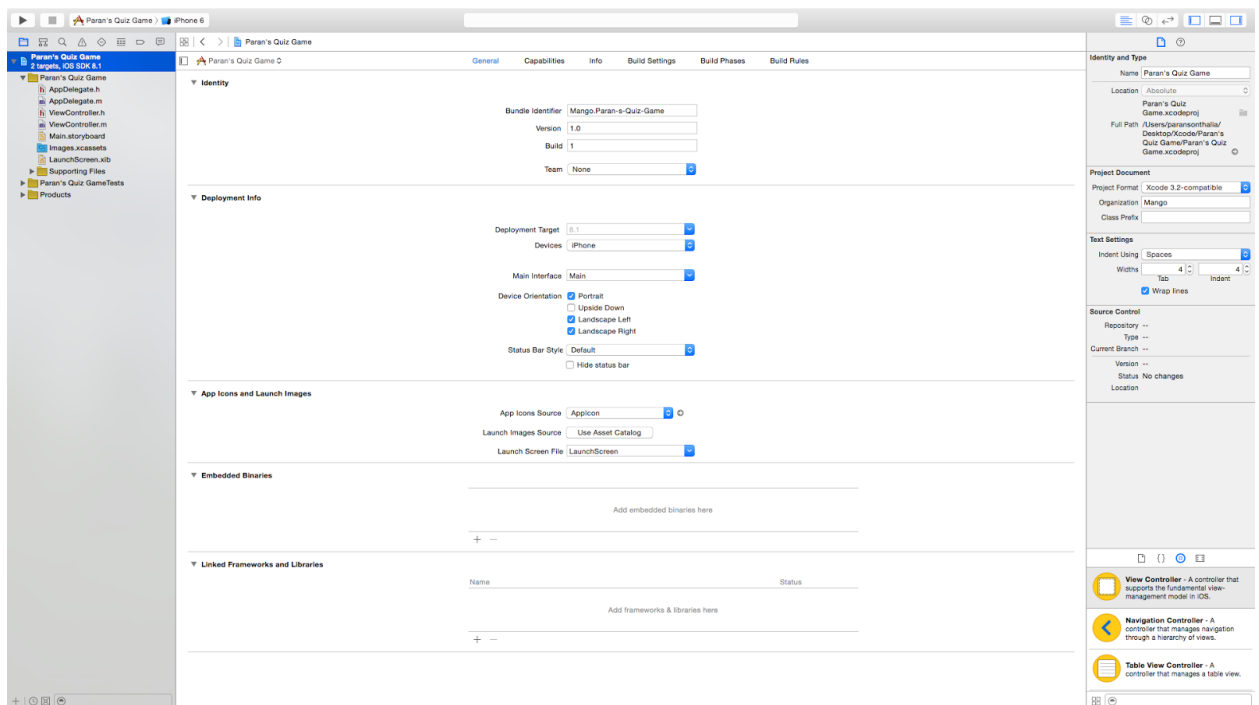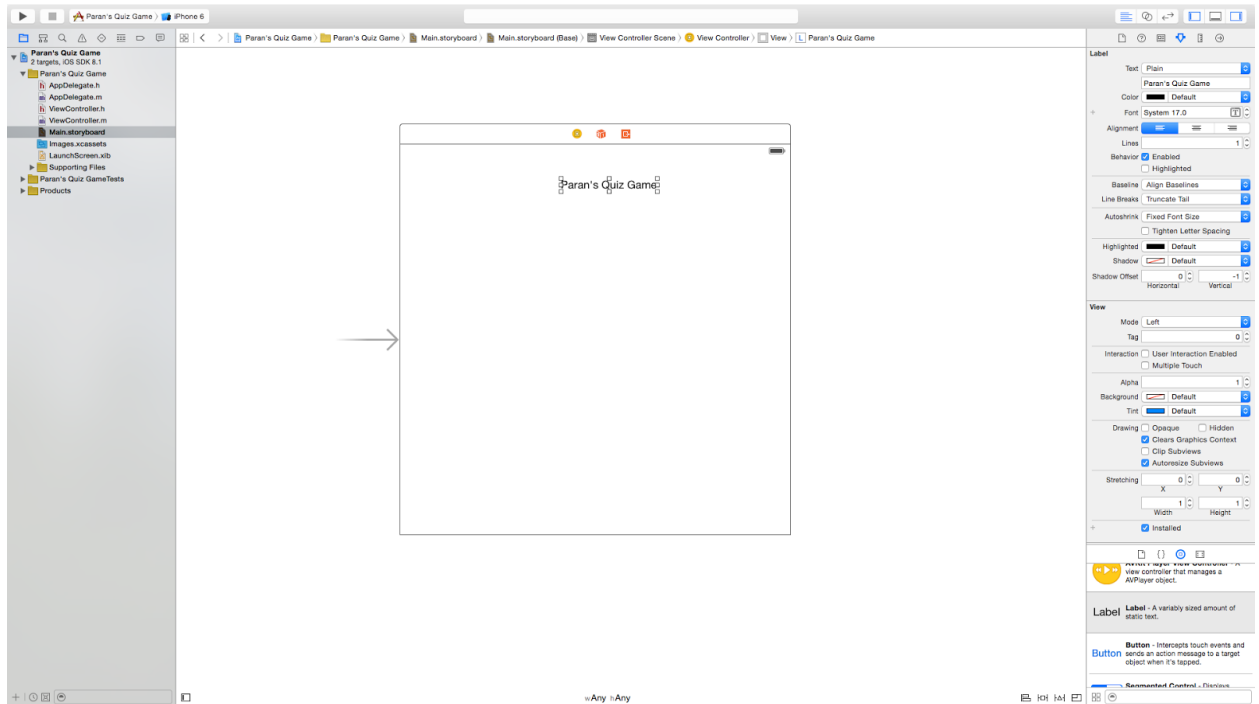# Building Your First iOS App

CREATING THE APPLICATION

1. Open up Finder and go to your Applications folder.
2. Search for Xcode and double click it. Now you are in Xcode
3. Click on "Create a New Xcode Project"
4. Click iOS Application
5. Click Single View Application
6. Click Next
7. Set the name to whatever you want, and make sure that in the devices section, iPhone is selected
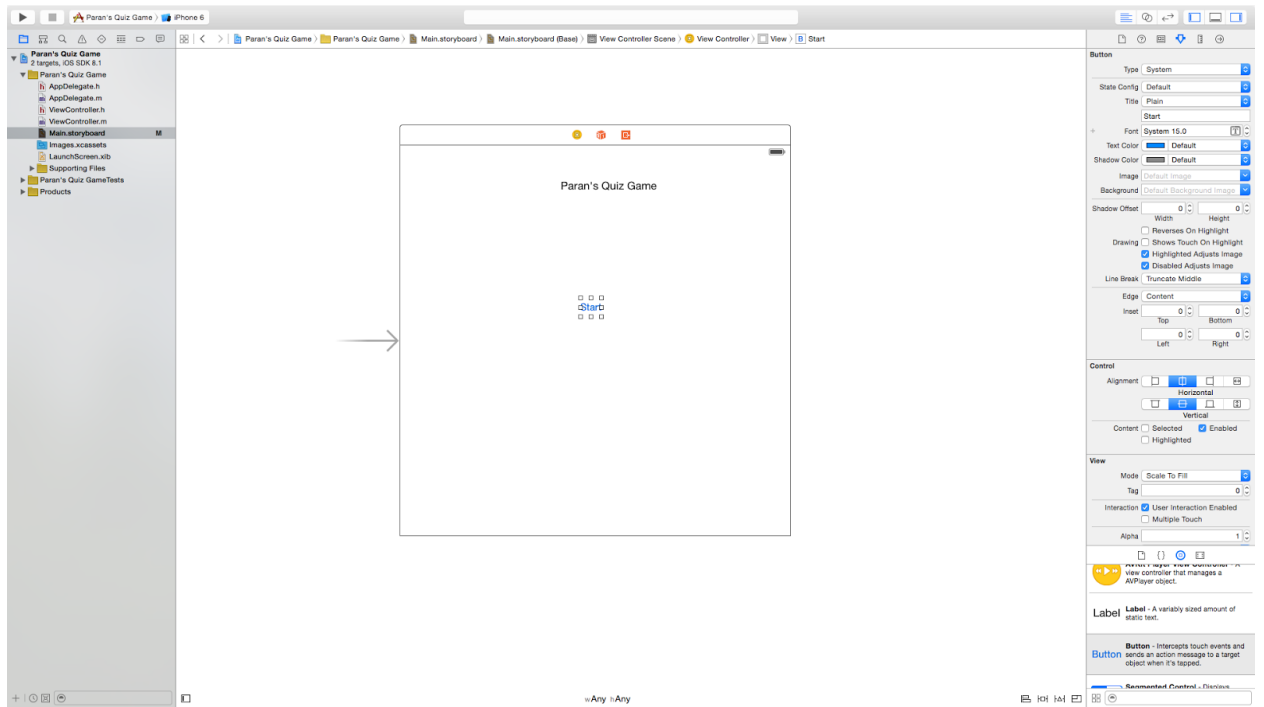8. Click Next
9. Save it on your desktop

CREATING A LABEL

1. In the left sidebar select "Main.storyboard"

2. Click on the image that looks like [icon] in the right sidebar

3. In the lower section of the right sidebar, scroll down until you see label

4. Drag and drop the label into the view that is in the center of your screen.

5. Click outside of your view

6. Click on the label once

7. In the right sidebar click on the image that looks like [icon]

8. Click on the second section where it says "Label" and change that to a name of your choice

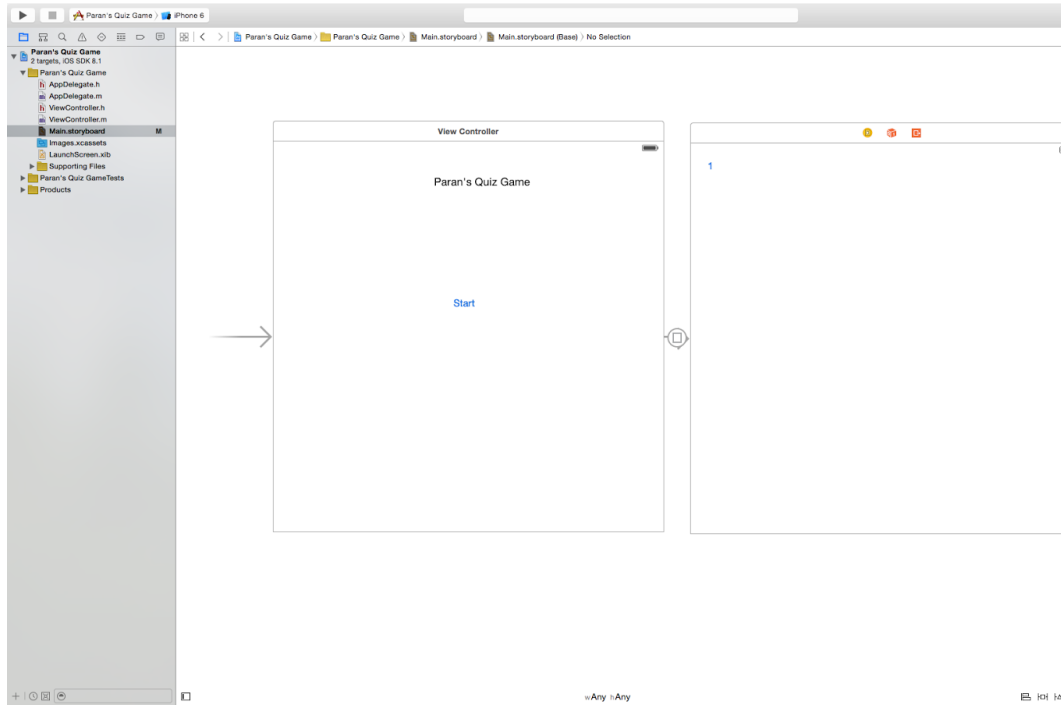9. Expand the label to fit your text by dragging the mini squares around the label

CREATING A BUTTON

1. Now drag a button from the bottom of the right sidebar into your view
2. Name the button "start" the same way you changed the text of the label

CREATING ANOTHER VIEW

1. Drag a view controller into the middle of the screen by clicking and dragging the view controller from the bottom of the right sidebar
2. Control-click and drag the start button into the other view
3. Click modal
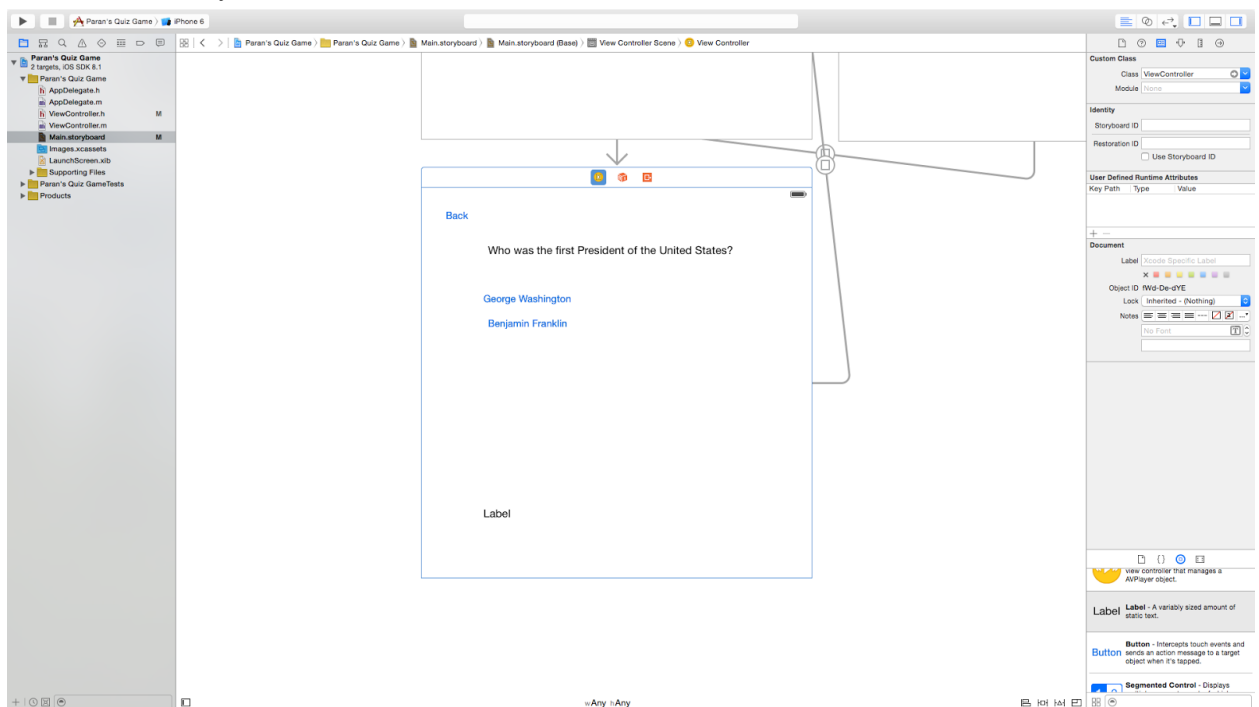4. Drag a button into the second screen and name the button "1"

CREATING THE FIRST QUESTION

1. Add another view controller into the middle of the screen the same way you added the other view
2. Control-click and drag the "1" button into the other view and select modal
3. In the next view add a label that says "Who was the first president of the United States?"
4. Drag two buttons into the screen and call the first one "Benjamin Franklin" and the next one "George Washington."Make sure that the label is at the top of the screen and then the first button and then the second button.
5. Add a label below the two buttons and set the text to a space
6. Add a button on the top left corner of the screen and call it "Back"
7. Control-click on the back button and drag it to the second view
8. Click on the bar beneath the screen that is grey. In the right sidebar click the button that looks like

    and change the class from "UIViewController" to "ViewController". The class is set in the first section where it says class
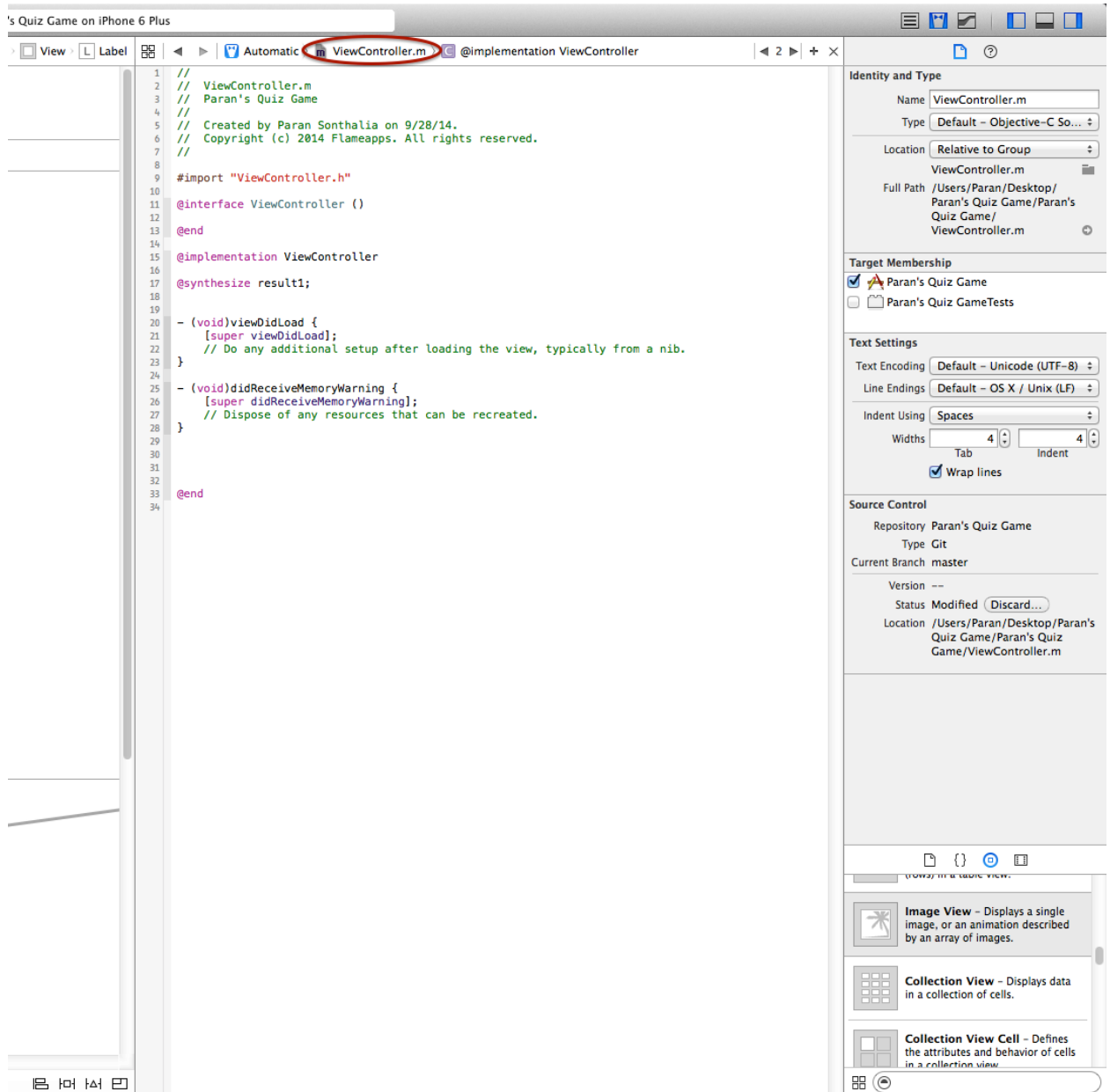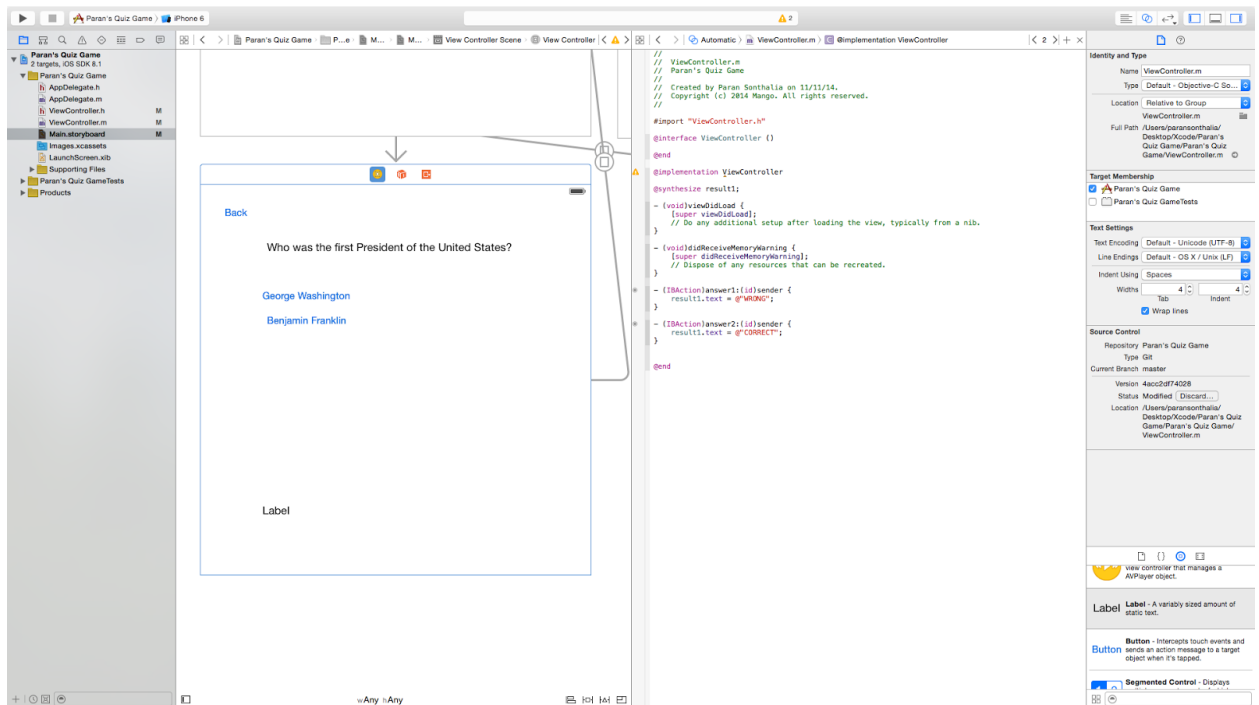
CODING THE FIRST QUESTION

1. Click on the first view then click on the button in the top of the screen that looks like [icon] We will call this the Assistant Editor.

2. On the top of the left side of the screen click on the section where it says ViewController.m and change that to ViewController.h
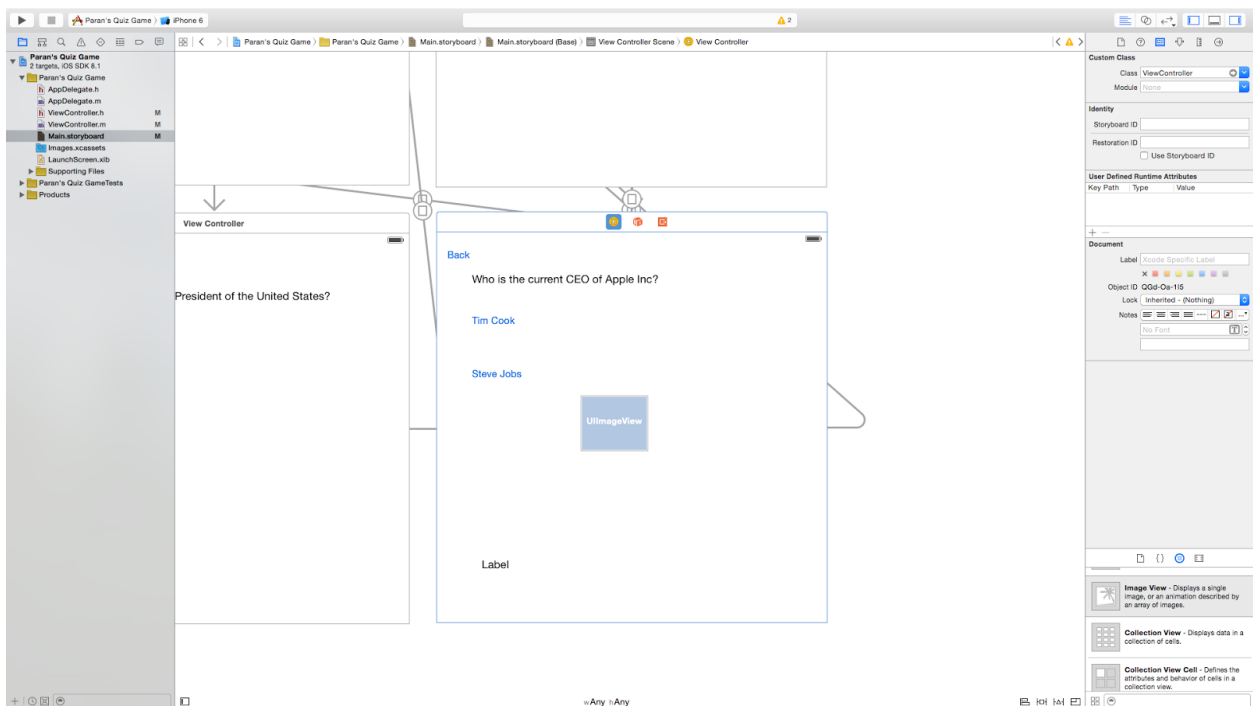

3. Add 1 "{" after the section where it says "@interface ViewController : UIViewController" and click enter
4. Go to the bottom of this page
5. Copy the code of Step 1 and paste it before the section where it says "@end"
6. You should see 3 circles, one next to each line of code.
7. Click in the middle of the circle next to answer 1 and move your mouse pointer to the first button

8. Click in the middle of the circle next to answer 2 and move your mouse pointer to the second button
9. Click in the middle of the circle next to result 1 and move your mouse pointer to the label with no text
10. Click on the section on the top of the second half of the screen where it says ViewController.h and change it to ViewController.m
11. Copy the text from Step 2 sec 1 and add it right below the line where it says @implementation ViewController
12. Copy the text from the line where it says Step 2 sec 2 and paste it right before the @end.
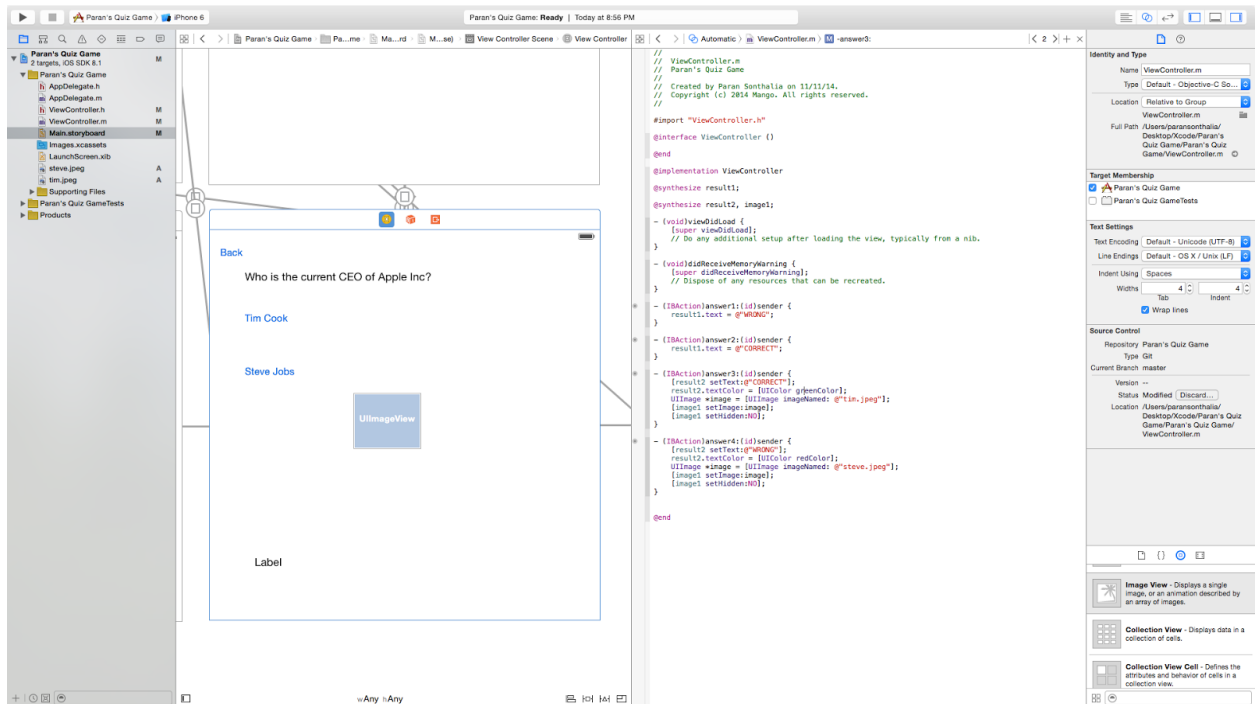
CREATING THE SECOND QUESTION

1. Add another button to your second screen that says two.
2. Add another view controller beneath the third one
3. Link the second button to the fourth view controller
4. Change the class for the fourth view controller the same way you did for the third.
5. Add the 2 labels and the two buttons the same way you did for the third view controller. Set the text of the top button to "Tim Cook". Set the text of the bottom button to "Steve Jobs" Set the text of the top label to "Who is the current CEO of Apple Inc?"
6. Add a button on the top left corner of the screen and call it "Back"
7. Control-click on the back button and drag it to the second view
8. Now go to the bottom of your right sidebar where you get the objects and look for an image view. Drag this onto the right side of your fourth view.

CODING THE SECOND QUESTION

1. Open up the assistant editor and make sure that you have the ViewController.h file open.
2. Go to the website and copy the code from step three and paste it before the @end section.
3. Go to the image 1 and image 2 links and download the images. Change the name of image1 to "tim.jpeg". Change the name of image2 to "steve.jpeg."
4. Drag "tim.jpeg" and "steve.jpeg" into the left sidebar of your xcode project right below Main.storyboard. When the alert box shows up say ok.
5. In Xcode now link answer3 with the top button with the circles.
6. Link answer4 with the bottom button with the circle.
7. Link result2 with the bottom label with the circle
8. Link image1 with the image view the same way with the circle
9. Change the Assistant editor to show ViewController.m
10. Copy the code from step 4 sec 1 and paste it below the line where it says "@synthesize result1"
11. Copy the code from step 4 sec 2 and paste it before the "@end" line.
12. Run your program and everything should work.

Add question three to your second view controller and do this on your own!
Contact me at paran.sonthalia@gmail.com with any questions.

Step 1

```
- (IBAction)answer1:(id)sender;
- (IBAction)answer2:(id)sender;
@property (strong, nonatomic) IBOutlet UILabel *result1;
```

Step 2
sec1
```
@synthesize result1;
```

sec2
```
- (IBAction)answer1:(id)sender {
    result1.text = @"WRONG";
}

- (IBAction)answer2:(id)sender {
    result1.text = @"CORRECT";
}
```

Step 3

```
- (IBAction)answer3:(id)sender;
- (IBAction)answer4:(id)sender;
@property (strong, nonatomic) IBOutlet UILabel *result2;
@property (strong, nonatomic) IBOutlet UIImageView *image1;
```

Step 4
sec1
```
@synthesize result2, image1;
```

sec2

```
- (IBAction)answer3:(id)sender {
    [result2 setText:@"CORRECT"];
    result2.textColor = [UIColor greenColor];
    UIImage *image = [UIImage imageNamed: @"tim.jpeg"];
    [image1 setImage:image];
    [image1 setHidden:NO];
}

- (IBAction)answer4:(id)sender {
    [result2 setText:@"WRONG"];
    result2.textColor = [UIColor redColor];
    UIImage *image = [UIImage imageNamed: @"steve.jpeg"];
    [image1 setImage:image];
    [image1 setHidden:NO];
}
```

image1
image2