Hello World - Beginner iOS Application

(1) Create a new Xcode project. Use the "Single View" template.

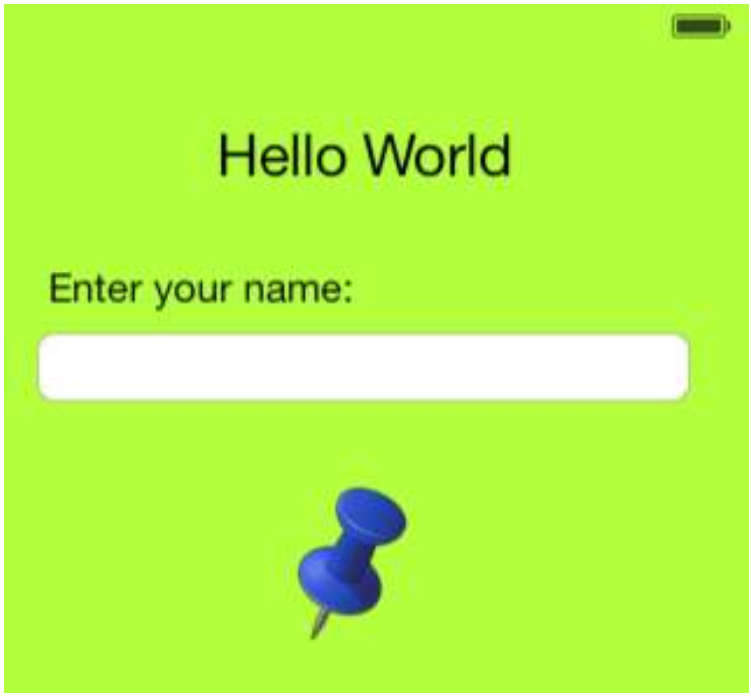
(2) Drag a label and change the text to "Hello World"

(3) Drag another label for the "Enter your name:" prompt.

(4) Drag a "Text Field" over to create a name input box.

(5) Drag a button over. Give the button a text label or image.

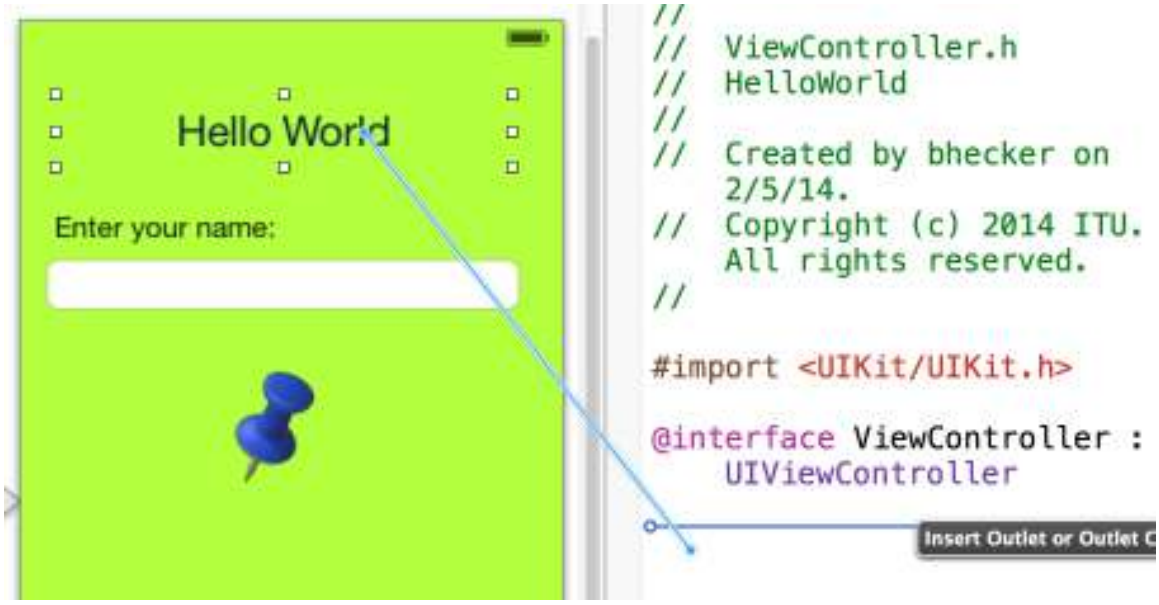
Now your UI should look like this:



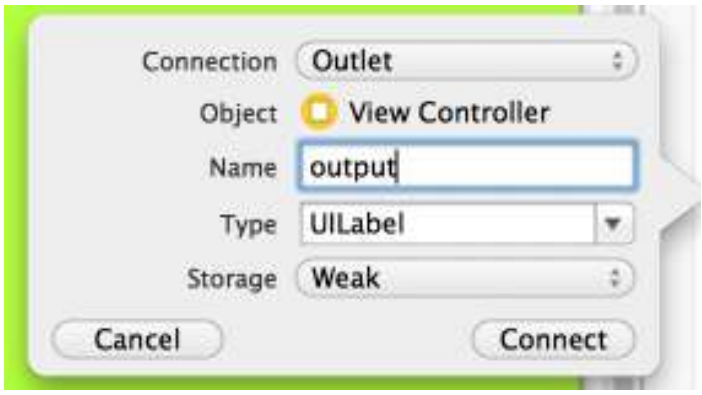
(6) Wire the components: Click on the item, hold down the **control** button on the keyboard and look for the little blue line. Drag the line to **ViewController.h**, and release the mouse/keyboard.

Important notes:

- Wire to **ViewController.h** and not the ViewController.m.
- Add everything in between the @interface and @end.



When the little box appears put the name of the item in the box, **output**, and select what type of object as follows:

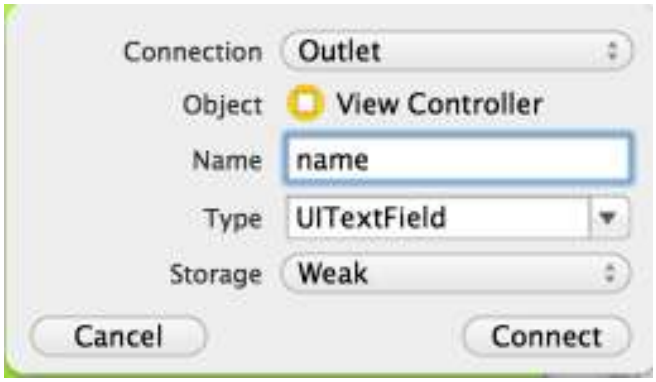


Click Connect.

This line of code is now added to your **ViewController.h** file:

```
@property (weak, nonatomic) IBOutlet UILabel *output;
```

We also need to create a property for the Text Field where the user will type their name. Do the same steps as you did for the label but call the Text Field property **name**.



Now you should see name added as another property as follows:

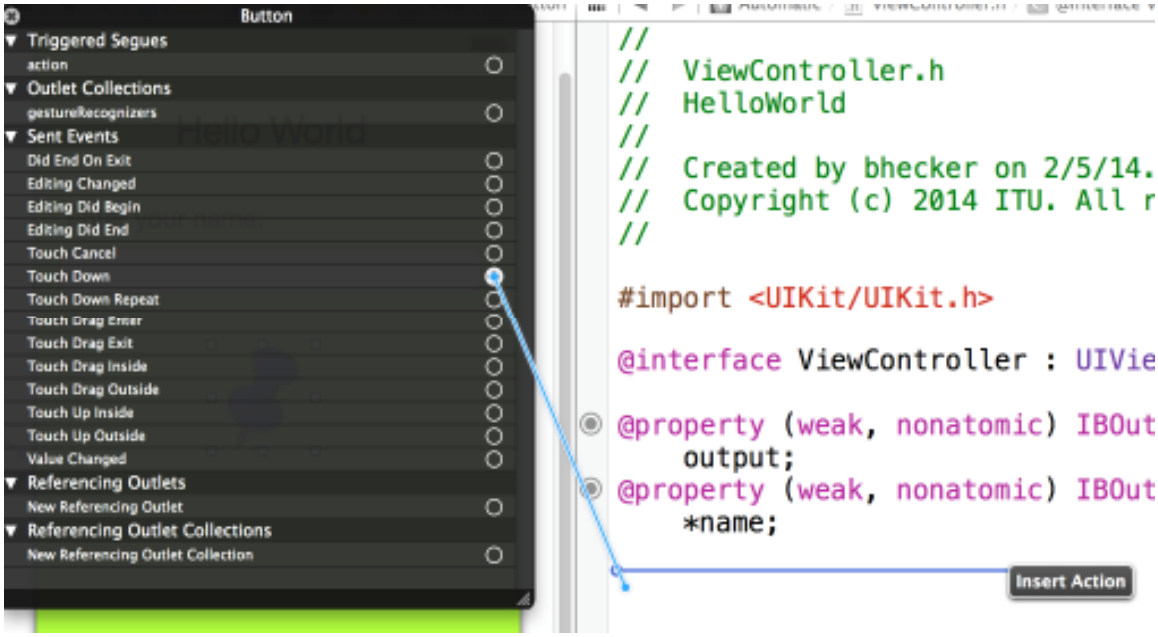
```
#import <UIKit/UIKit.h>

@interface ViewController : UIViewController

@property (weak, nonatomic) IBOutlet UILabel *
    output;
@property (weak, nonatomic) IBOutlet UITextField
    *name;
```

The button will be a little different. We will create an IBACTION instead of a property for the button.

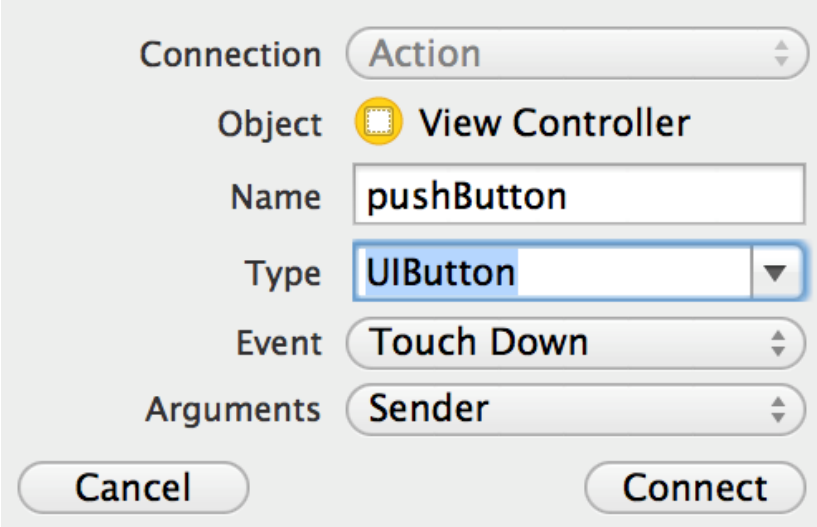
Important notes:

- Wire to **ViewController.h** and not the ViewController.m.
- Add everything in between the @interface and @end.

You need to **Right-Mouse** click on the button so a little black window shows. Next, select one of the Touch Events to wire as follows (Any of the touch events will work for now. You can experiment with the different ones later on):



Release the mouse/keyboard and fill in the name and type of object:



Now the finished code looks like this:

```
#import <UIKit/UIKit.h>

@interface ViewController : UIViewController

@property (weak, nonatomic) IBOutlet UILabel *
    output;
@property (weak, nonatomic) IBOutlet UITextField
    *name;
- (IBAction)pushButton:(UIButton *)sender;

@end
```

(7) Switch over to the **ViewController.m** file.

Add a line to synthesize **name** and **output** between the @implementation and the @end. The file now looks like:

```
//

#import "ViewController.h"

@interface ViewController ()

@end

@implementation ViewController

@synthesize name, output;

- (void)viewDidLoad
{
    [super viewDidLoad];
    // Do any additional setup af
```

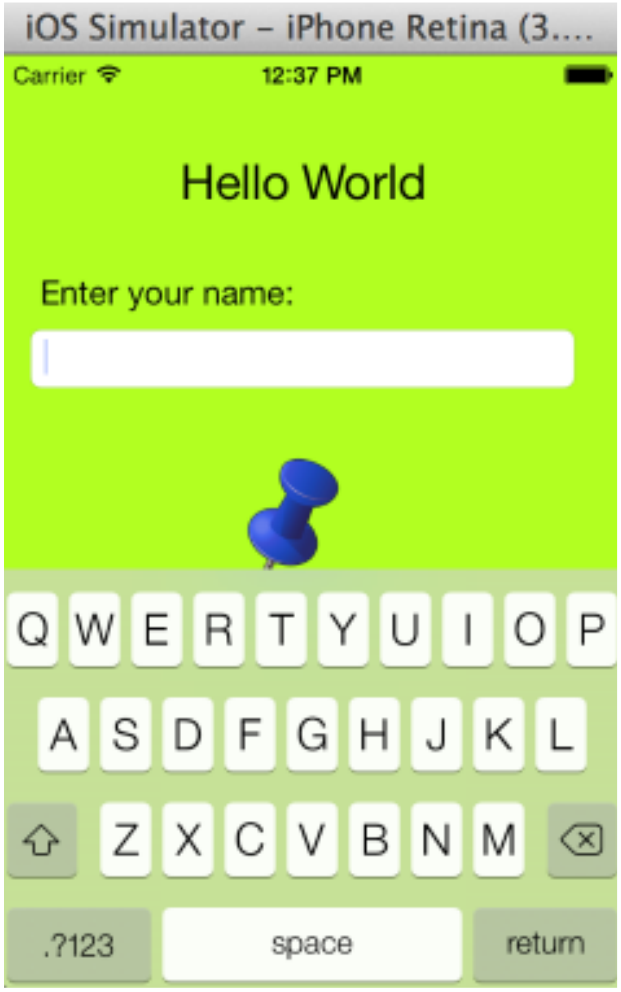
(8) Let's add some code to the pushbutton method you should find already in the file. The empty method looks like:

```
- (IBAction)pushButton:(UIButton *)sender {
}
@end
```

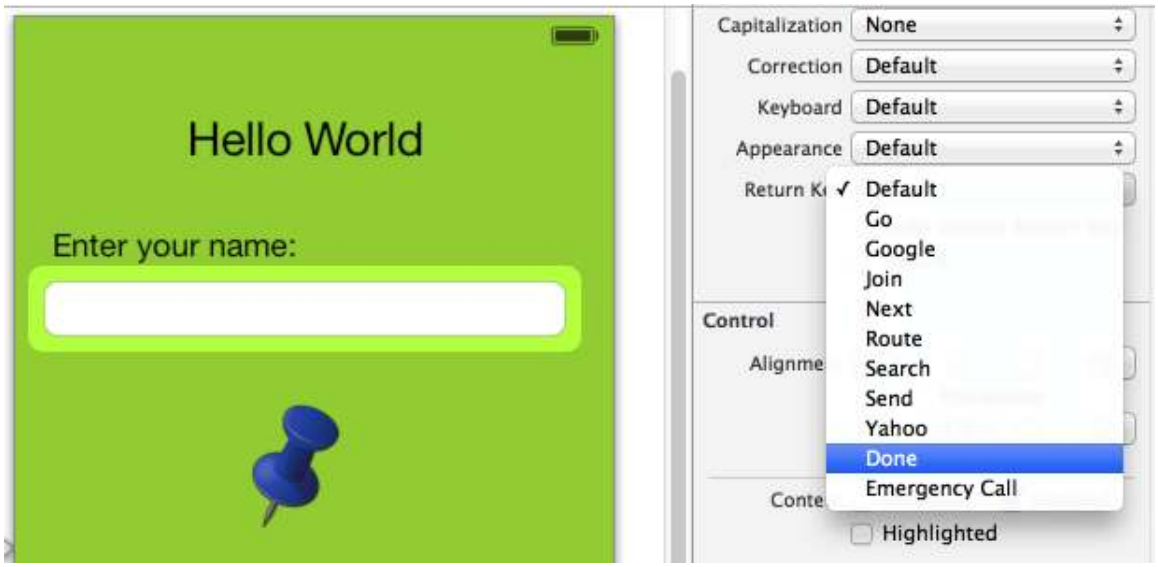
(9) Add the following source code to this method.

```
// this line changes the label to the text that is typed in the text field

  [output setText:name.text];
```

(10) Run your program it should work. You might notice the keyboard stays open.



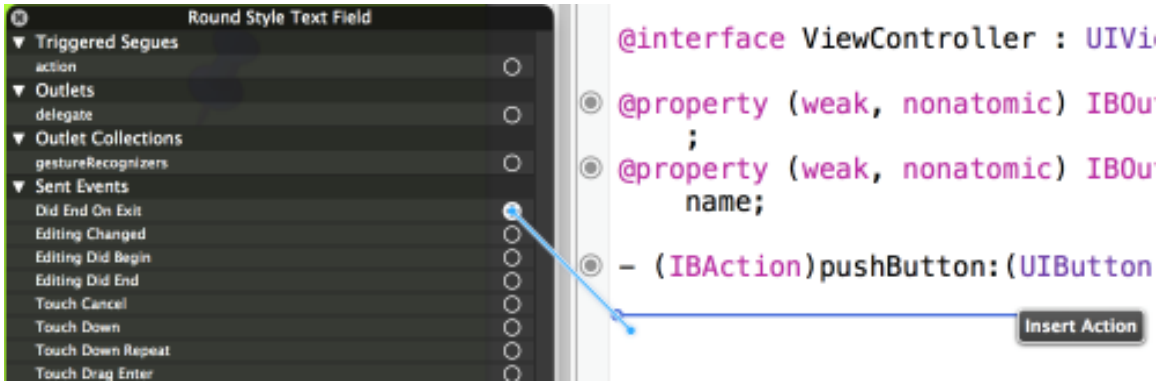
Change the property on the Text Field to set the "return key" to "done" and you will see "done" instead of "return" in the lower right-hand corner.



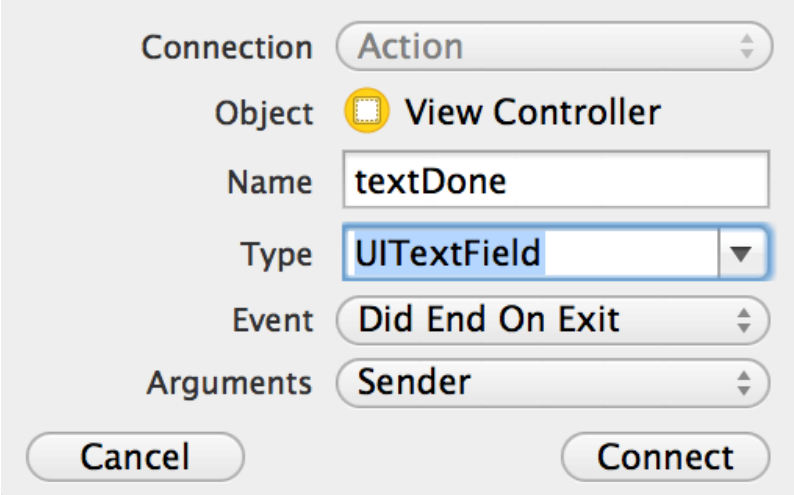
How look at the new **done** option.

Now you can get that pesky keyboard out of the way by clicking on done but before you can do that we need to tell the "Done" button what to do.

(11) We need to go back and wire the **Did End on Exit** event of the Text Field to an IBAction so we can program the keyboard to go away. Open the **Main.storyboard** and the **ViewController.h** file and do another wire as follows:



Name it **textDone** and select the object type of UITextField.



You now have a new IB Action as follows:

```
- (IBAction)textDone:(UITextField *)sender;
```

(12) Switch to the ViewController.m file so we can add the source code to resign the keyboard. Add the following line of source code to this method.

```
[sender resignFirstResponder];
[output setText:name.text];        // add this line to update the label as well
```

(13) Run and enjoy! You just created your first iOS app!