

Sunny Wear

Tampa Hackerspace 2018

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# Build Your First iPhone App! Part 1



# Xcode Intro

- Make sure you are running Xcode 8.x
- If you have something older or newer, downgrade to 8.x
- Syntax differs from demo provided



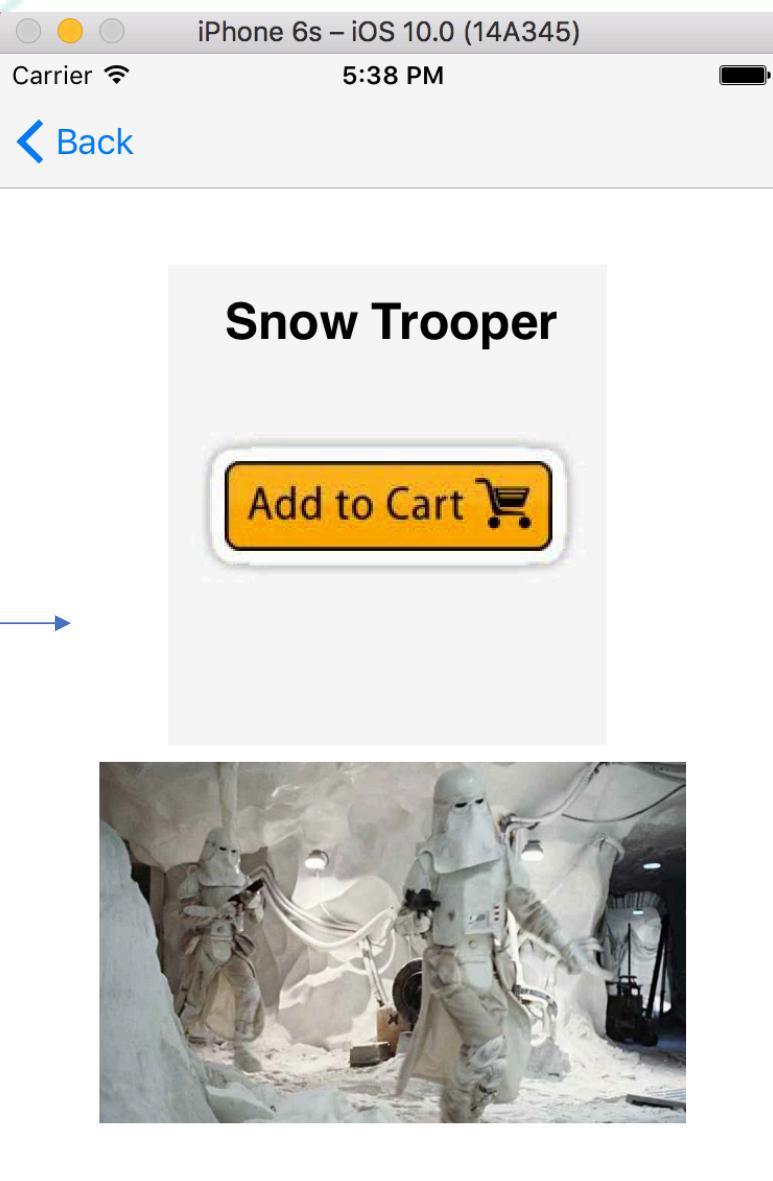
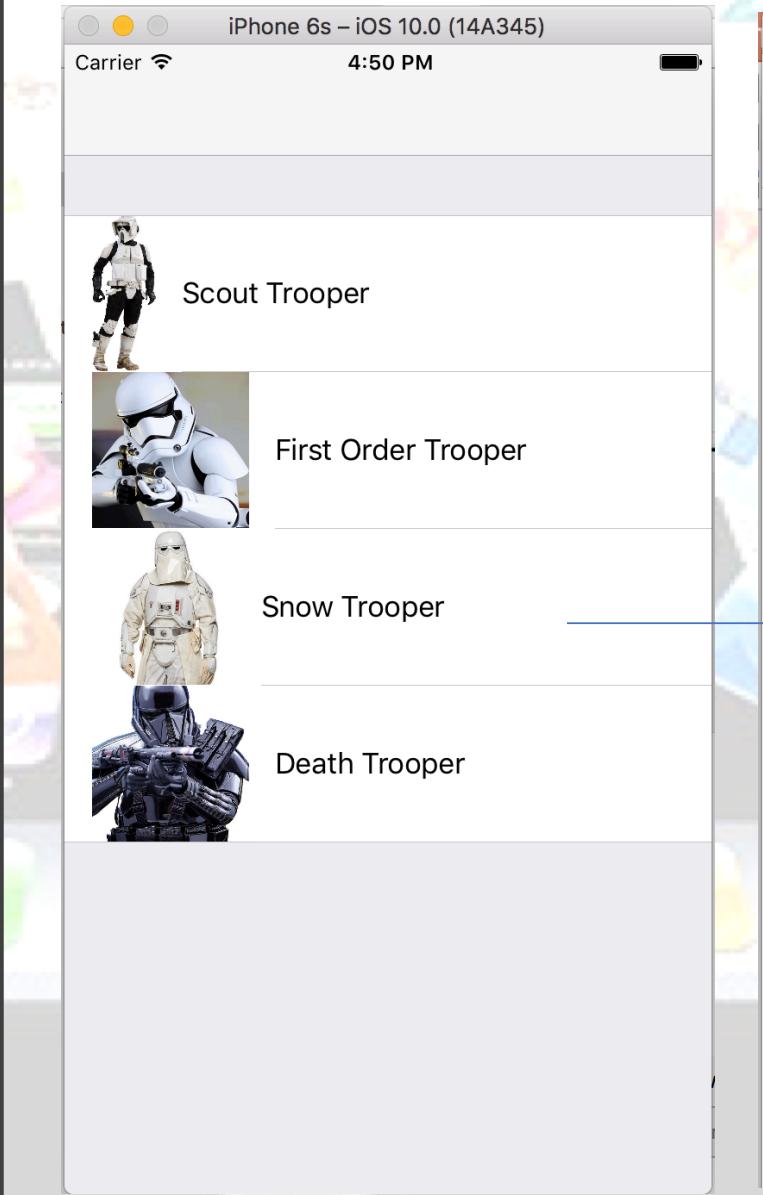
SWIFT

# Programming Background

What is Swift?

# Demo of final app

You are creating a Stormtrooper app for iPhone 6s



# Xcode Intro (2)

1. Create your first Xcode project
  - We will step through this together
2. Storyboard defaults within Xcode
3. Xcode Panels

# Storyboards

## 1. Storyboards and Subviews

- Each storyboard contains its own ViewController and the VC manages the main view; subviews go inside the main view

## 2. More Xcode panels

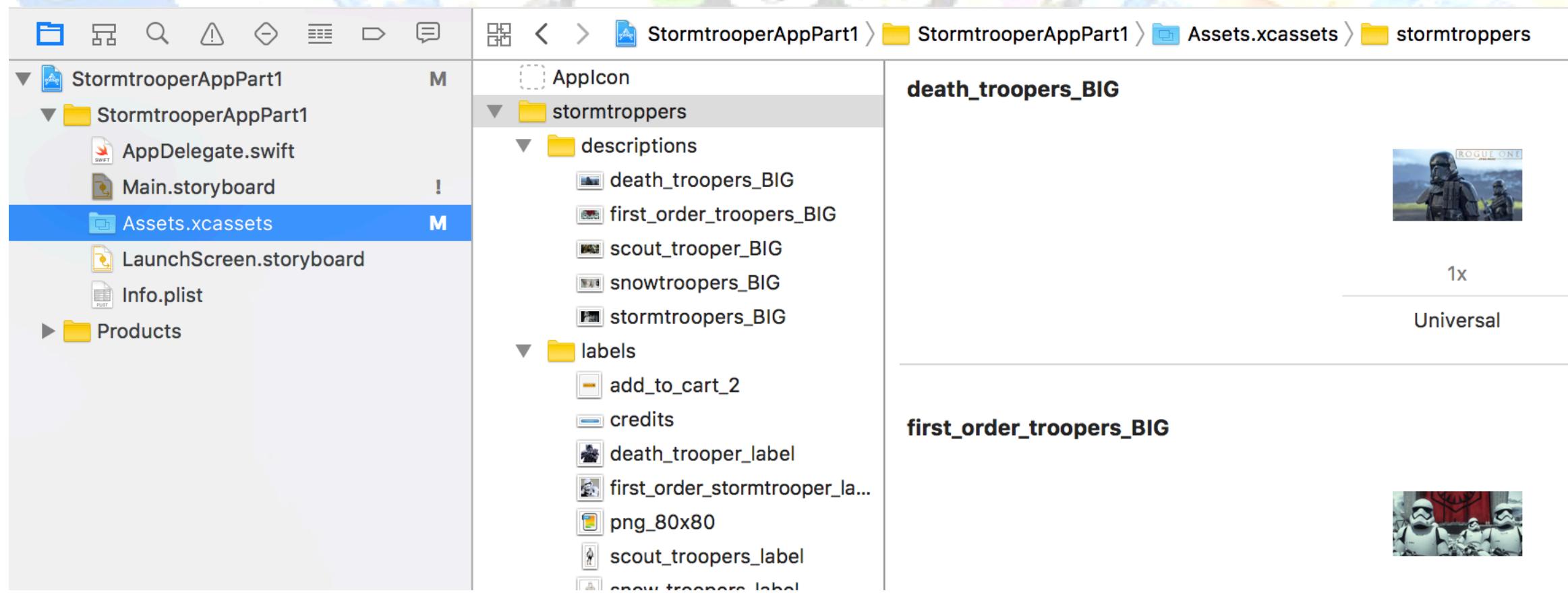
- Inspector panel and it's subtabs (identity, attributes, size)
- Object panel in bottom right corner
- Select iPhone 6s for our simulator

## 3. Build, Run, Simulator

- Try it out yourself
- Command + Shift + H to see Home Screen of simulator

# Import images

- Sunny's Github page for this class: [https://github.com/sunshineFett/iOS\\_class](https://github.com/sunshineFett/iOS_class)

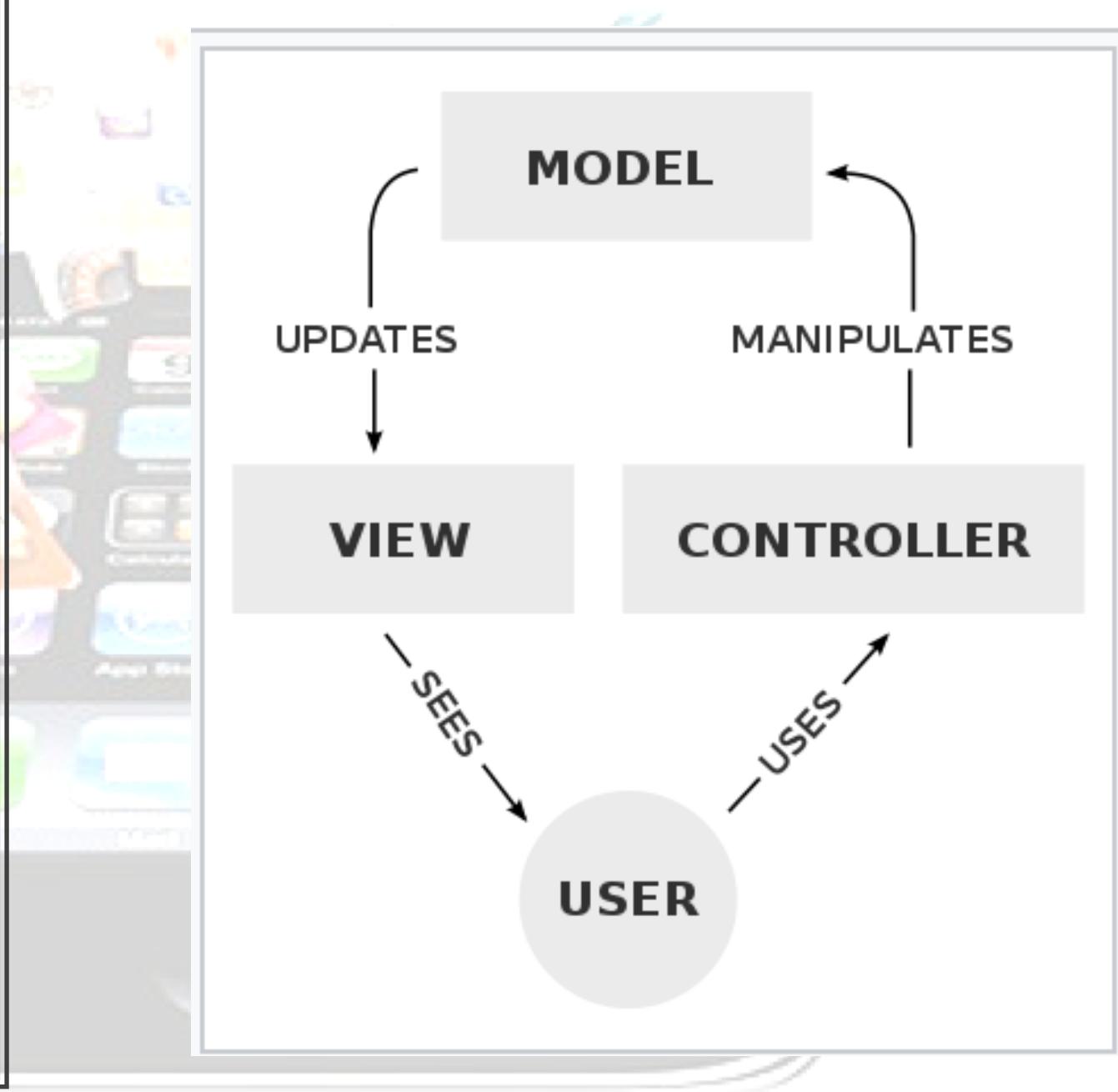


# Adding Subviews to Main View

1. Let's build our Stormtrooper Type Detail screen complete with a picture, label and button
  - Delete pre-built ViewController and it's swift file
  - Create new ViewController from Object panel and check "Is Initial View Controller"
2. Add label, image view and button to Main view from the Object panel; each component is considered a subview
3. The button will be the "[add\\_to\\_cart\\_2](#)" image.

# Design Concept: MVC

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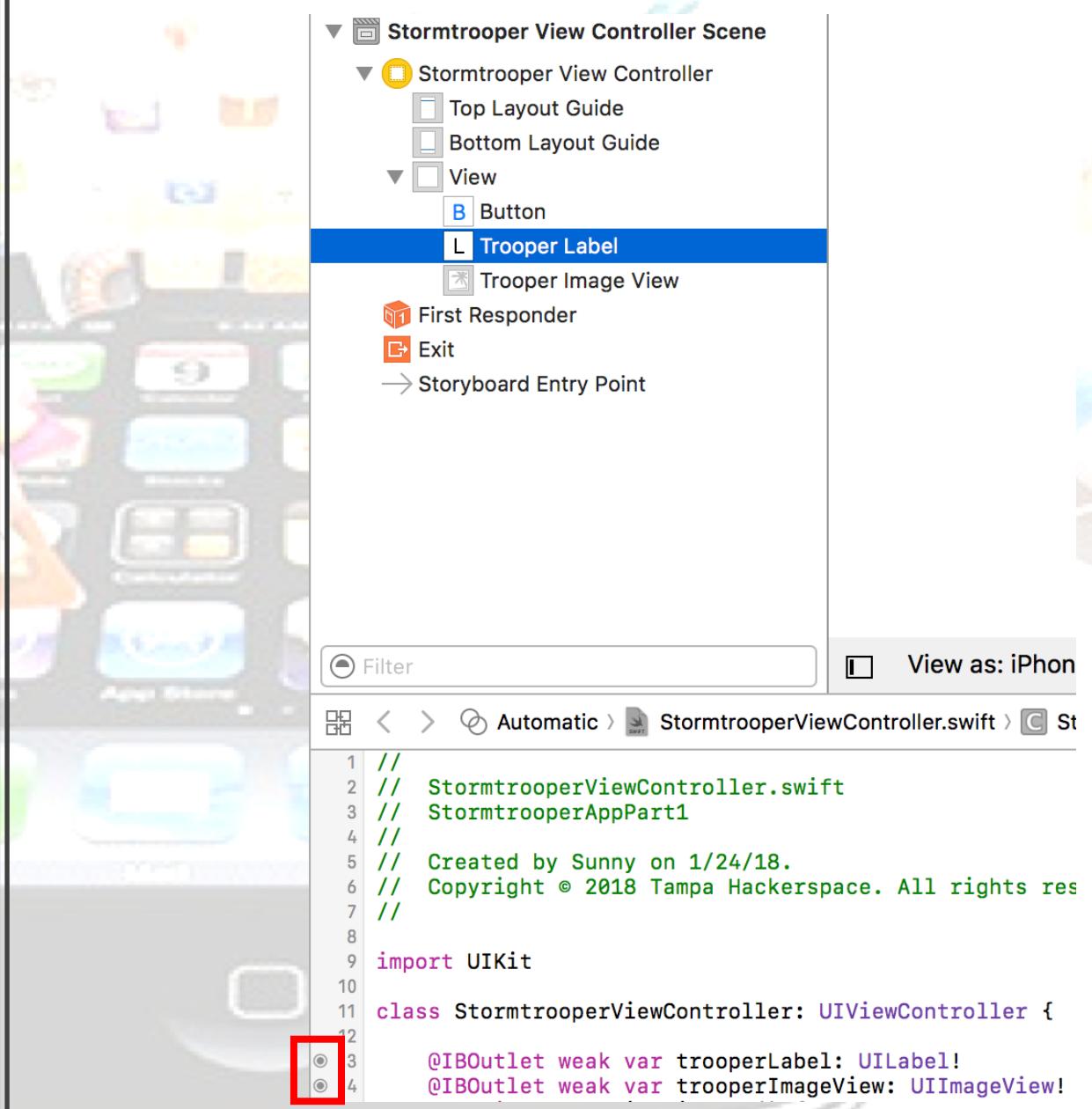
# Stormtrooper View Controller Class

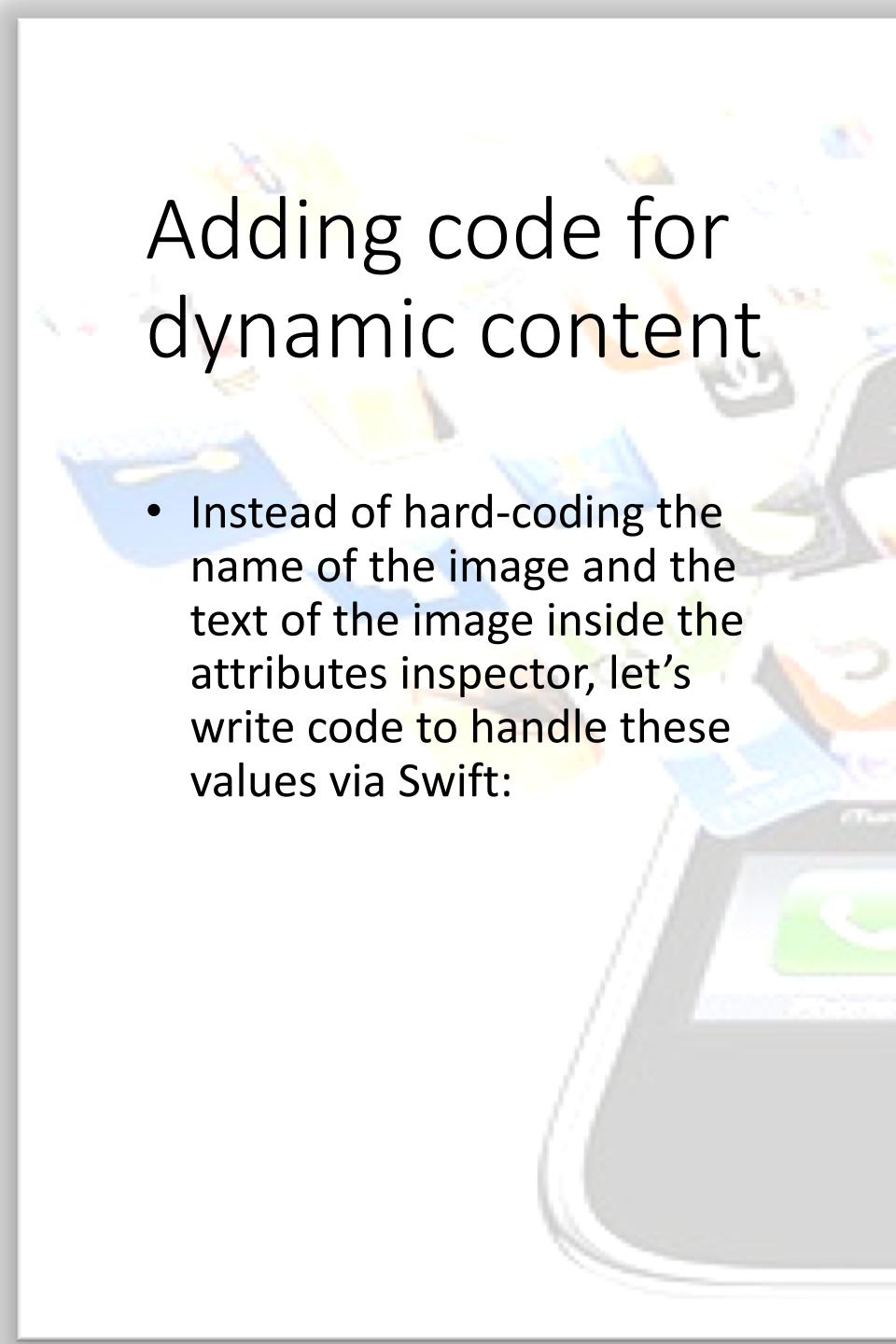
1. Project -> New File -> Cocoa Touch File -> **StormtrooperViewController** which is type **UIViewController** (must type it in); make sure language is Swift
2. Clean out boilerplate code generated except viewDidLoad() function
3. Set to **StormtrooperViewController** in Identity Inspector panel under Custom class
4. Now use the "Code Assist" button to view both Storyboard and Swift Code for StormtrooperViewController

# Outlets

1. Making outlets – Control + drag to Swift code
2. Purpose – connect a storyboard object with a Swift variable
3. How to know my outlet is connected – look for dark circle on left

# Create Two Outlets: (Label, Image View)





# Adding code for dynamic content

- Instead of hard-coding the name of the image and the text of the image inside the attributes inspector, let's write code to handle these values via Swift:

```
class StormtrooperViewController: UIViewController {  
  
    @IBOutlet weak var scoutImageView: UIImageView!  
    @IBOutlet weak var scoutLabel: UILabel!  
    override func viewDidLoad() {  
        super.viewDidLoad()  
  
        // Do any additional setup after loading the view.  
        scoutLabel.text = "Scout Trooper"  
        scoutImageView.image = UIImage(named: "scout_trooper_BIG")  
    }  
}
```

# Apple Developer Documentation

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<https://developer.apple.com/documentation/uikit/uilabel/1620538-text>

Instance Property

## text

The current text that is displayed by the label.

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## Declaration

```
var text: String? { get set }
```

# Creating a UIImage

- Documentation gives us the syntax; parenthesis means initialize class
- Code: `UIImage(named: "scout_trooper_BIG")`

`init?(named: String)`

Returns the image object associated with the specified filename.

# Actions

1. Difference between Actions and Outlets
2. Steps to add action to Stormtrooper View Controller
  - Drag button (“add to cart”) from SVC down to Swift class code
  - Change Connection from outlet to **action**
  - Give name “**addToCartPressed**”, leave other items as default
  - Notice the newly generated function in the Swift code
  - Add print message inside the new function

```
class StormtrooperViewController: UIViewController {  
  
    @IBAction func addToCartPressed(_ sender: AnyObject) {  
        print("Button tapped")  
    }  
}
```

## Adding Action Code to StormtrooperViewController Swift Code

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```
1 // StormtrooperViewController.swift
2 // SlidesTest
3 //
4 // Created by Sunny on 1/2/18.
5 // Copyright © 2018 Tampa Hackerspace. All rights reserved.
6 //
7
8 import UIKit
9
10 class StormtrooperViewController: UIViewController {
11
12
13 @IBAction func addToCartPressed(_ sender: AnyObject) {
14     print("Button tapped")
15 }
16
17 @IBOutlet weak var scoutImageView: UIImageView!
18 @IBOutlet weak var scoutLabel: UILabel!
19 override func viewDidLoad() {
20     super.viewDidLoad()
21
22     // Do any additional setup after loading the view.
23     scoutLabel.text = "Scout Trooper"
24     scoutImageView.image = UIImage(named: "scout_trooper_BIG")
25
26 }
27
28 }
29
```