

iPhone App Development

CM420-09-2016-C

Lesson 6

Lecturer

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Git

[https://github.com/bryanttang/iOS-
Class-2016-9](https://github.com/bryanttang/iOS-Class-2016-9)

Test

- Scope: All in handout!
- Date: 10/27 (45 minites)

Project

- Type: Game, Utility
- Demo date: 10/27 (1 hour)

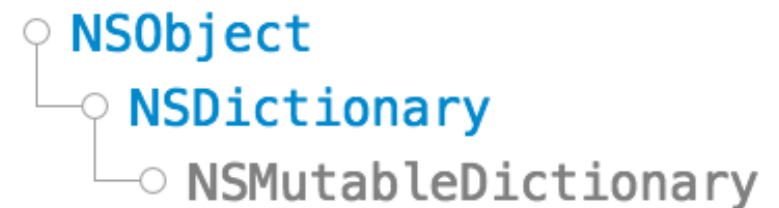
Summary

- Custom Table View Cell, NSDictionary
- Navigation Controller
- View cycle
- Debug mode

Dictionary (advance)

- NSMutableDictionary
- Add KeyPair
 - - setObject:forKey:
- Remove KeyPair
 - - removeObjectForKey:

Inheritance



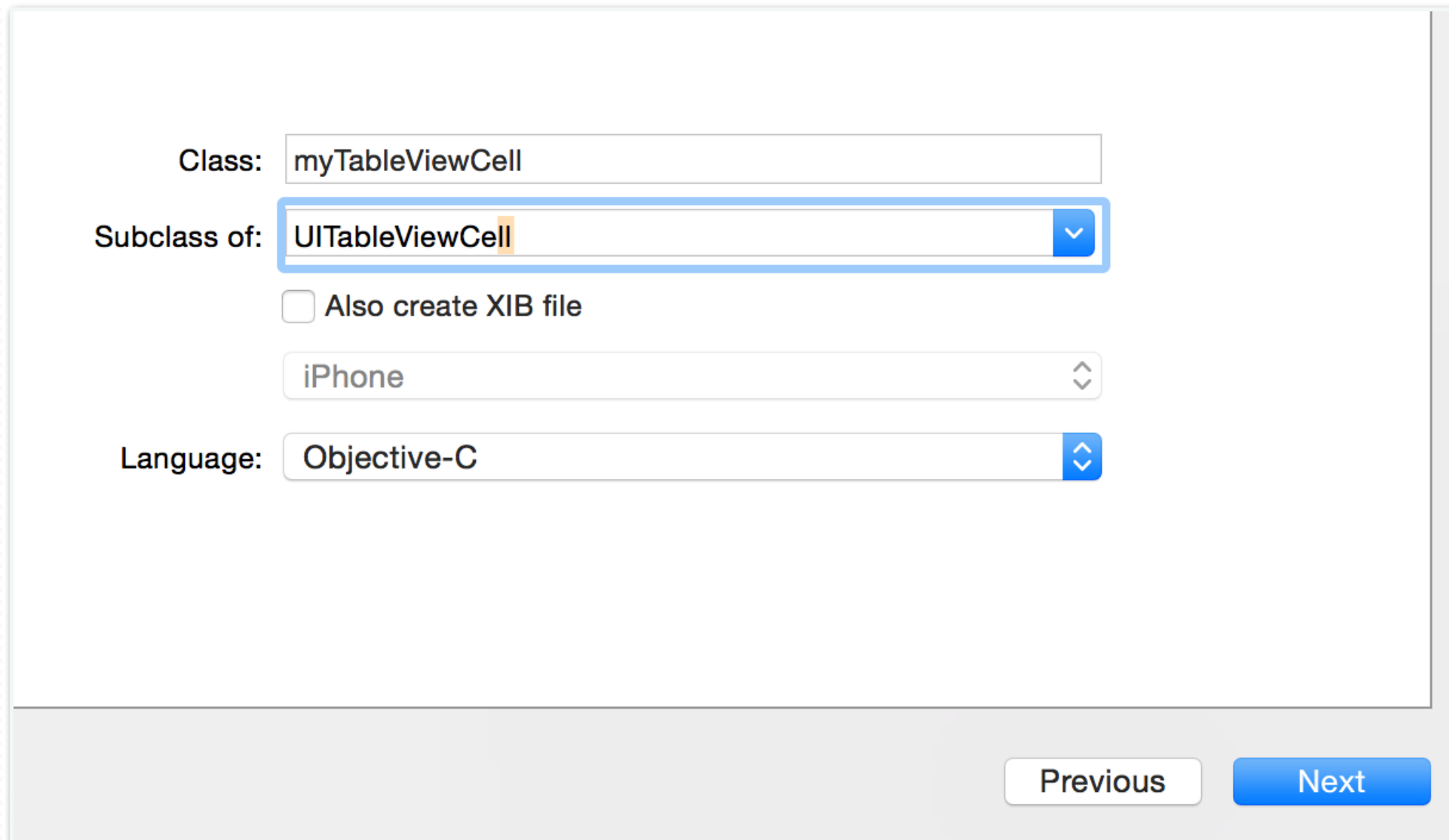
Custom Table View Cell

How to make a custom Cell?

- New a Class inheritance **TableViewCell**
- Define what information would show on cell
(e.g. name, user image, description)
- Design custom cell UI in storyboard
- Implement cell in DataSource function in TableViewController

Custom Table View Cell

New a Class inheritance **TableViewCell**



The image shows the 'New Class' dialog box in Xcode. It is a light gray window with a white content area and a gray footer. The 'Class' field is a text box containing 'myTableViewCell'. The 'Subclass of:' field is a dropdown menu with 'UITableViewCell' selected and highlighted with a blue border. Below this is an unchecked checkbox labeled 'Also create XIB file'. The next field is a device selector showing 'iPhone'. The 'Language' field is a dropdown menu showing 'Objective-C'. At the bottom right, there are two buttons: 'Previous' (disabled, light gray) and 'Next' (active, blue).

Class: myTableViewCell

Subclass of: UITableViewCell

☐ Also create XIB file

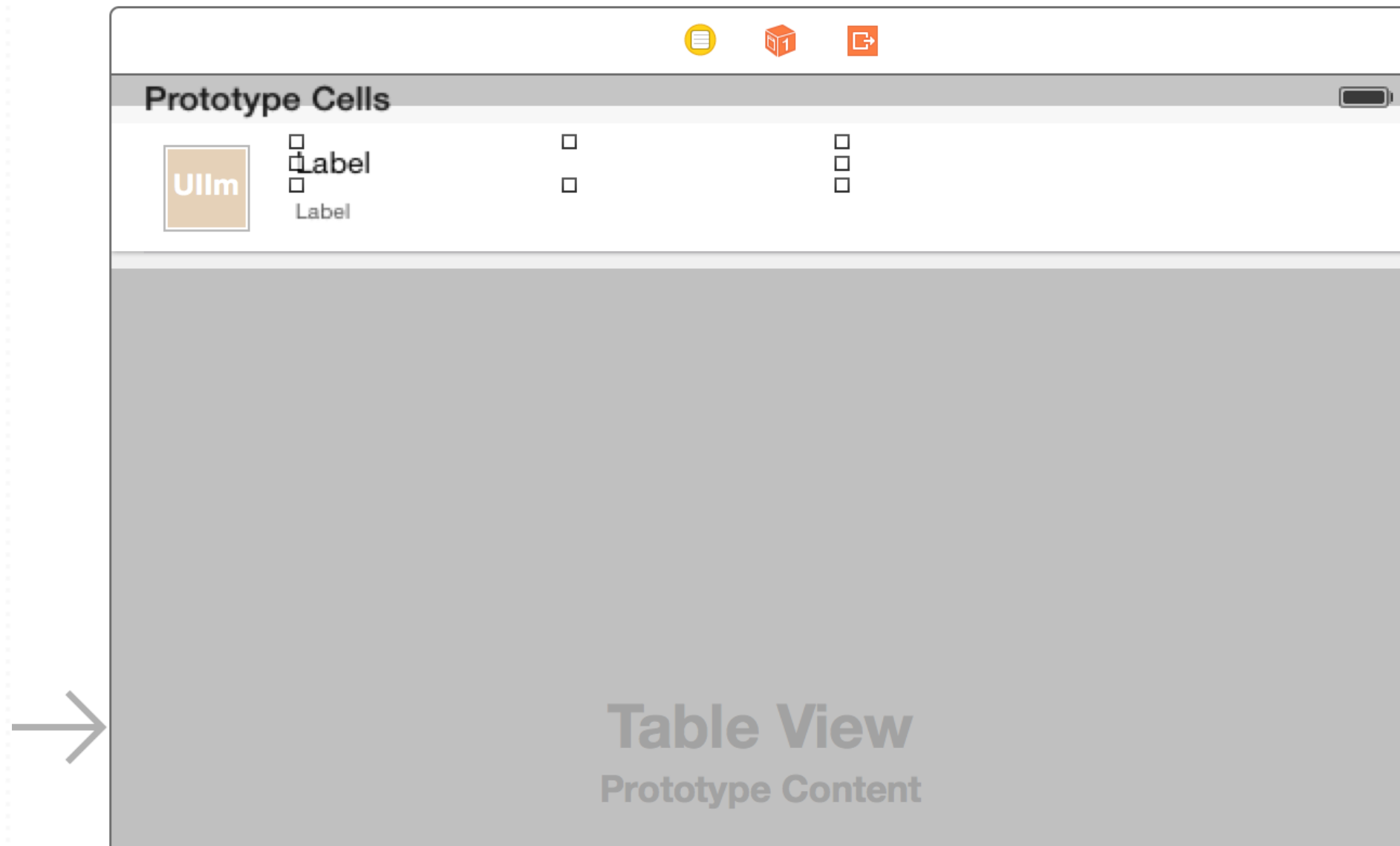
iPhone

Language: Objective-C

Previous Next

Custom Table View Cell

- Define what information would show on cell
(e.g. name, user image, description)
- Design custom cell UI in storyboard

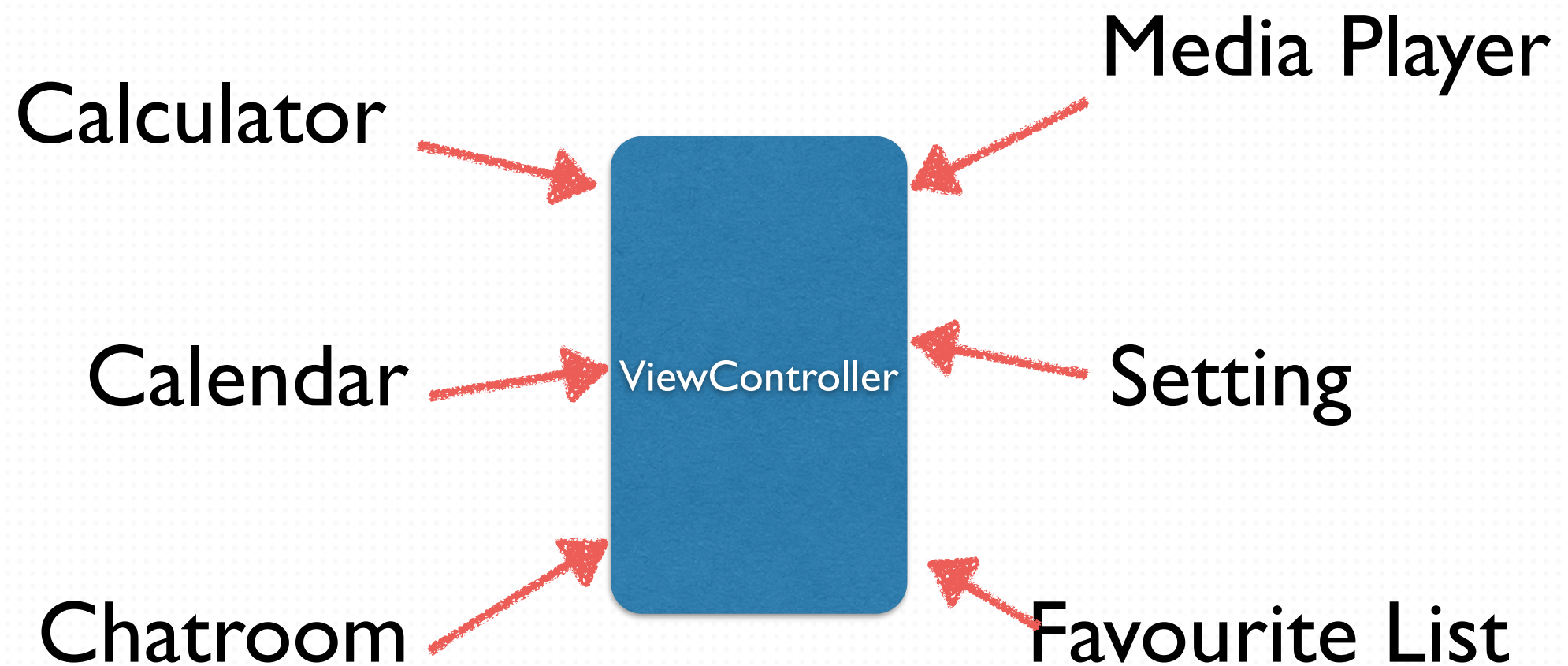


Navigation Controller

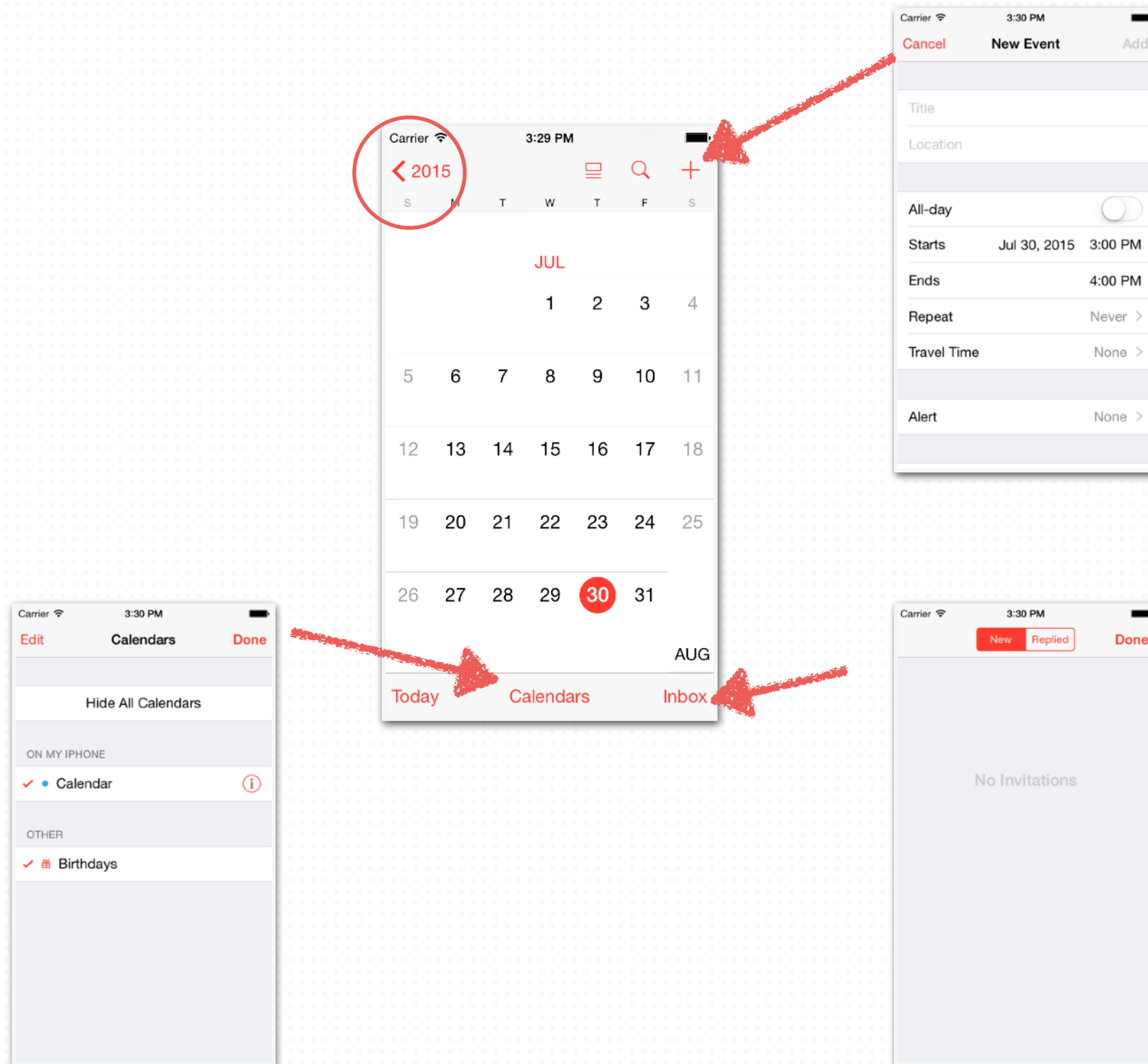
Demo

Navigation Controller

- Don't use only “ONE” Controller in your app



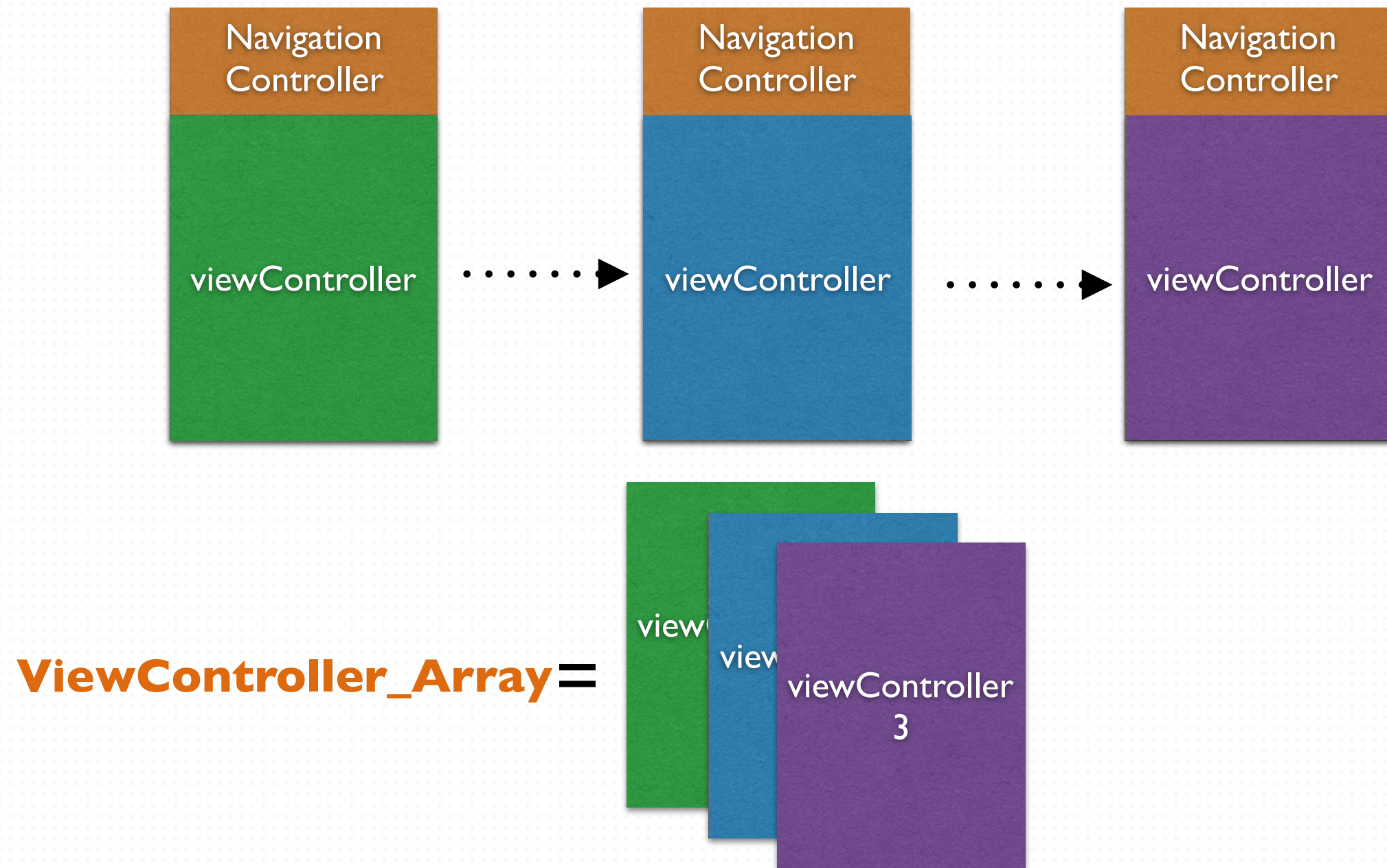
Navigation Controller



Navigation Controller

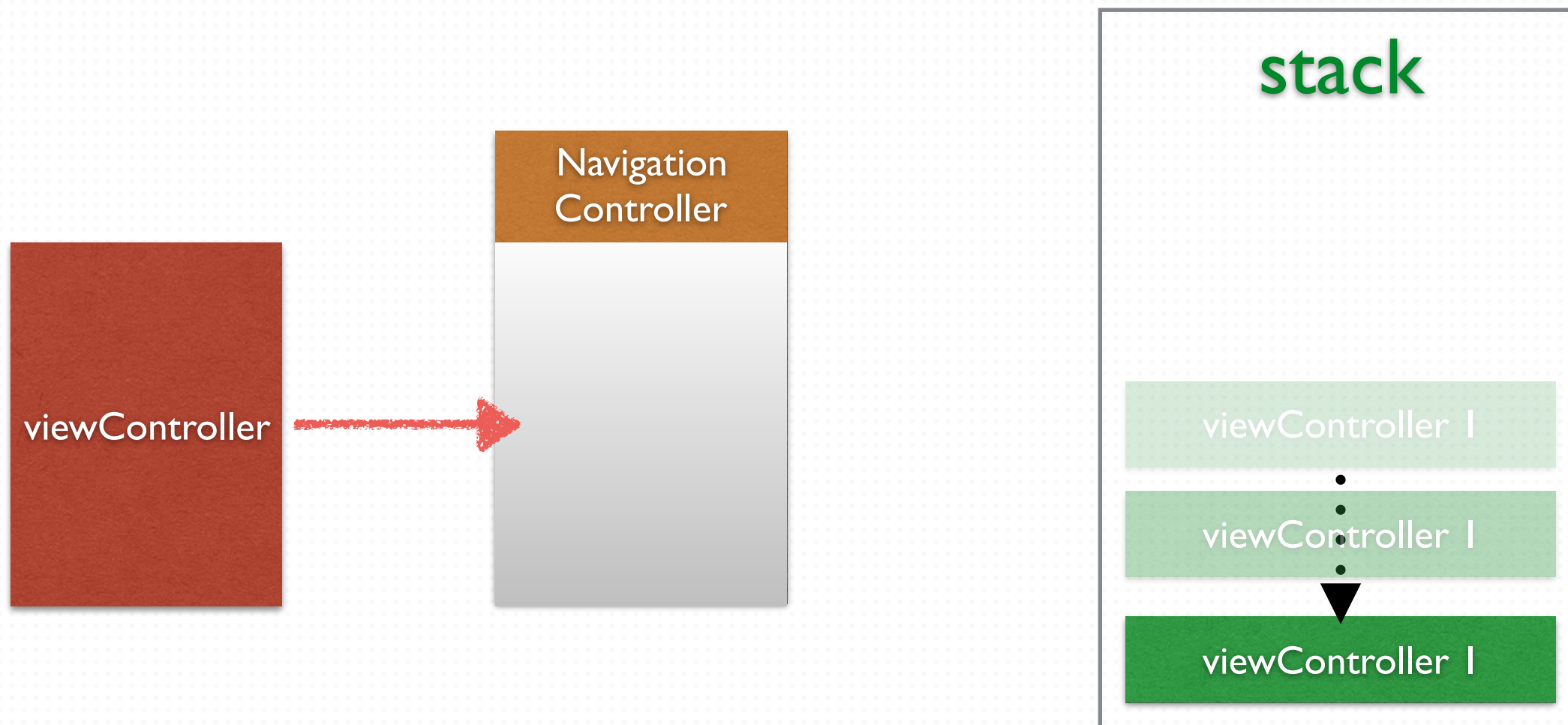


Navigation Controller



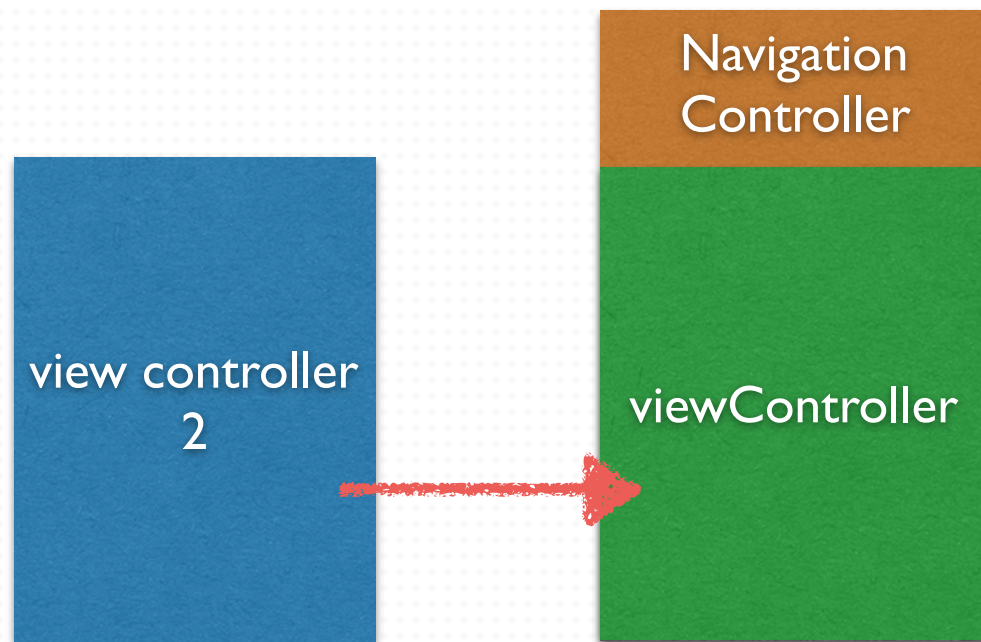
Navigation Controller Manages the navigation of hierarchical content

Navigation Controller

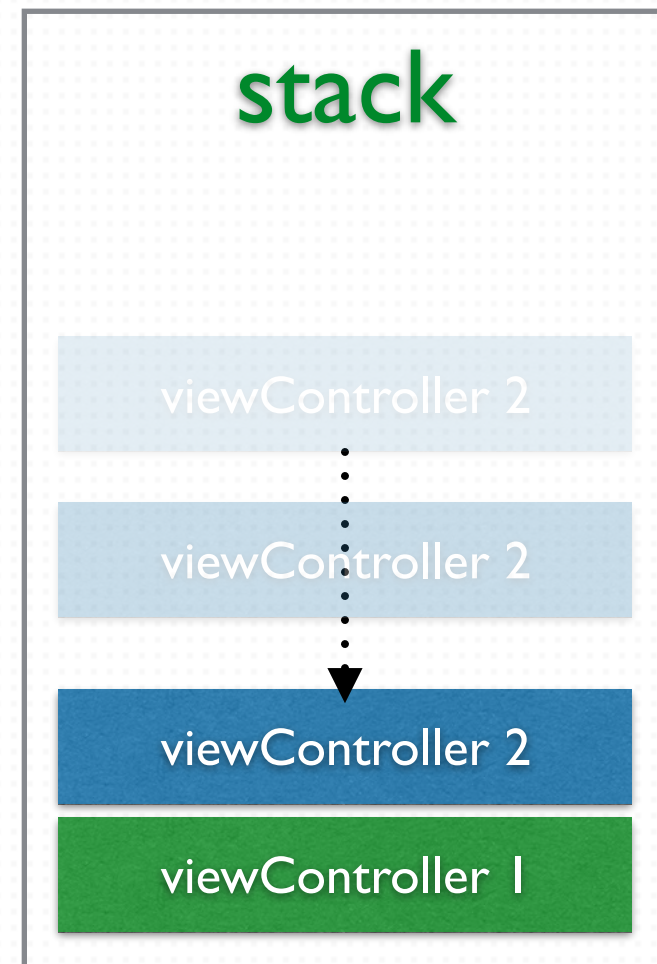


There is at least one `ViewController` in `Navigation Controller` -
RootViewController

Navigation Controller

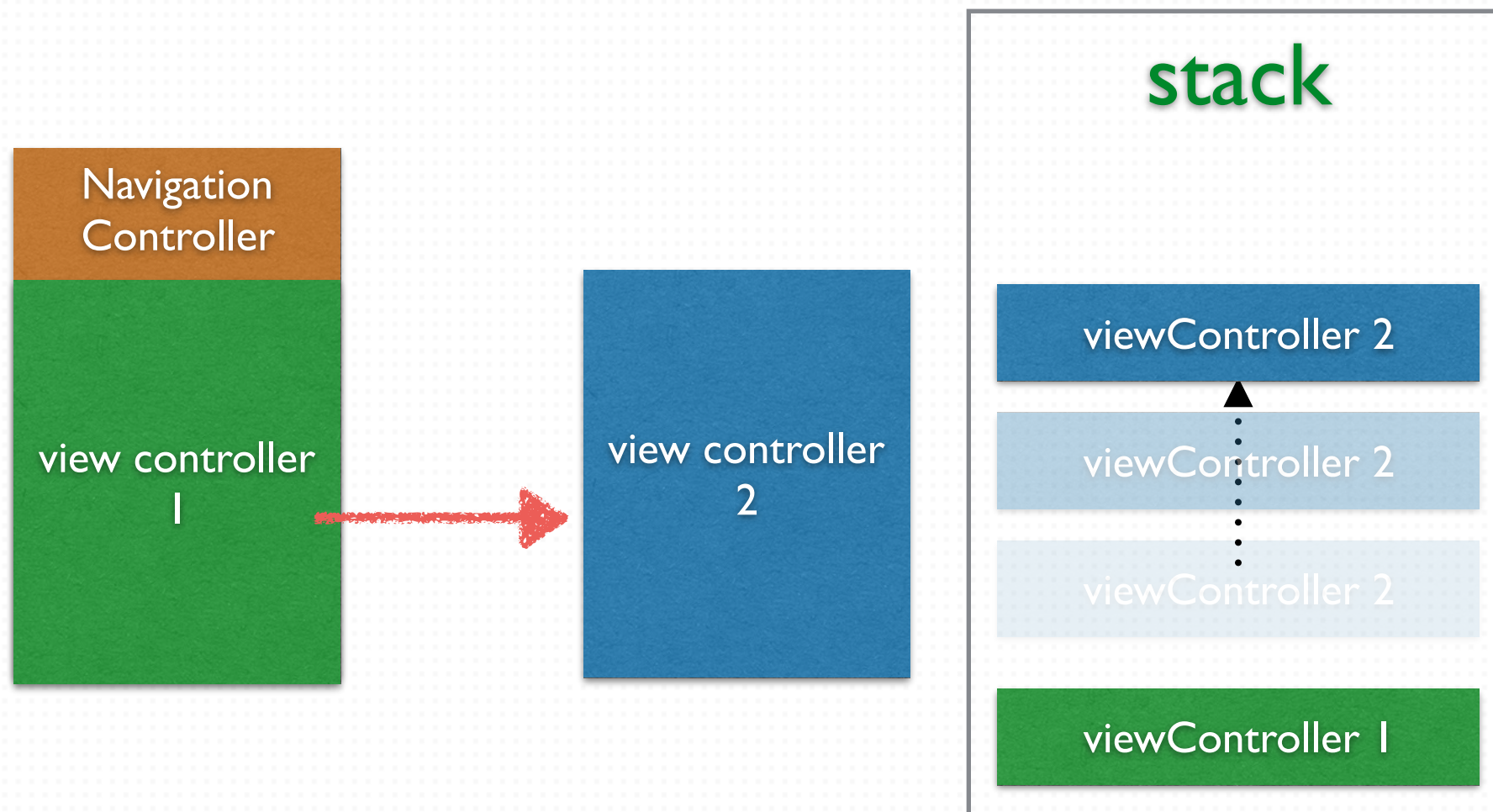


Action: **Push**



Transit to view controller 2

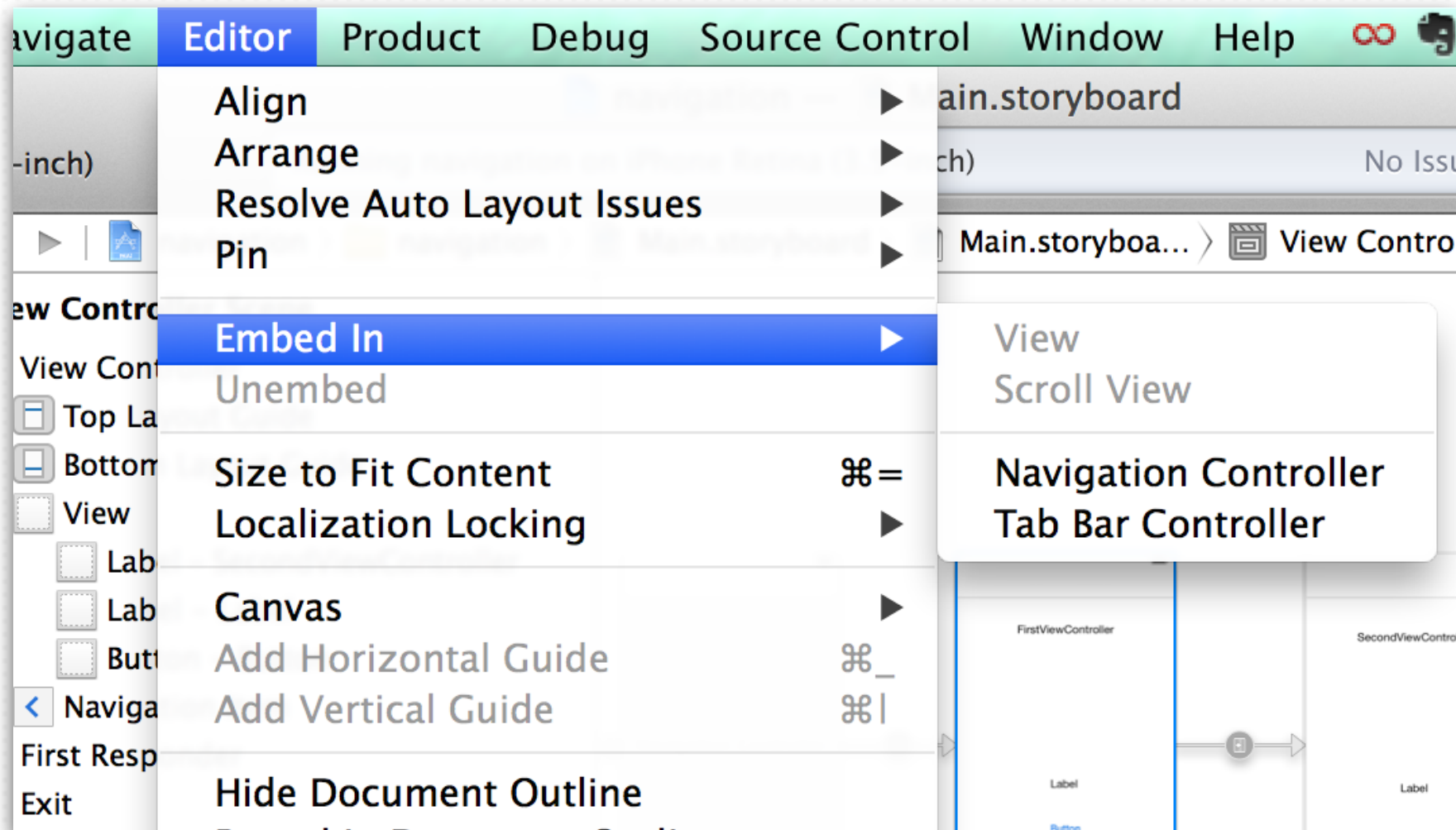
Navigation Controller



Action: **Pop**

Transit view controller 2 to view controller 1

Navigation Controller

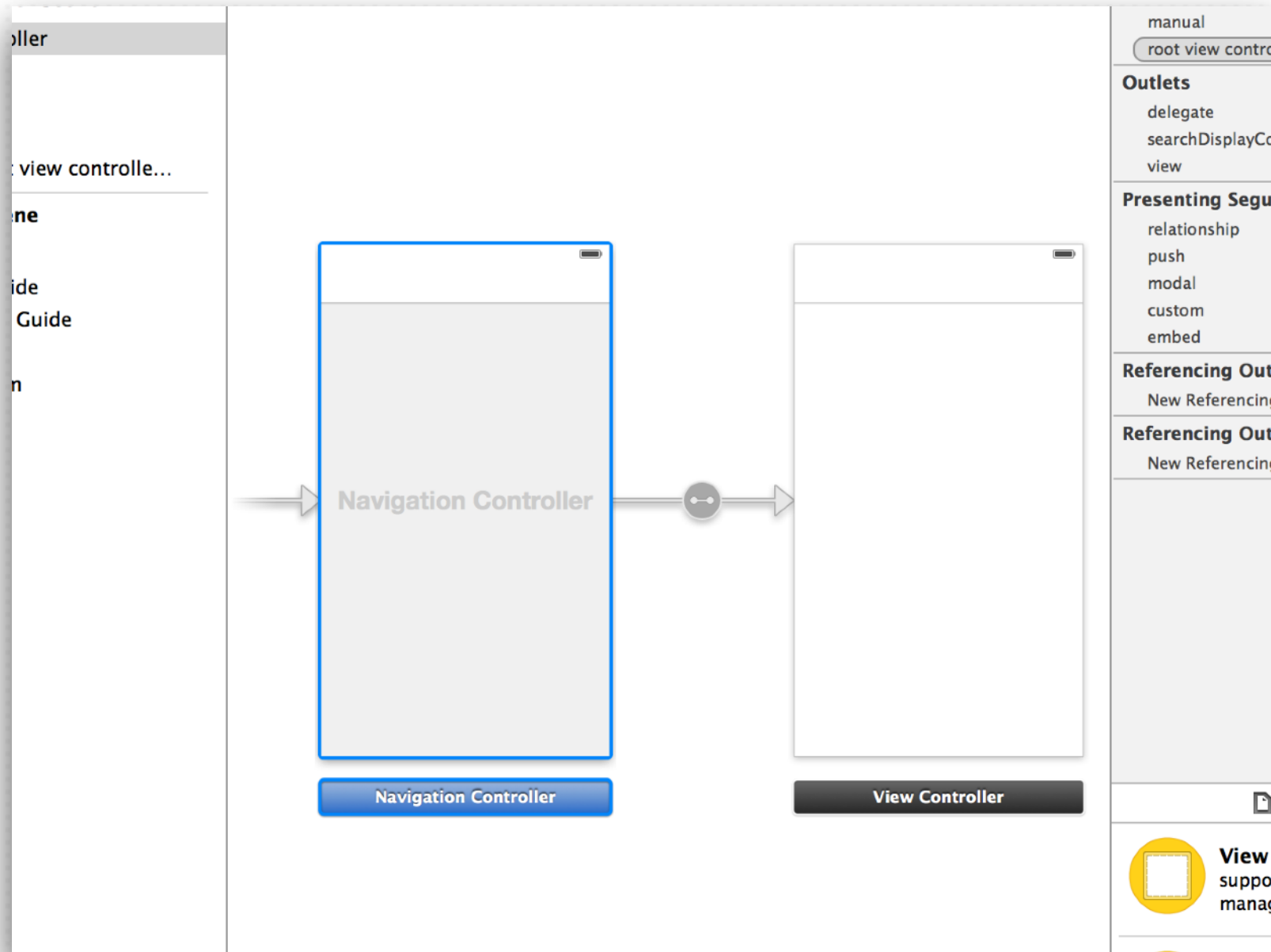


Embed a navigation Controller in storyboard

✓select View Controller

✓Editor -> Embed in -> Navigation Controller

Navigation Controller

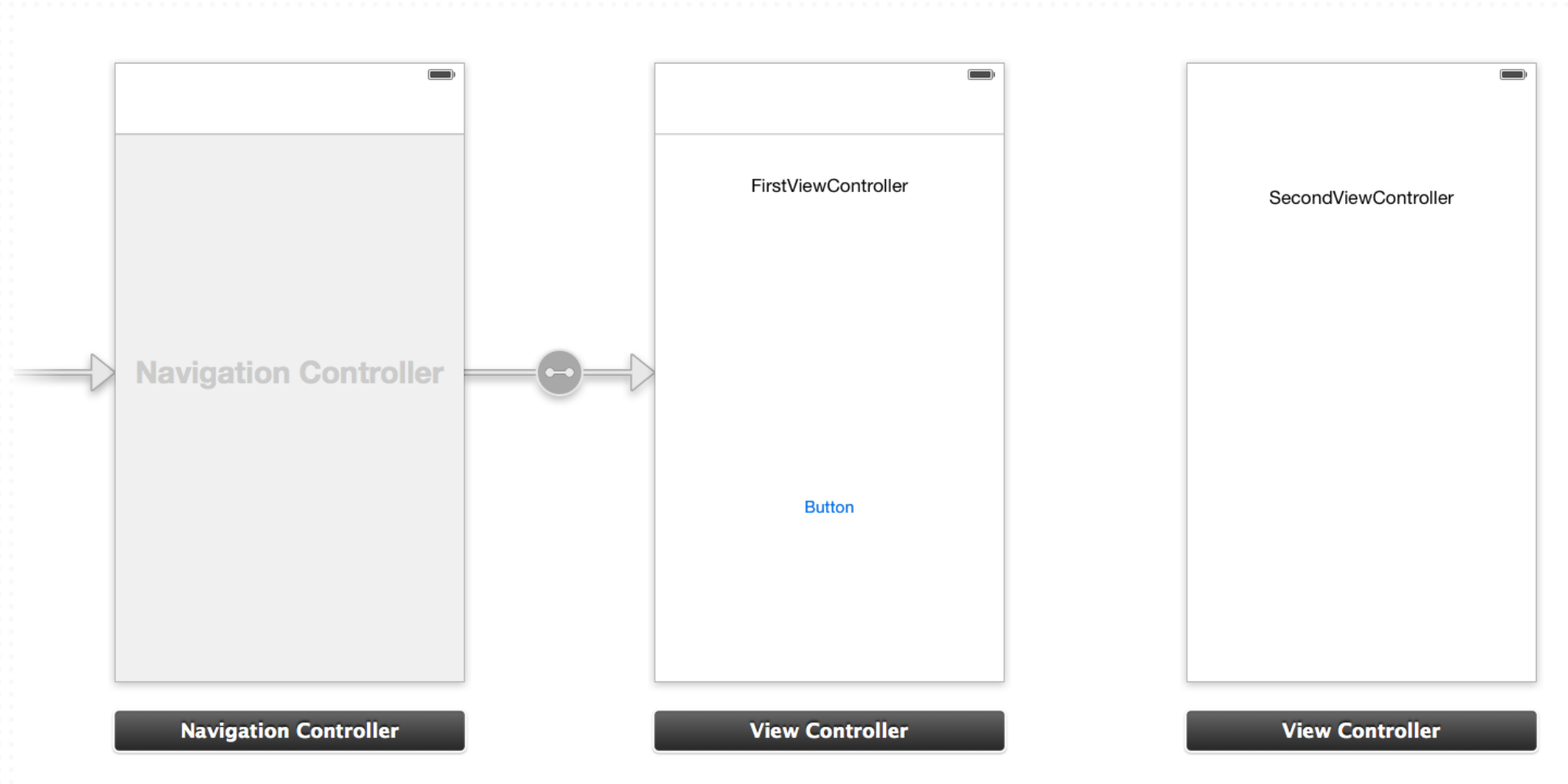


Navigation Controller is put in front of View Controller by default

Navigation Controller

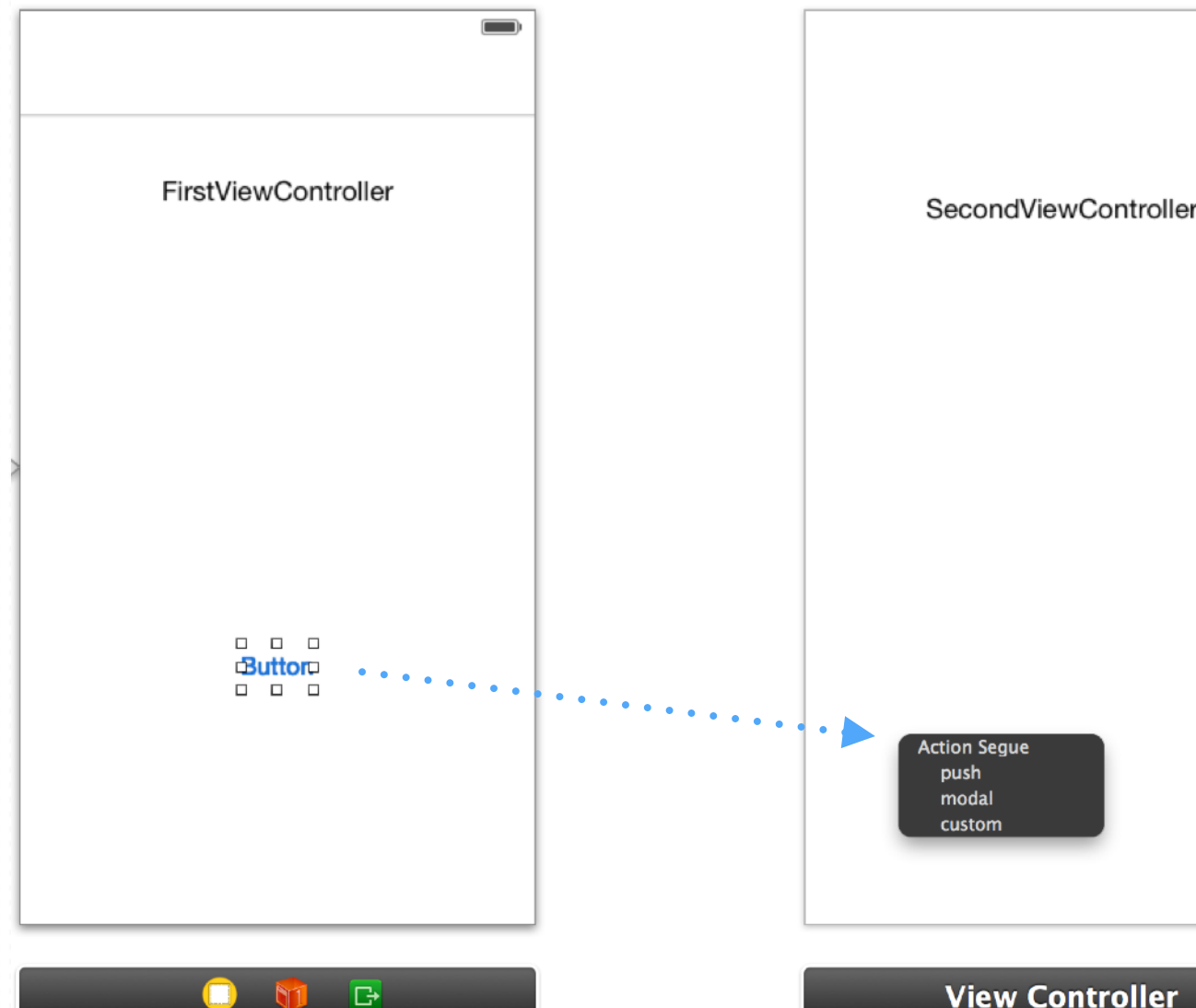
- First View Controller (View Controller) transit to Second View Controller(View Controller)
 - ✓ Create a button
 - ✓ Create a new View Controller (Give a label name Second View Controller)

Navigation Controller



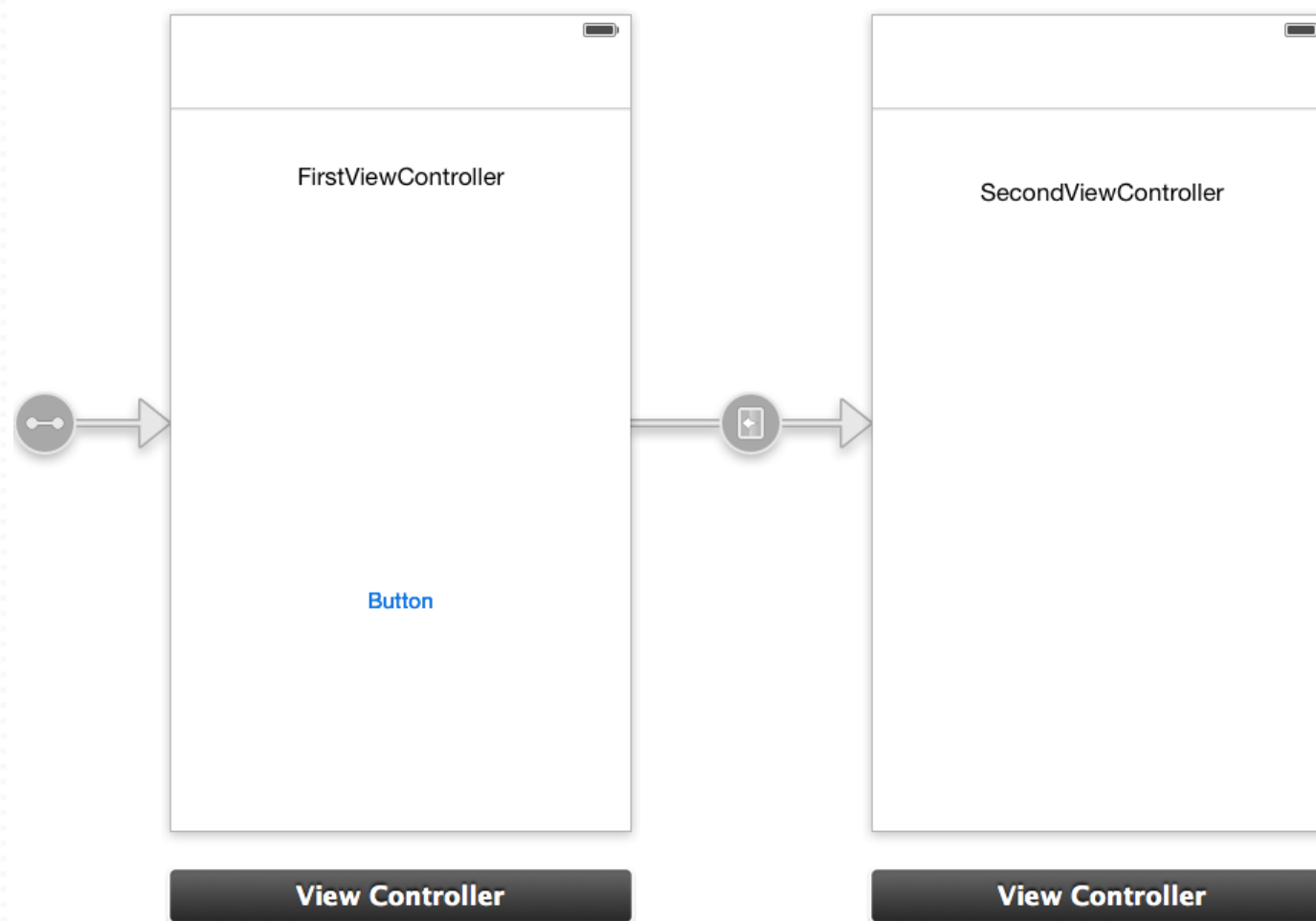
Create a new view controller

Navigation Controller



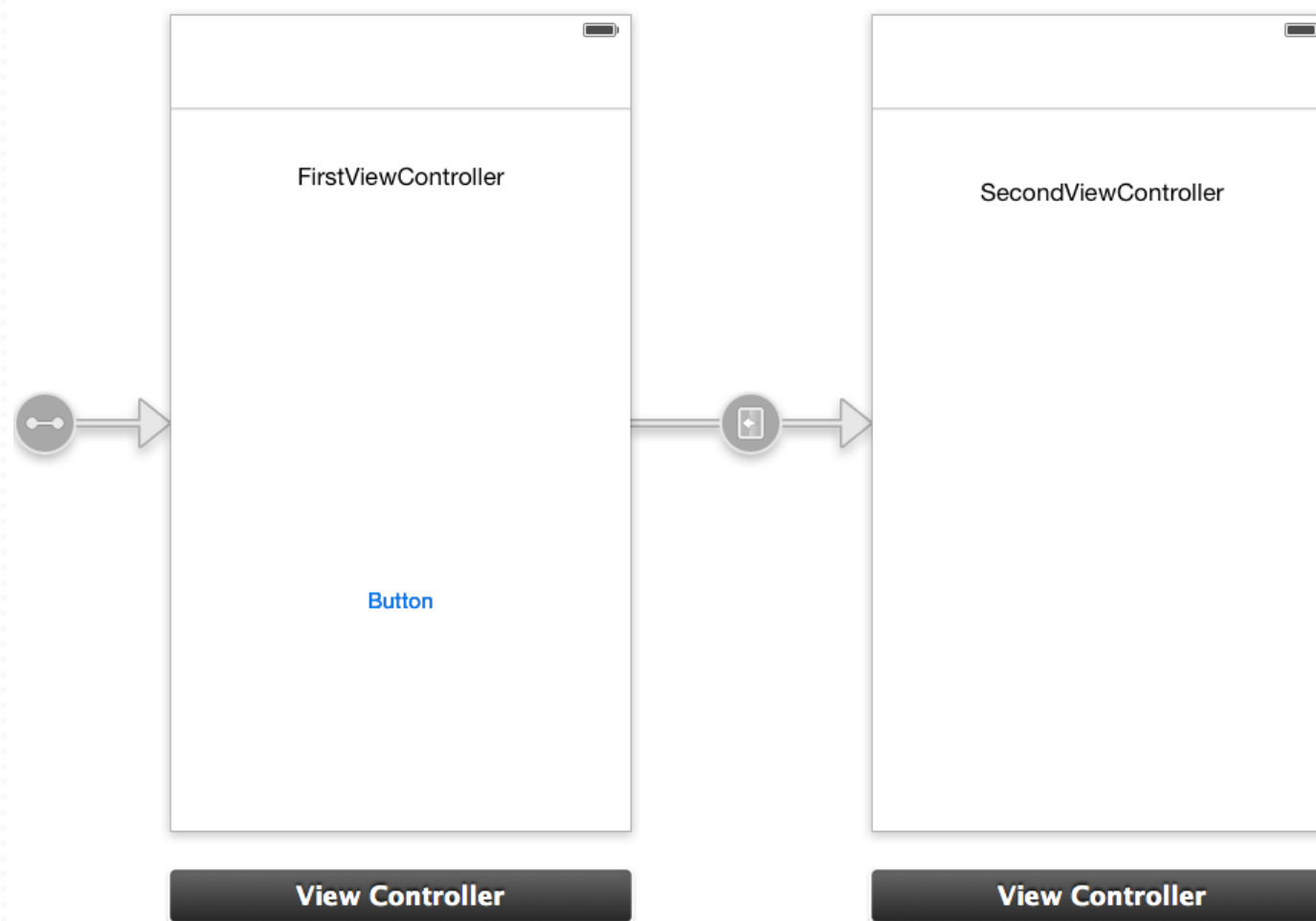
Drag (press control + click on button + drag) a button to Second View Controller

Navigation Controller



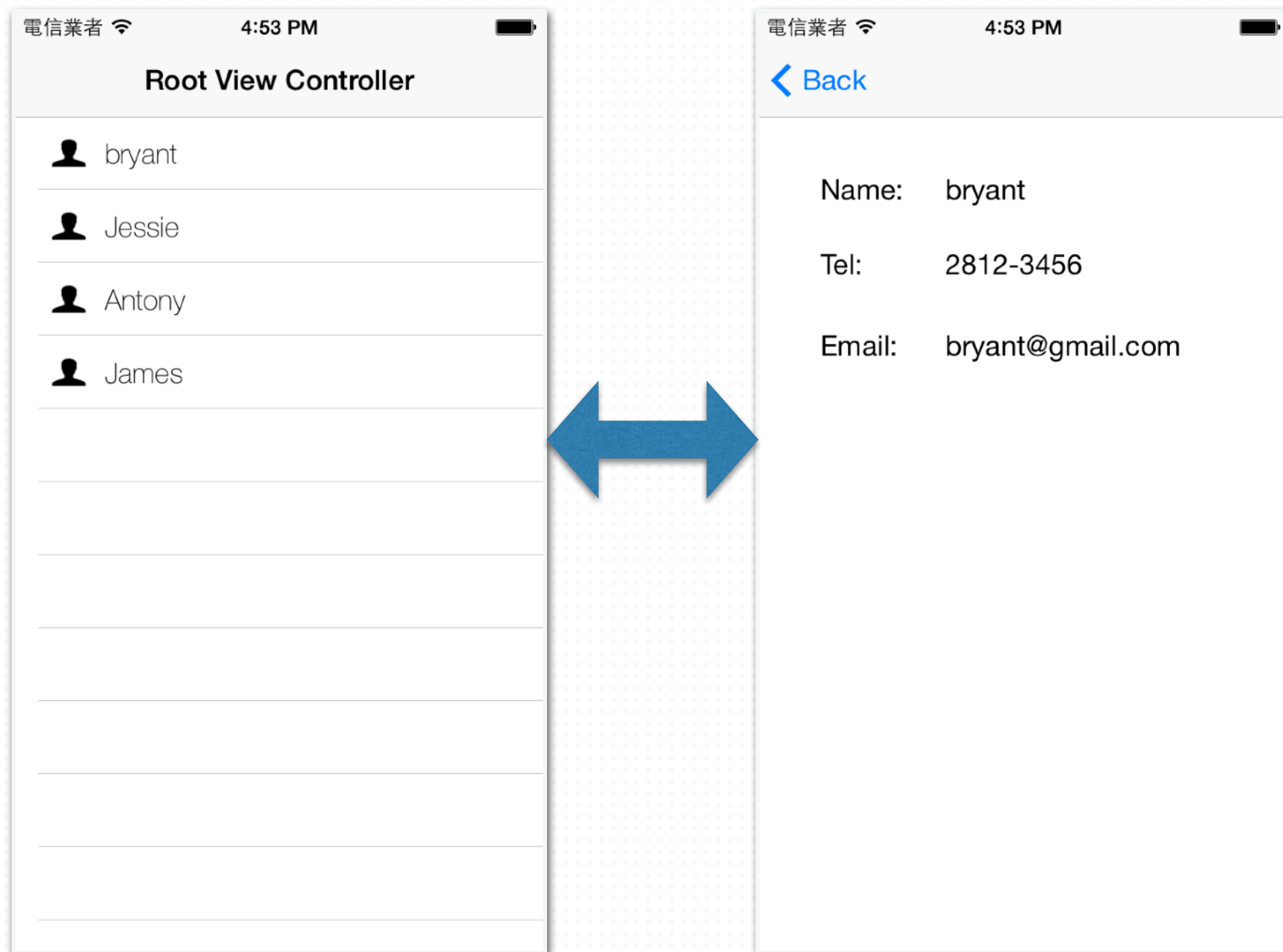
create a transition relationship between First View Controller and
Second View Controller

Navigation Controller



create a transition relationship between First View Controller and
Second View Controller

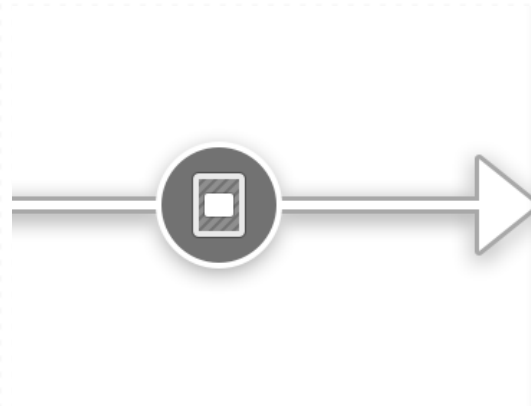
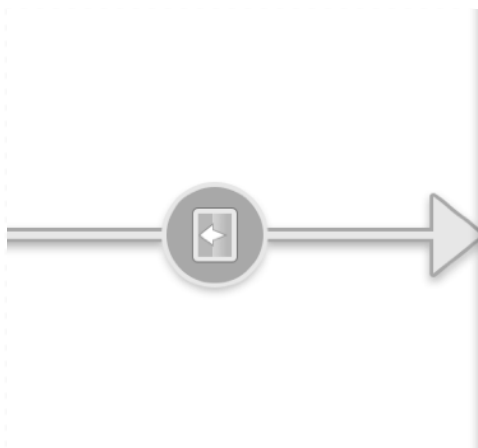
Navigation Controller



Cooperates with table view controller

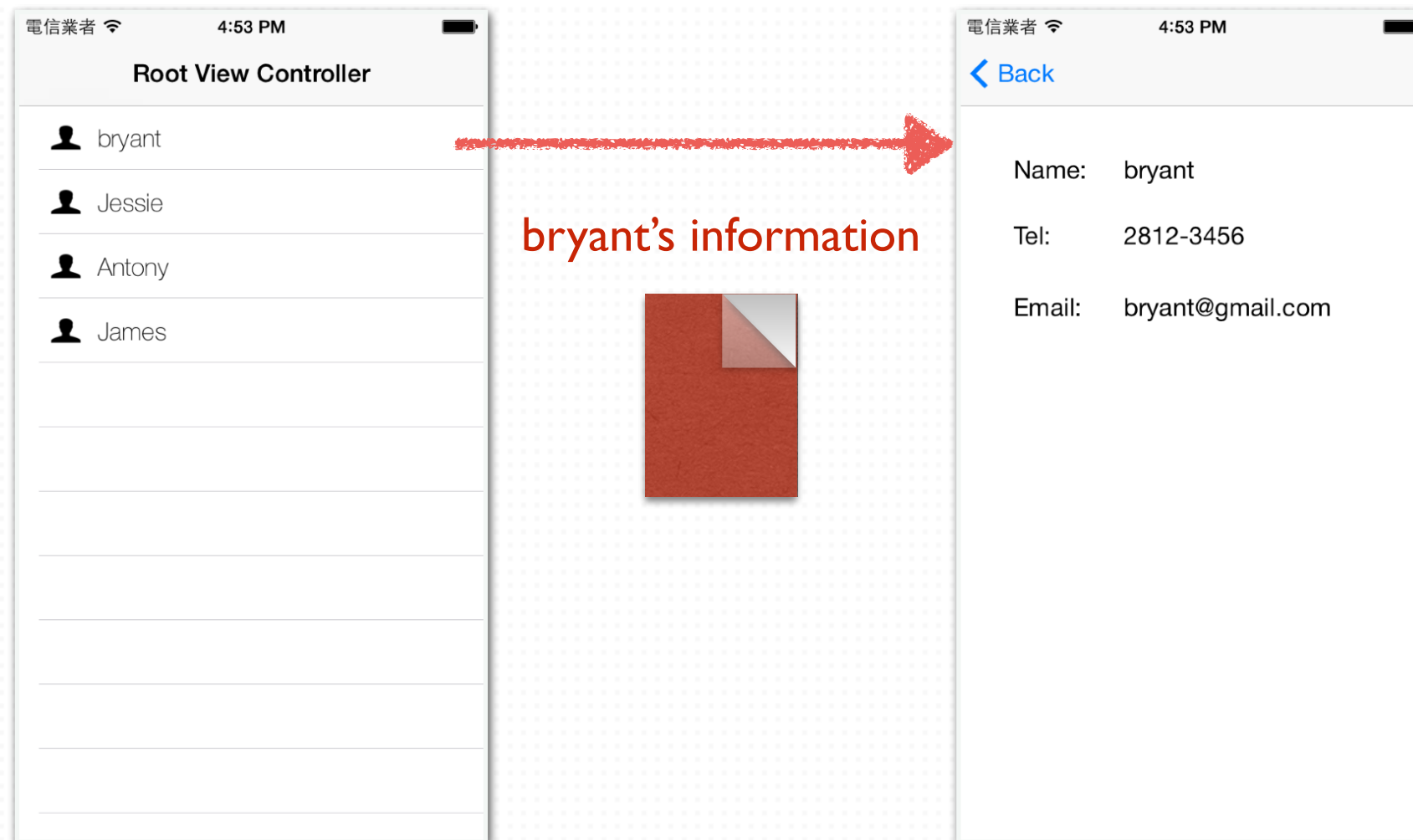
Navigation Controller

- Connection between to view controller: **Segue**
 - ✓ Push
 - ✓ Modal
 - ✓ Custom

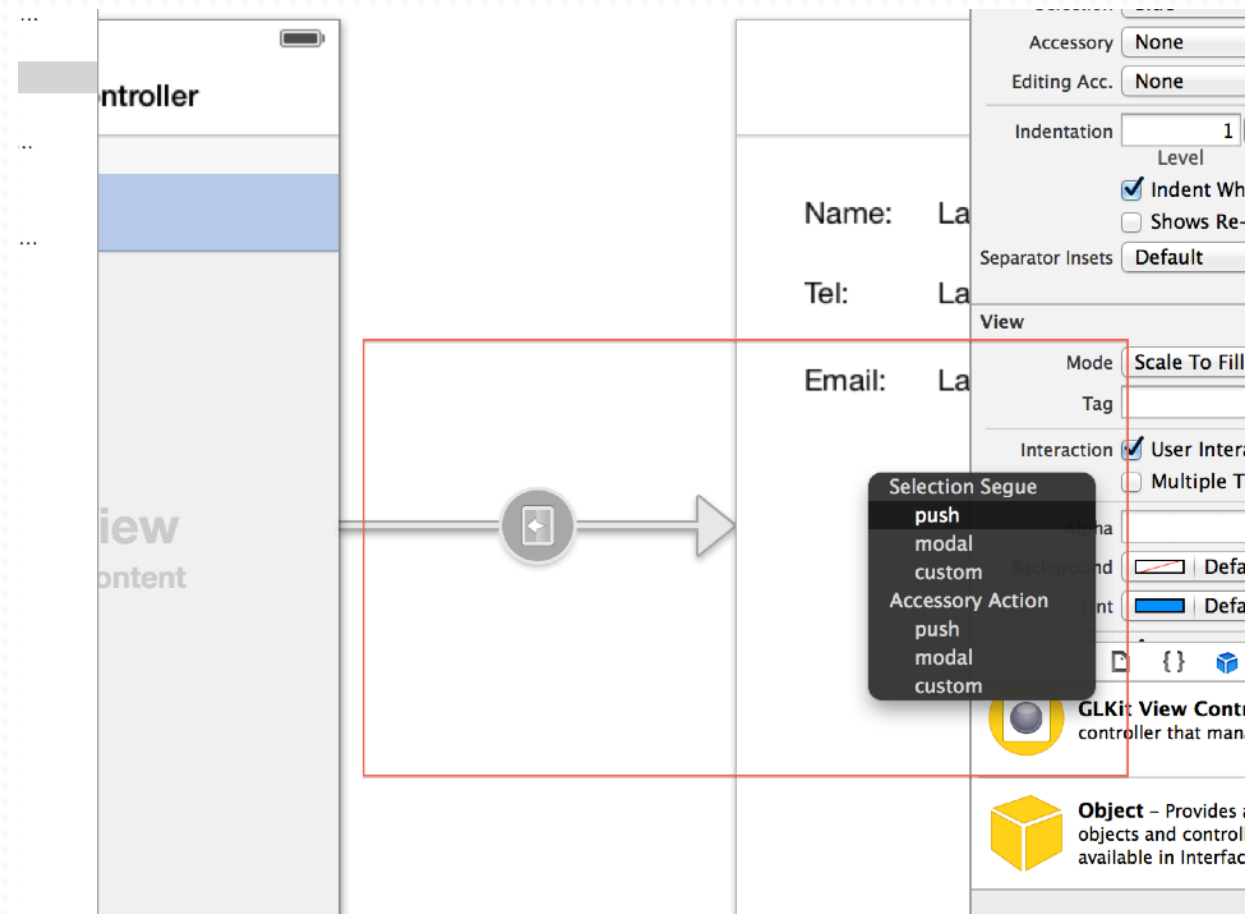


Navigation Controller

- Passing data from first view controller to second view controller by using segue

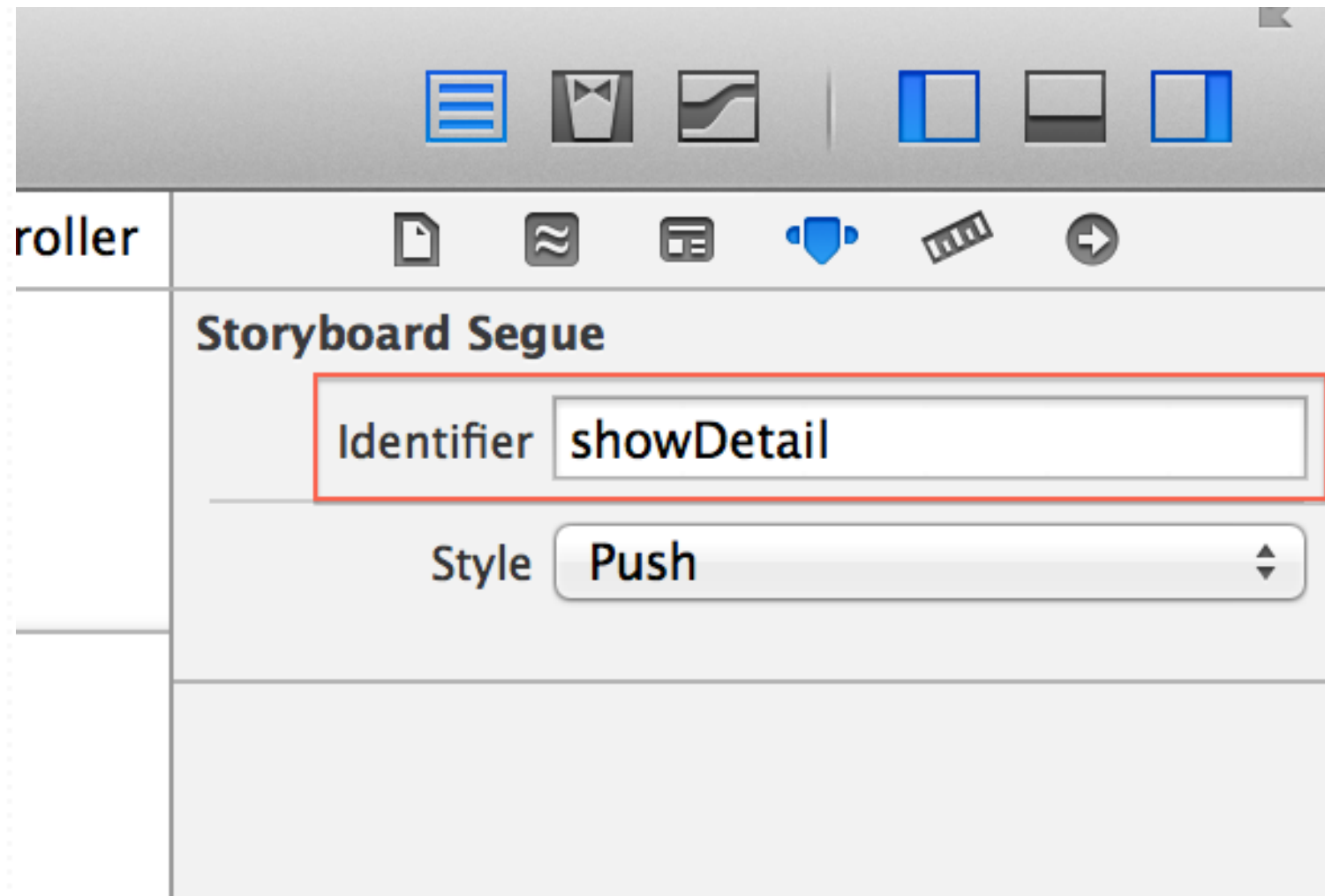


Navigation Controller



- Construct connection between two view controller

Navigation Controller



- To control segue you have to assign an id to segue identifier (unique)

Navigation Controller

```
-(void)prepareForSegue:(UIStoryboardSegue *)segue sender:(id)sender {  
    if ([segue.identifier isEqualToString:@"showDetail"]) {  
        UIViewController *destViewController = segue.destinationViewController;  
        destViewController.property = value;  
    }  
}
```

- Tell segue to transmit data to second view controller

View Lifecycle

View Lifecycle

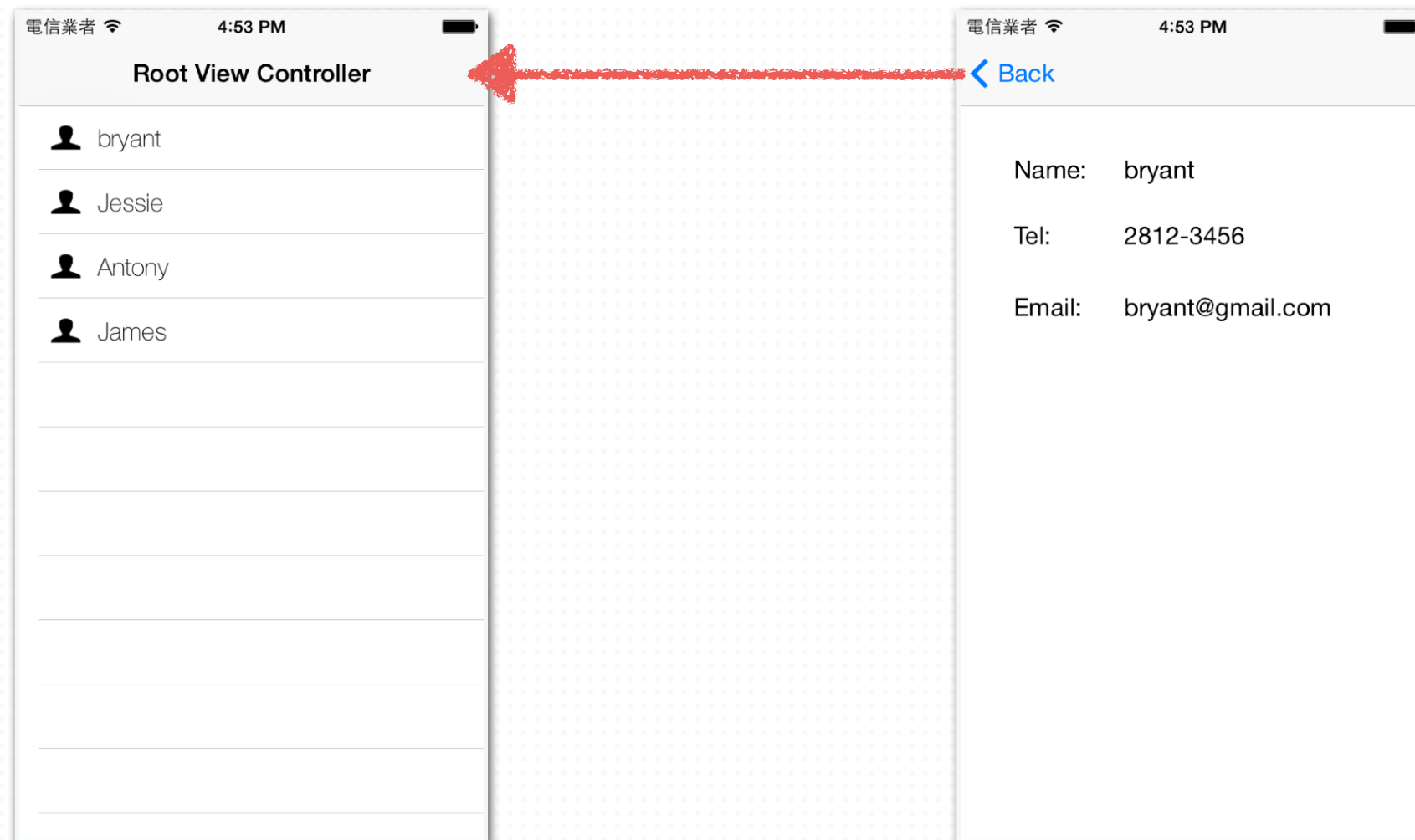
- viewDidLoad
- viewDidUnload
- viewWillAppear:
- viewWillDisappear:



Handle by **ViewController**

Example

- What view cycle would process after pop from children view?

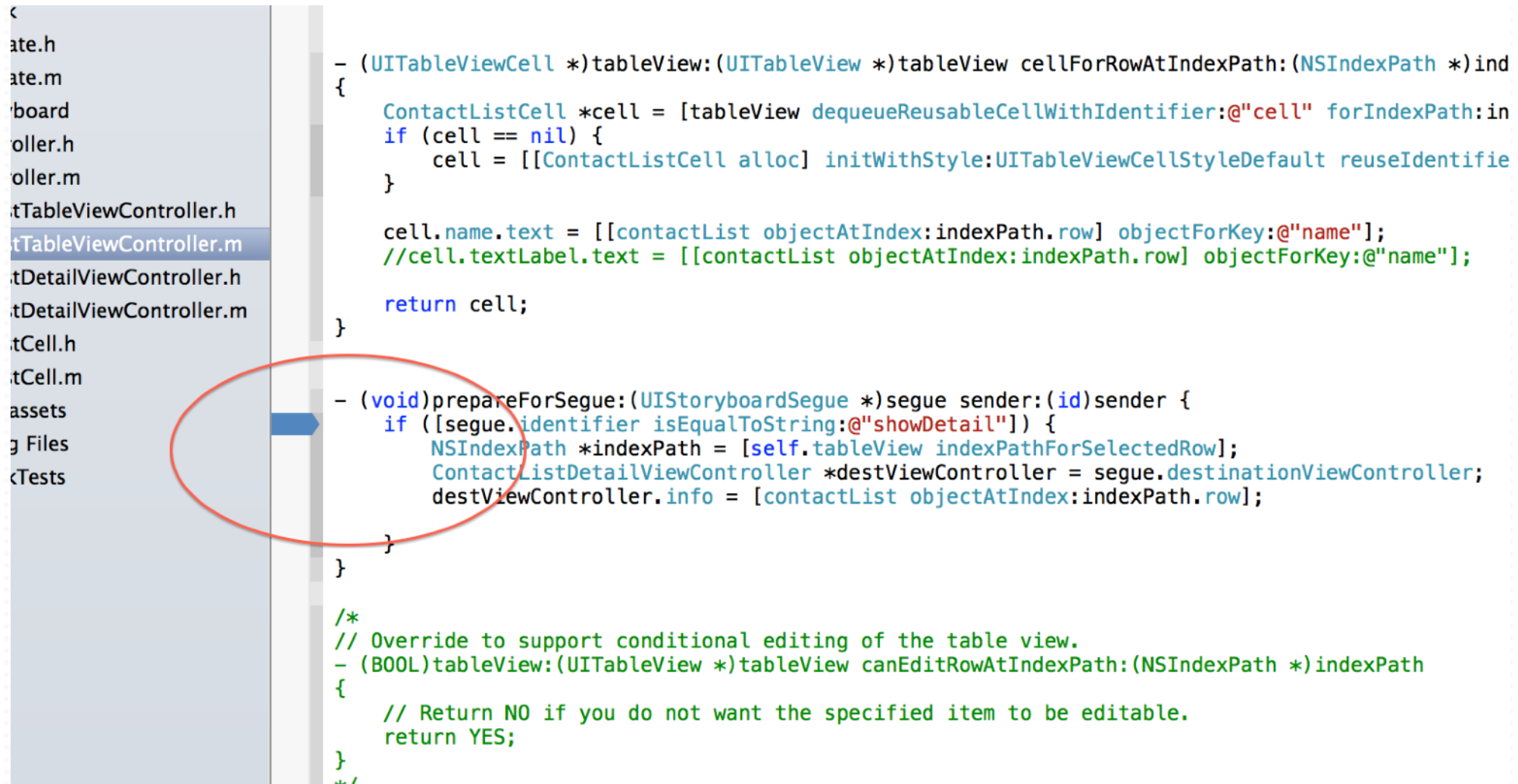


Debug mode

Debug mode

- The way to find the bug more effectively
 - ✓ Process check
 - ✓ context check
 - ✓ logic check

Debug mode



Enable debug mode: click the space on the left of code line

Debug mode

```
dispatch-manager  
  
- (UITableViewCell *)cell {  
    cell = [[ContactListCell alloc] initWithStyle:UITableViewCellStyleDefault reuseIdentifier:@"cell"];  
  
    cell.name.text = [[contactList objectAtIndex:indexPath.row] objectForKey:@"name"];  
    //cell.textLabel.text = [[contactList objectAtIndex:indexPath.row] objectForKey:@"name"];  
  
    return cell;  
}  
  
- (void)prepareForSegue:(UIStoryboardSegue *)segue sender:(id)sender {  
    if ([segue.identifier isEqualToString:@"showDetail"]) {  
        NSIndexPath *indexPath = [self.tableView indexPathForSelectedRow];  
        ContactListDetailViewController *destViewController = segue.destinationViewController;  
        destViewController.info = [contactList objectAtIndex:indexPath.row];  
    }  
}  
  
/*  
// Override to support conditional editing of the table view.  
- (BOOL)tableView:(UITableView *)tableView canEditRowAtIndexPath:(NSIndexPath *)indexPath  
{  
    // Return NO if you do not want the specified item to be editable.  
    return YES;  
}
```

Thread 1: breakpoint 1.1



In debug mode

Homework

- A Contact book with different cell style