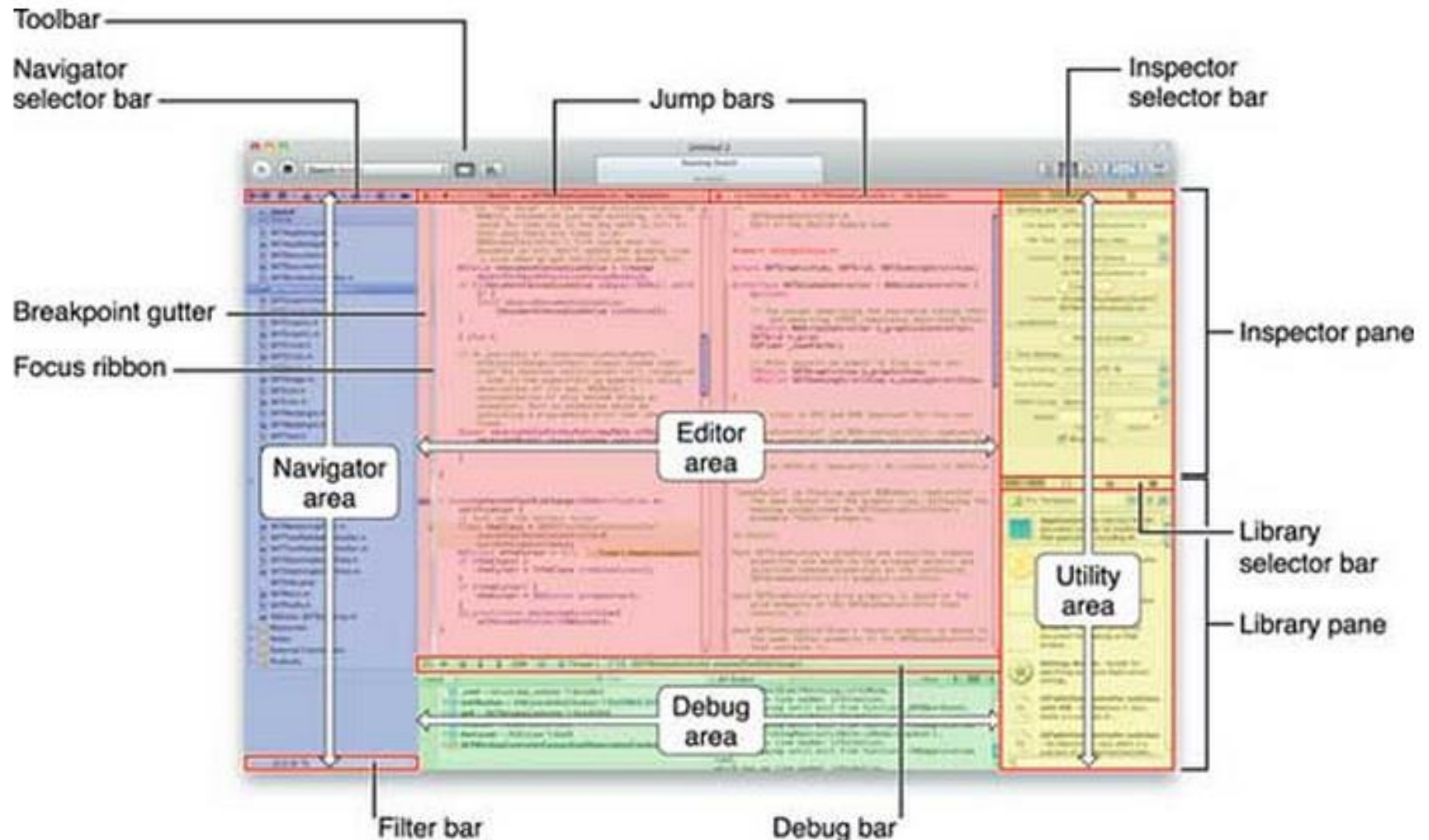


iPhone Apps Development using Objective C & Xcode

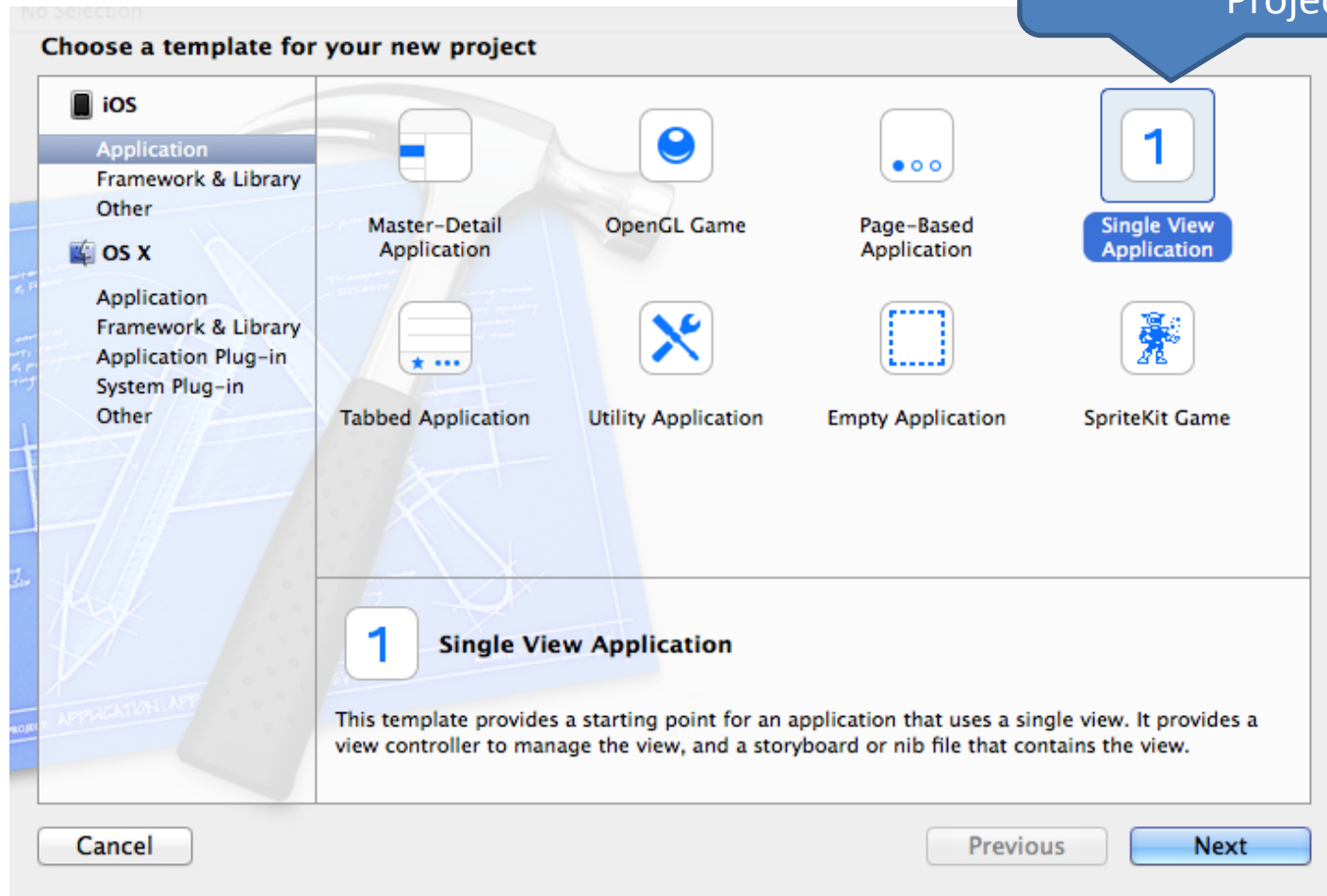
By Dannis Mok

Xcode Project Screen



Creating the first project

Create a Single View Project



Creating the first project

Choose options for your new project:

Package Name

Application Name

Product Name myFirstApp

Organization Name uec

Company Identifier com.uec

Bundle Identifier com.uec.myFirstApp

Class Prefix uec

Supported Platforms

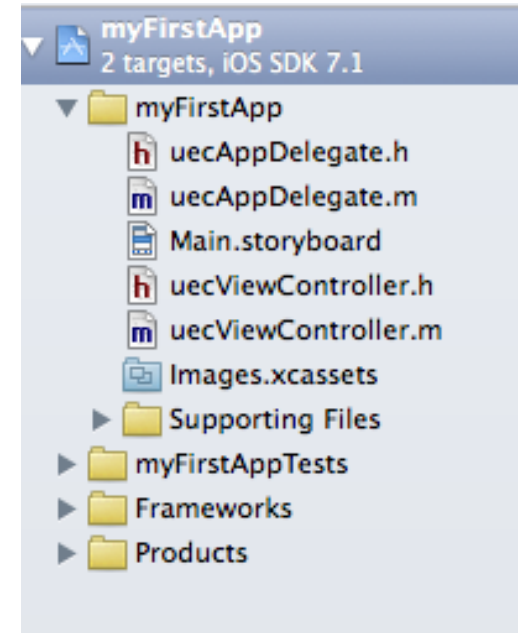
Devices iPhone

Class Prefix. XYZ means no prefix

Cancel Previous Next

Default Files

- ViewController.h
 - inherits the UIViewController which provides the fundamental view management model for the iOS applications.
- ViewController.m
 - Do initial setup in viewDidLoad which is called after view loads
 - didReceiveMemoryWarning method is called in case of memory warning.



Default Files

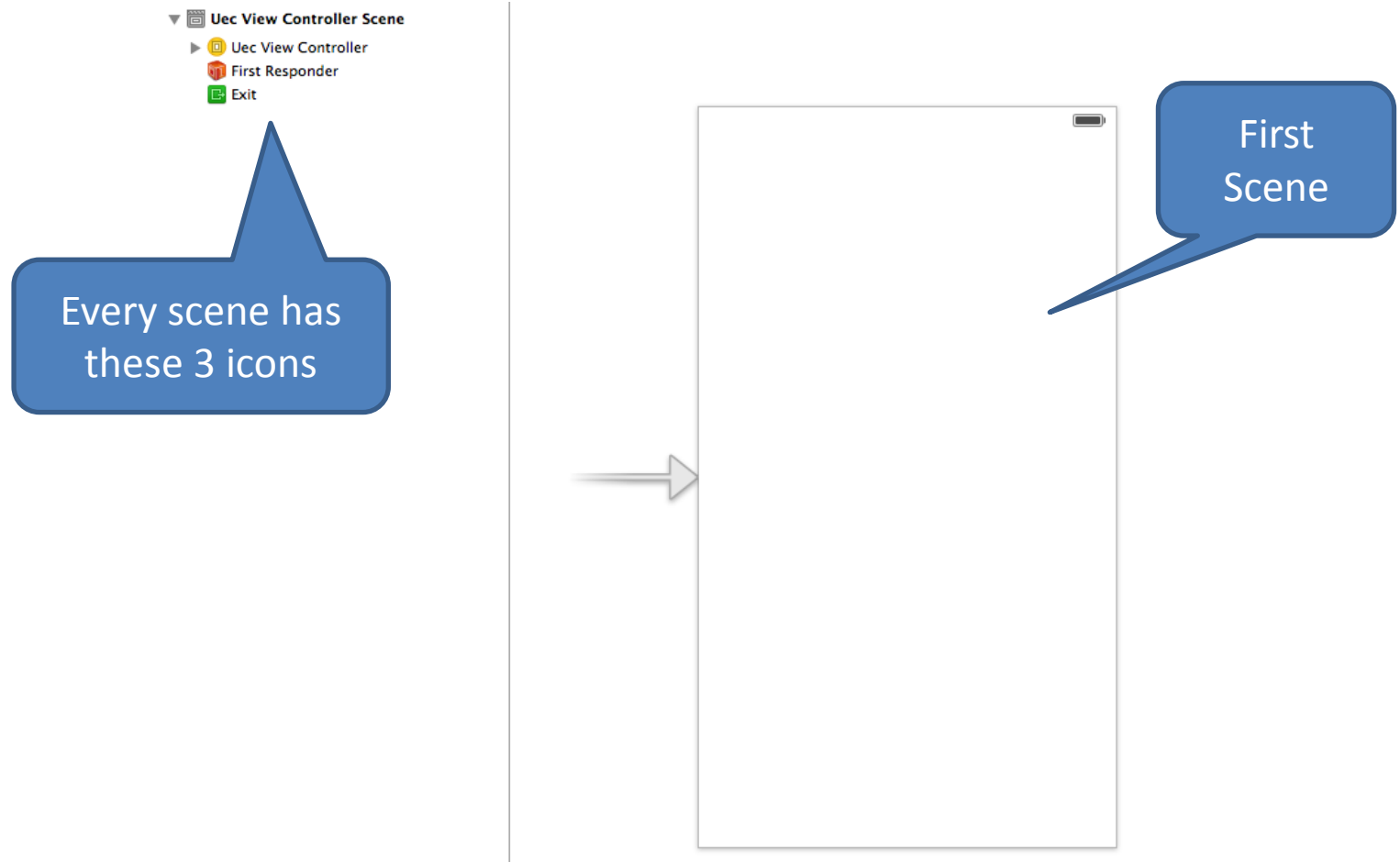
- AppDelegate.h
 - AppDelegate inherits from UIResponder that handles iOS events
 - Implements the delegate methods of UIApplication delegate which provide key application events like finished launching, about to terminate and so on.
 - UIWindow object to manage and co-ordinate the various views on the iOS device screen. It's like the base view over which all other views are loaded. Generally there is only one window for an application.
 - UIViewController to handle the screen flow.

Default Files

- AppDelegate.m
 - UIApplication delegates defined here. All the methods defined above are UI application delegates and contains no user defined methods.
 - UIWindow object is allocated to hold the application is allocated.
 - UIViewController is allocated made as window's initial view controller.
 - To make window visible makeKeyAndVisible method is called.

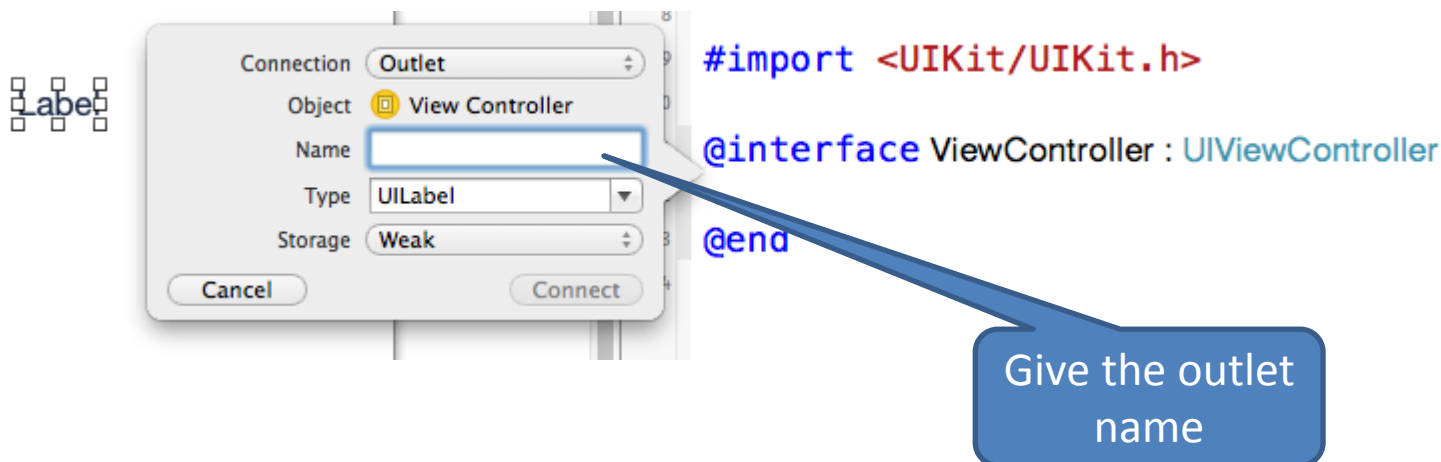
MainStoryboard.storyboard

- Contains the Interface Builder for creating interface for the apps



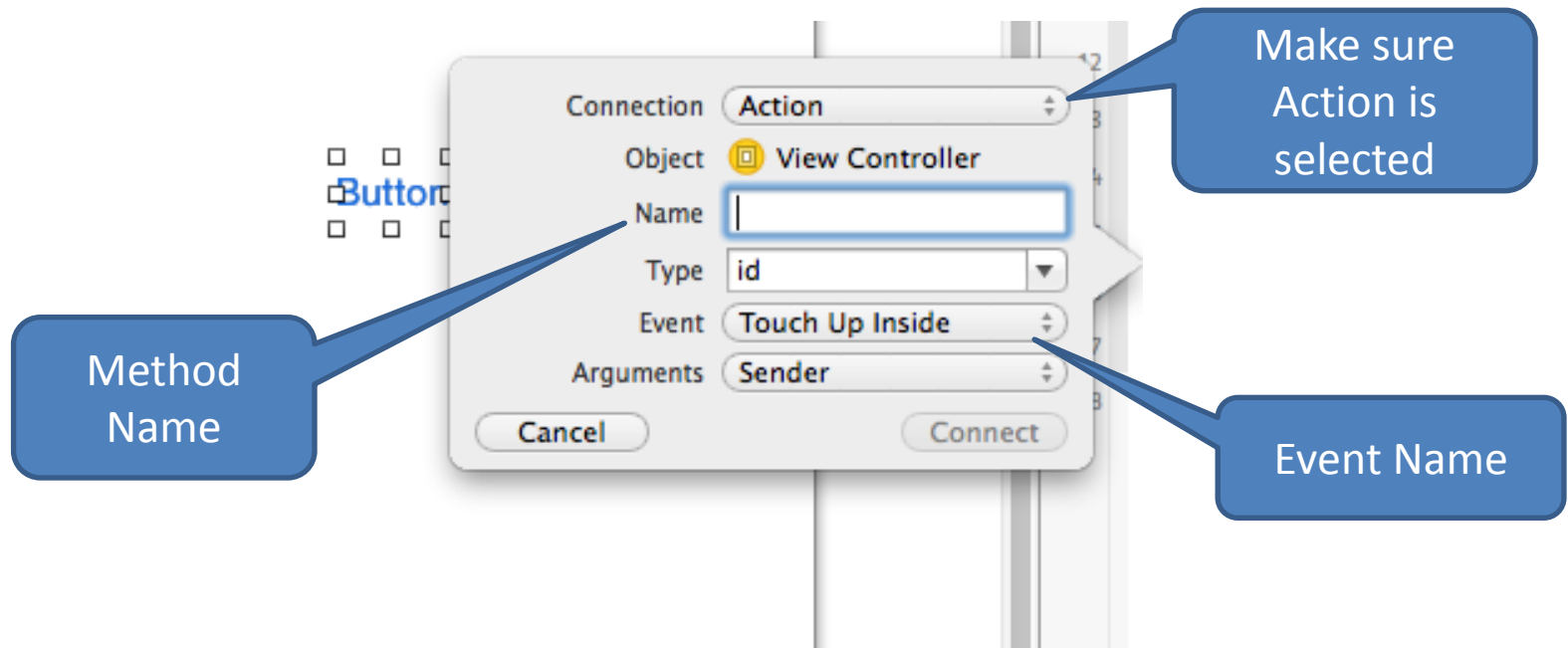
IBOutlet

- IBOutlet is an indicator to the compiler that this UILabel is connected to the code and its values can be affected by the code
- Control-drag/Right button drag from the UILabel element to the ViewController.h file to create the IBOutlet automatically.



IBAction

- IBAction is another indicator to the compiler that an event associated with the UIButton will trigger the named method in the code
- Create similar to the IBOutlet



IBOutlet and IBAction

- IBOutlets and IBActions are defined in the ViewController.h and need to be implemented in the ViewController.m

```
9  #import <UIKit/UIKit.h>
10
11  @interface ViewController : UIViewController
12
13  @property (weak, nonatomic) IBOutlet UILabel *myLabel;
14
15  - (IBAction)changeLabel:(id)sender;
16
17  @end
18
```

Exercise 1

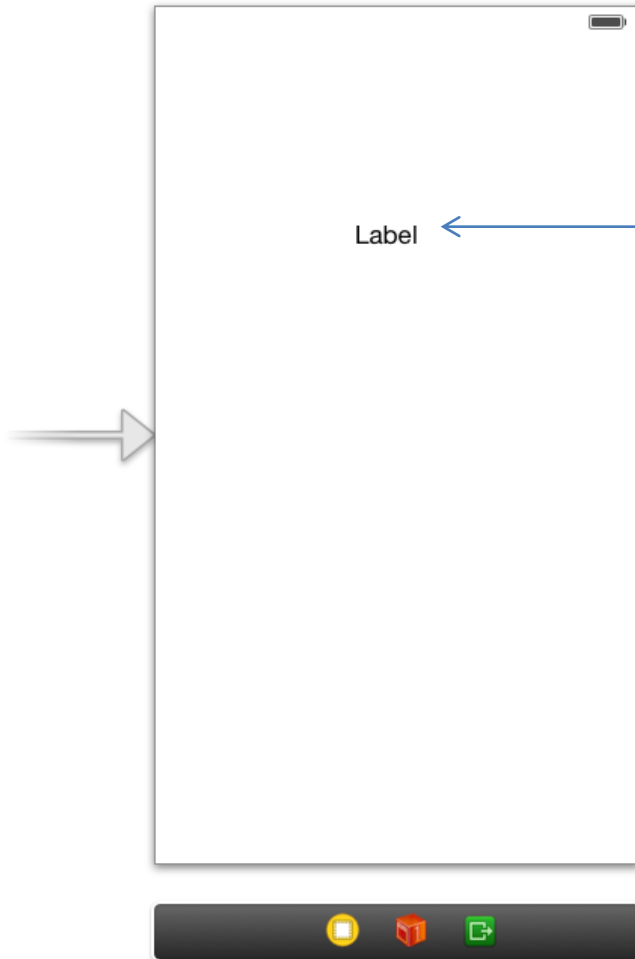
Create a Label

ViewController.h

```
@interface ViewController : UIViewController  
  
@property (weak, nonatomic) IBOutlet UILabel *myLabel;  
  
@end
```

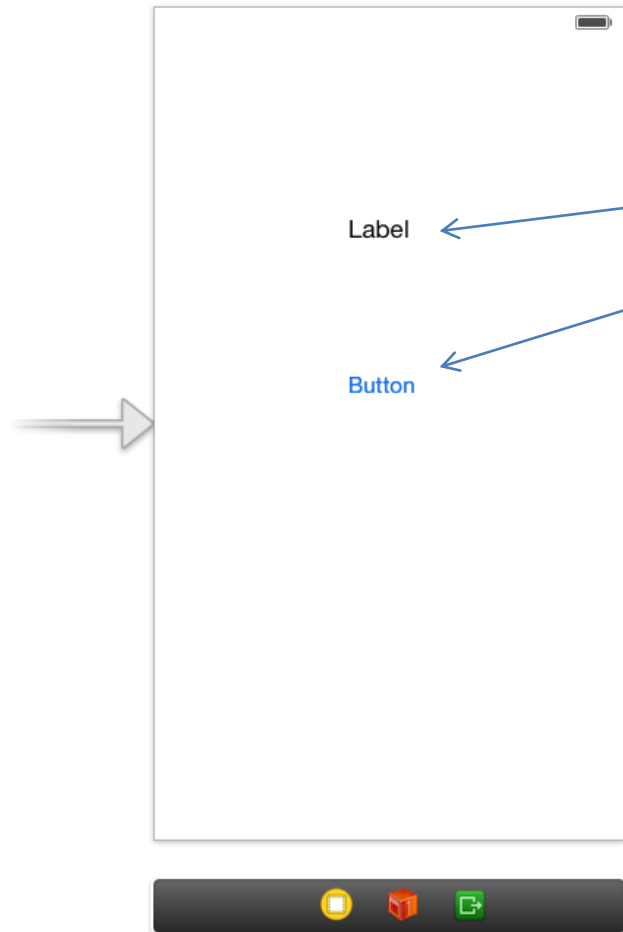
ViewController.m

```
- (void)viewDidLoad  
{  
    [super viewDidLoad];  
  
    self.myLabel.text = @"Hello";  
  
}
```



Exercise 2

Use a Button to change Label Content



ViewController.h

```
@interface ViewController : UIViewController

@property (weak, nonatomic) IBOutlet UILabel *myLabel;

- (IBAction)changeLabel:(id)sender;

@end
```

ViewController.m

```
- (IBAction)changeLabel:(id)sender {

    self.myLabel.text = @"I am clicked";

}

@end
```

UIButton – More Info

Button State	Description
UIControlStateNormal	Normal State
UIControlStateHighlighted	Button in selected
UIControlStateDisabled	Button is disabled

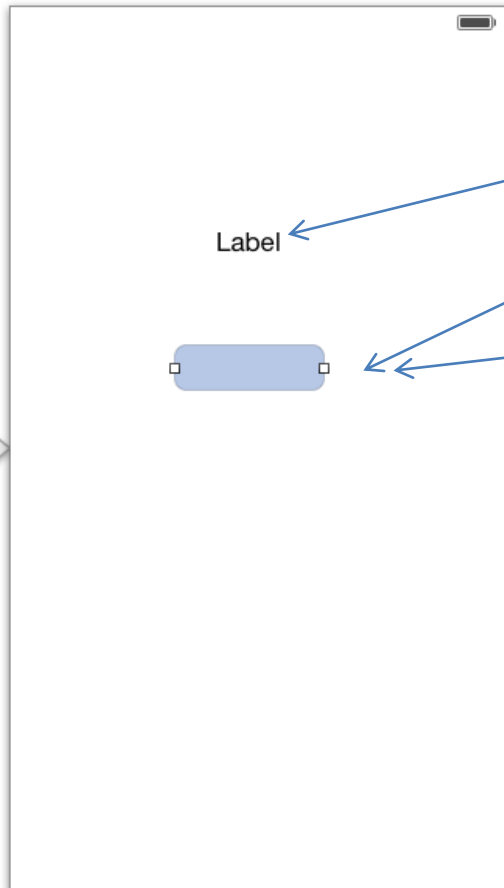
Example

- `[myButton setTitle:@"Press Me" forState:UIControlStateNormal];`
- `[myButton setTitle:@"Disabled" forState:UIControlStateDisabled];`

Button Event	Description
Touch Up Inside	Triggered when finger lift up
Touch Down	Triggered when touch down
Touch Down Repeat	Triggered when touch 2 times

Exercise 3

Use a TextField to enter information



ViewController.h

```
@property (weak, nonatomic) IBOutlet UILabel *myLabel;  
  
@property (weak, nonatomic) IBOutlet UITextField *  
    myTextField;  
  
- (IBAction)changeLabel:(id)sender;
```

ViewController.m

```
- (IBAction)changeLabel:(id)sender {  
    self.myLabel.text = self.myTextField.text;  
}
```

UITextField – More Info

Example

- `myTextField.placeholder = @"Please enter your name";`
- `myTextField.textAlignment = NSTextAlignmentCenter;`
- `myTextField.textColor = [UIColor greenColor];`
- `myTextField.font = [UIFont systemFontOfSize:14];`
- `myTextField.minimumFontSize = 10.0`
- `myTextField.keyboardType = UIKeyboardTypeNumberPad`