Connections between Storyboard and Code
- Variables in Swift View Controller classes
- Properties can be changed
- Easiest to add in Assistant View

# Assistant View

The screenshot displays the Xcode Assistant View for an iPhone 6s Plus project. The interface is divided into several panels:

- Left Panel (Project Navigator):** Shows the project structure with folders like 'OutletsAndActions', 'Assets.xcassets', and 'Main.storyboard'.
- Top Panel (Scene Editor):** Displays the 'Main View Controller Scene' with a 'View' element selected.
- Center Panel (Code Editor):** Shows the Swift code for 'MainViewController.swift'. The code includes comments, an import statement for 'UIKit', and three overridden methods: 'viewDidLoad()', 'didReceiveMemoryWarning()', and 'prepareForSegue()'.

```
1 //
2 // MainViewController.swift
3 // OutletsAndActions
4 //
5 // Created by Jeffrey Linwood on 9/20/16.
6 // Copyright © 2016 Jeff Linwood. All rights reserved.
7 //
8
9 import UIKit
10
11 class MainViewController: UIViewController {
12
13     override func viewDidLoad() {
14         super.viewDidLoad()
15
16         // Do any additional setup after loading the
17         // view.
18     }
19
20     override func didReceiveMemoryWarning() {
21         super.didReceiveMemoryWarning()
22         // Dispose of any resources that can be
23         // recreated.
24     }
25
26     /*
27     // MARK: - Navigation
28
29     // In a storyboard-based application, you will
30     // often want to do a little preparation before
31     // navigation
32     override func prepareForSegue(segue:
33     UIStoryboardSegue, sender: AnyObject?) {
34         // Get the new view controller using
35         segue.destinationViewController.
36         // Pass the selected object to the new view
37         controller.
38     }
39     */
40 }
```
- Right Panel (Property Inspector):** Shows the 'Custom Class' section with 'MainViewController' selected. Below it, the 'Document' section shows a 'Label' with 'Xcode Specific Label' and an 'Object ID' of 'BYZ-38-t0r'. At the bottom, there are three informational cards: 'View Controller', 'Storyboard Reference', and 'Navigation Controller'.

# Creating an Outlet

- Drag an image view, button, label, or other element onto the storyboard
- Hold the control button down and click and drag between the new item and the view controller
- Release and name the outlet
- Practice!

# Actions

- Swift functions that run when something happens - a user taps a button, a switch is changed
- Similar to outlets, but creates a function, not a variable
- Be sure to change Outlet to Action in Pop Up
- Use Assistant View

# Tab Bar Controller

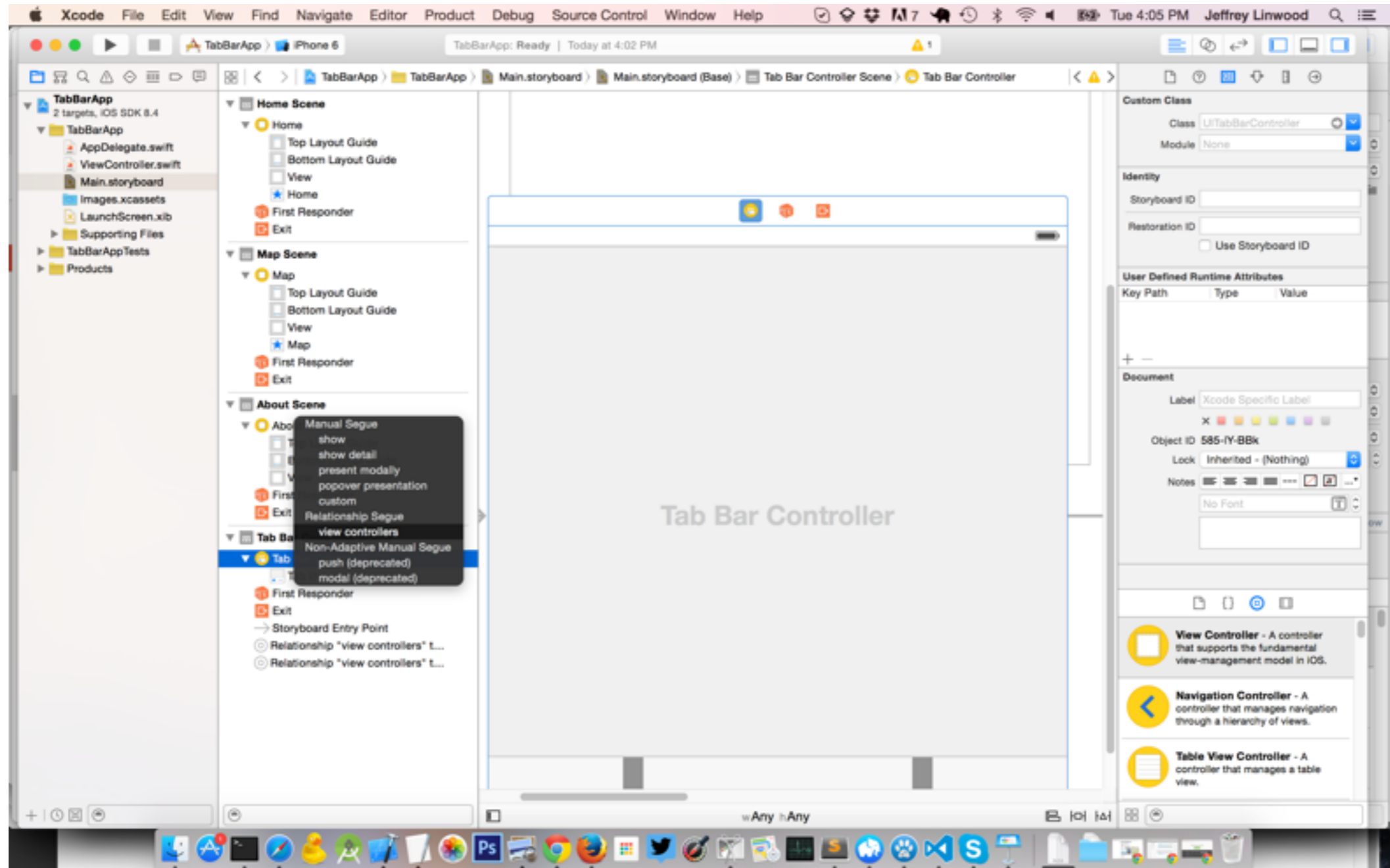
- Icon + Text
- Always at bottom of screen
- Could be customized
- Different areas of the app

# Tab Bar Controller Setup

- First View Controller
  - Embed in Tab Bar Controller
- Other View Controllers:
  - After they are set up on storyboard, Control-Click on Tab Bar Controller in Outline and Drag to View Controller in Outline
  - Choose "view controllers" under "Relationship Segue" to show that the view controller belongs to the tab bar controller
- Edit the Item for each to change the title or images



# Tab Bar Segue



# In-Class Tab Bar Controller Exercise

- Create a new XCode Project
- Create a new view controller - Home
- Embed Home in a Tab Bar Controller
- Create new view Controllers for Map and About
- Create Segues for each of these
- Set up the titles on the Tab Bar Items