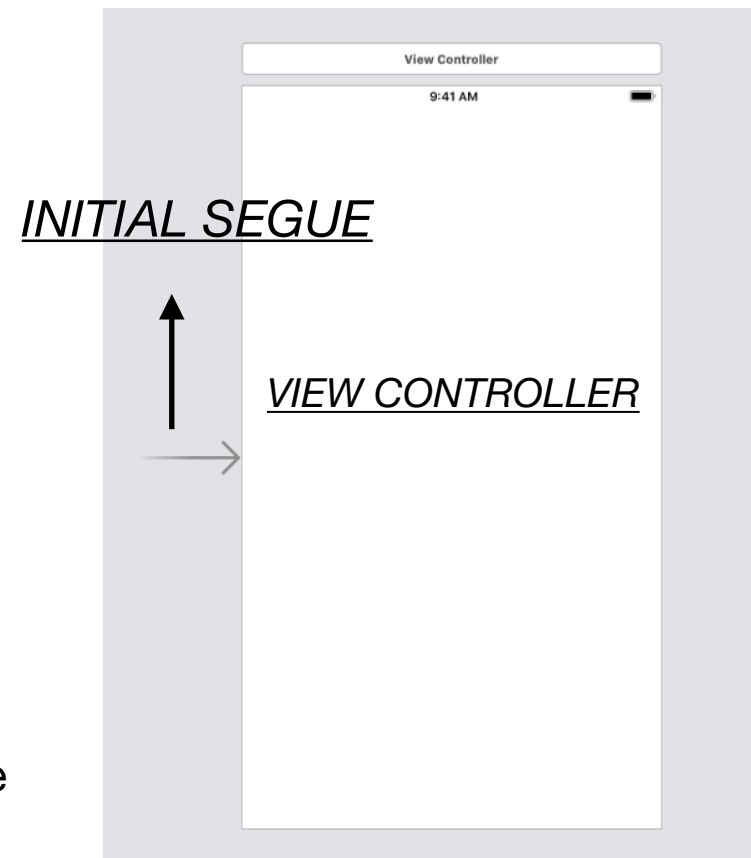


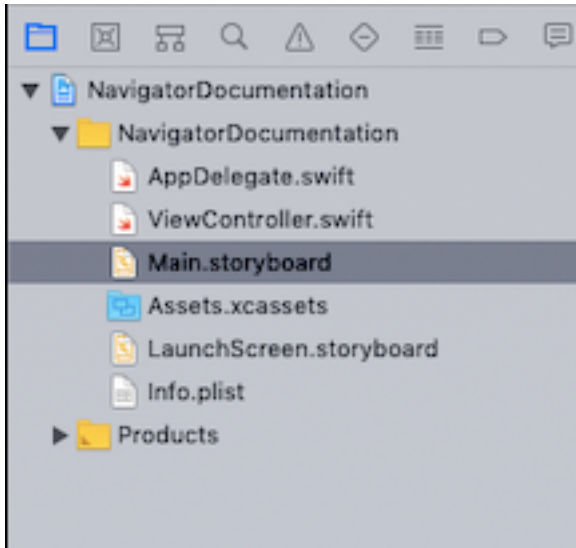
NAVIGATION USING "NAVIGATION CONTROLLER".

- This project is about implementing navigation between view controllers using "**navigation controller**"
- **View controller** is basically a display page in user interface which connects the interaction with user and underlying data, delivering its own unique view for every app content.
- When ever we create a new **single view** project a view controller created along with an **initial segue**.
- The **segue** is connection identifier between view controller which defines the flow of the app, an initial segue will be already present in the parent view controller.
- **Project navigator** is the place where the tree of the files created in the projects are available in arrangeable manner.

MAIN STORY BOARD



PROJECT NAVIGATOR

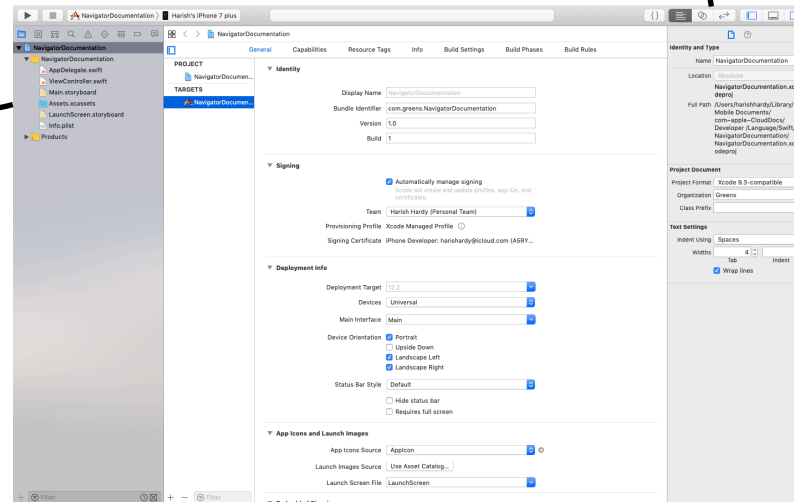
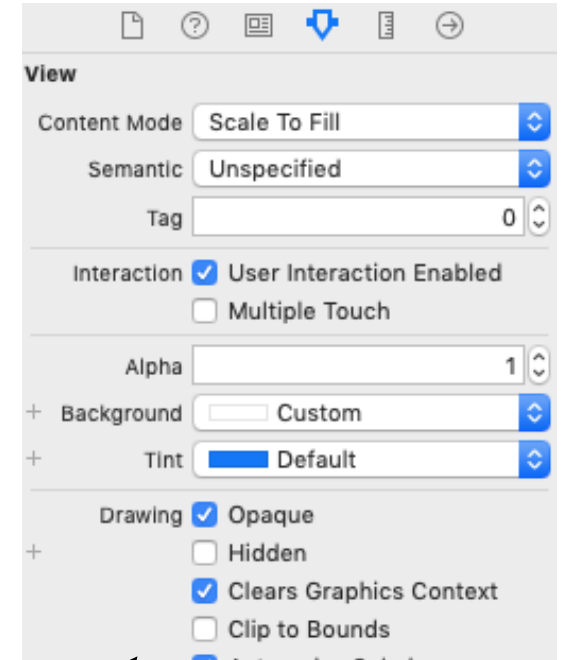


ASSISTANT EDITOR

LIBRARY

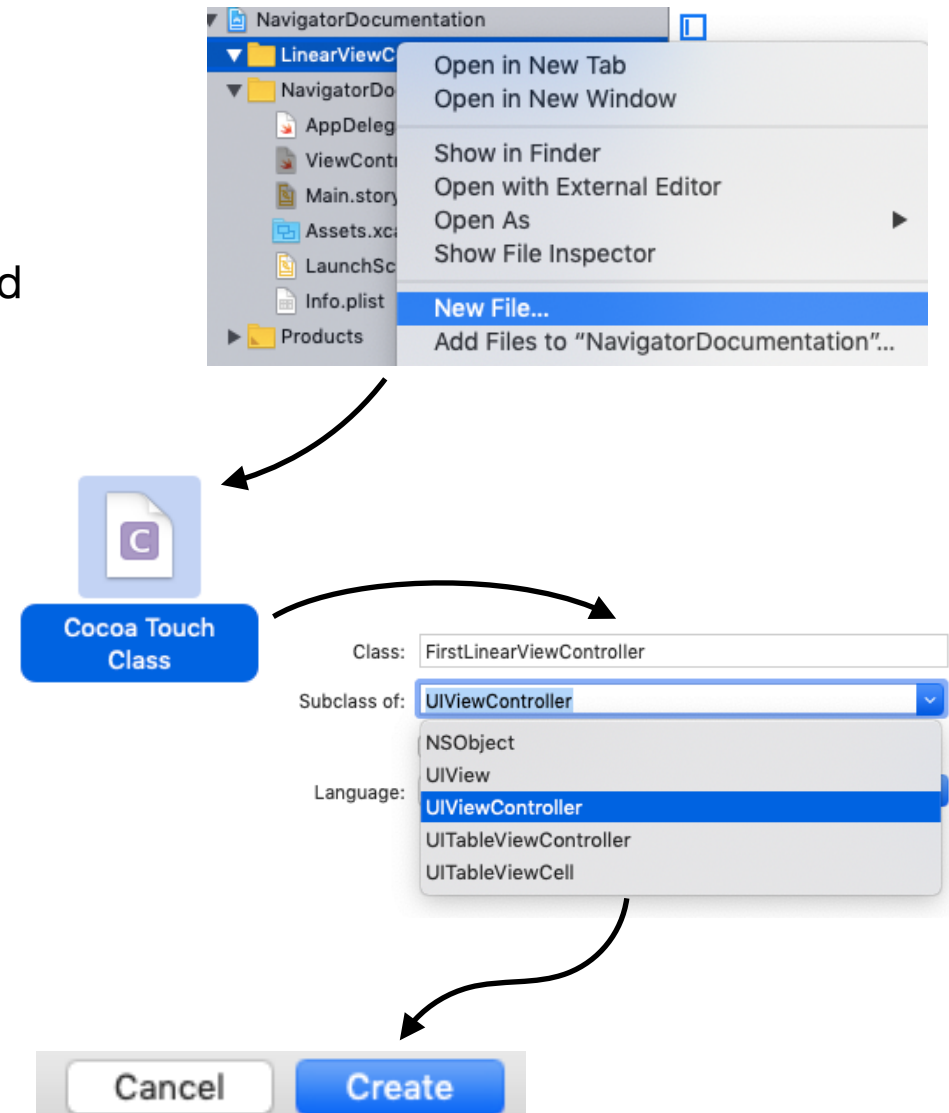


INSPECTORS

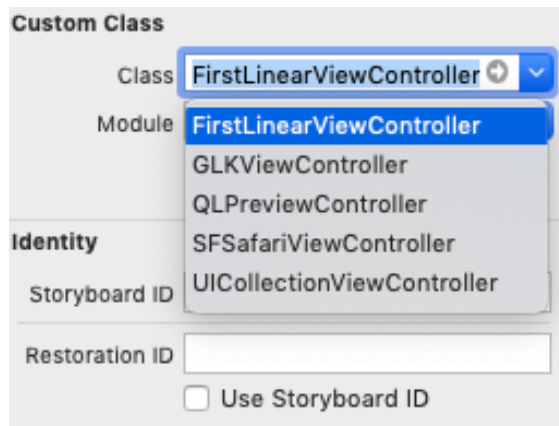
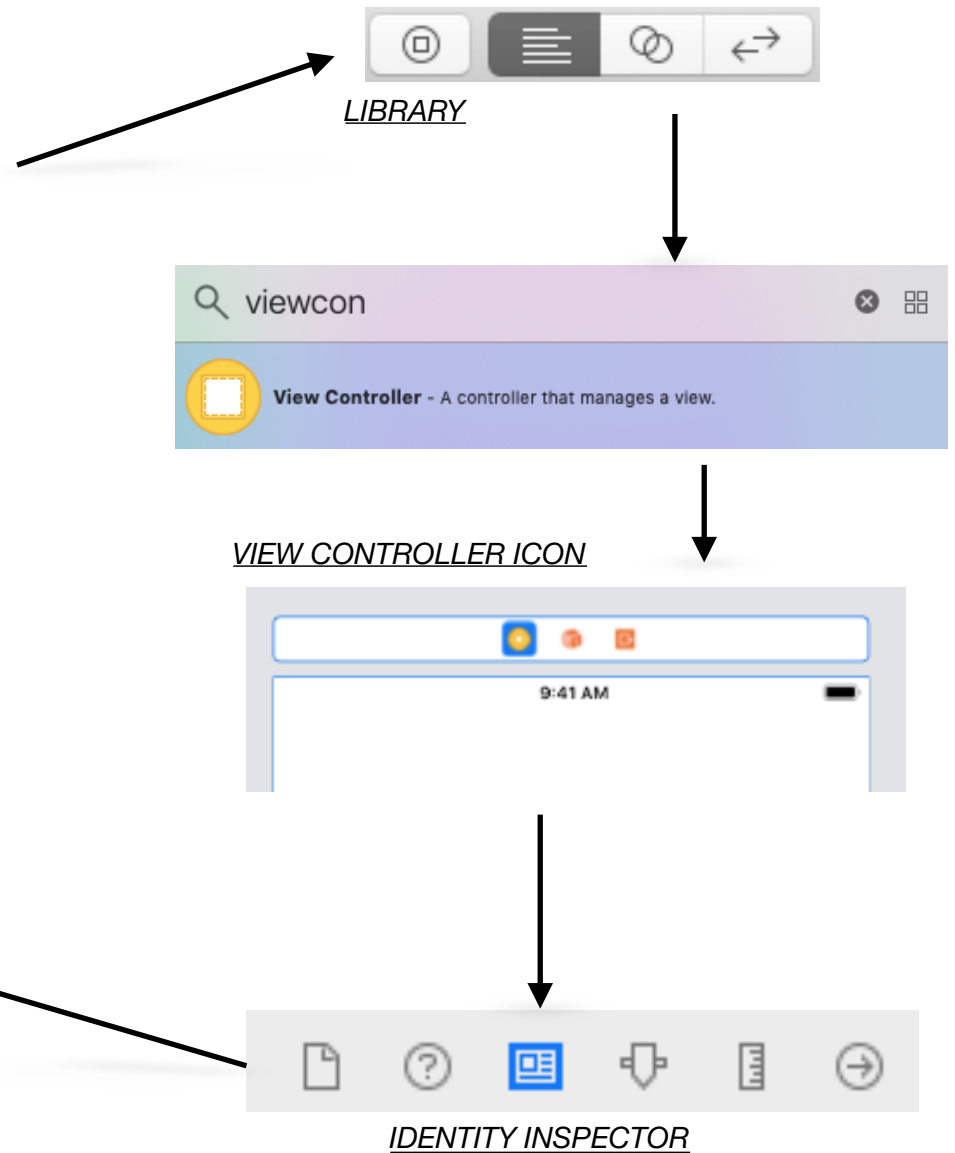


CREATE A NEW VIEW CONTROLLER

- By default a ***view controller (parent)*** will be already created in main story board.
- A new view controller in main story board should be created along with a corresponding ***[ViewController.swift]*** file in project navigator.
- Create a ***New File*** in project navigator.
- Select ***cocoa touch*** and click ok.
- Create a ***class*** name for the ***view controller***.
- Select sub class of : ***UIView controller***.
- Click ok.
- Select the location.
- Click create to create a new ***ViewController.swift*** file.

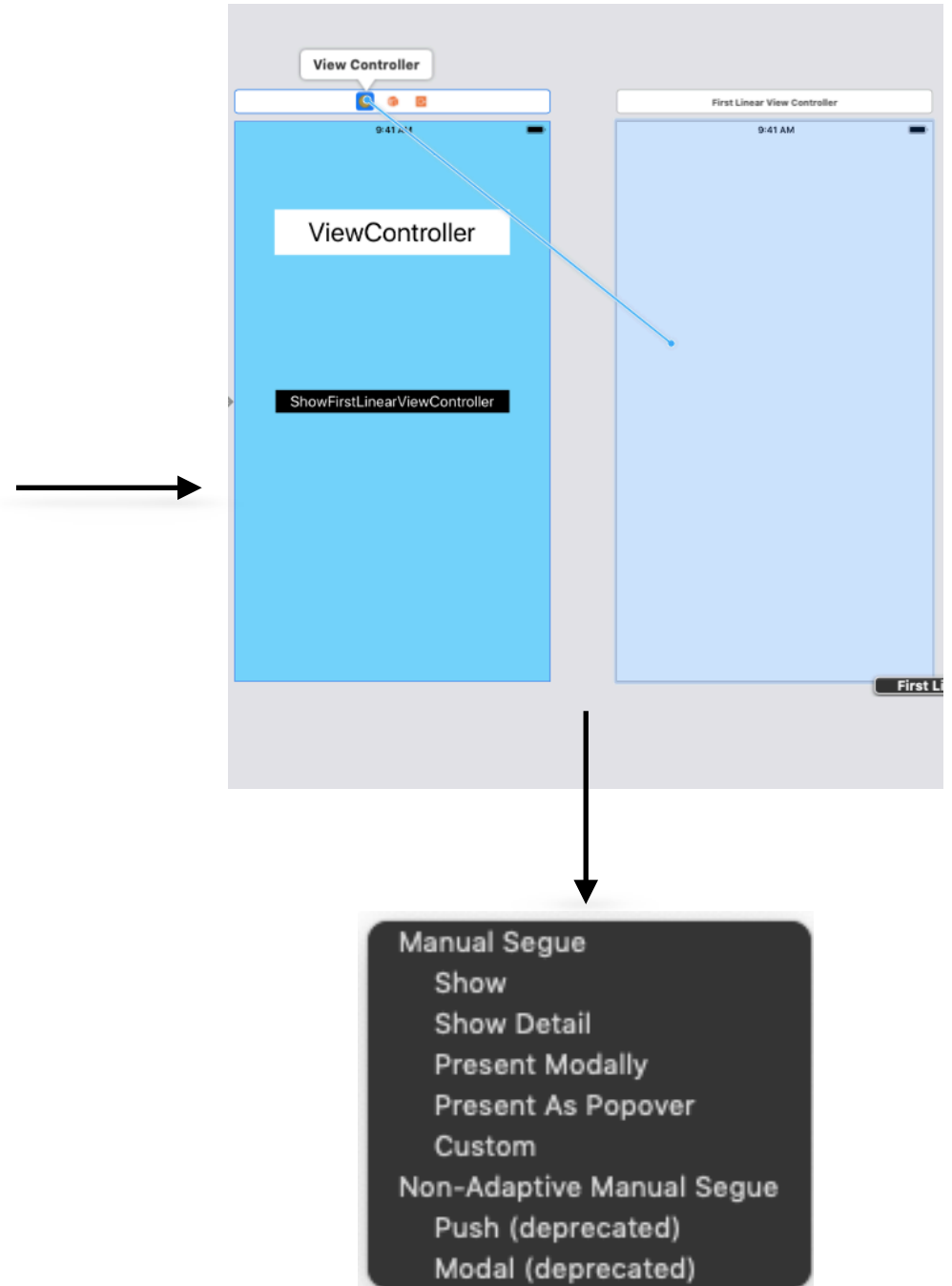


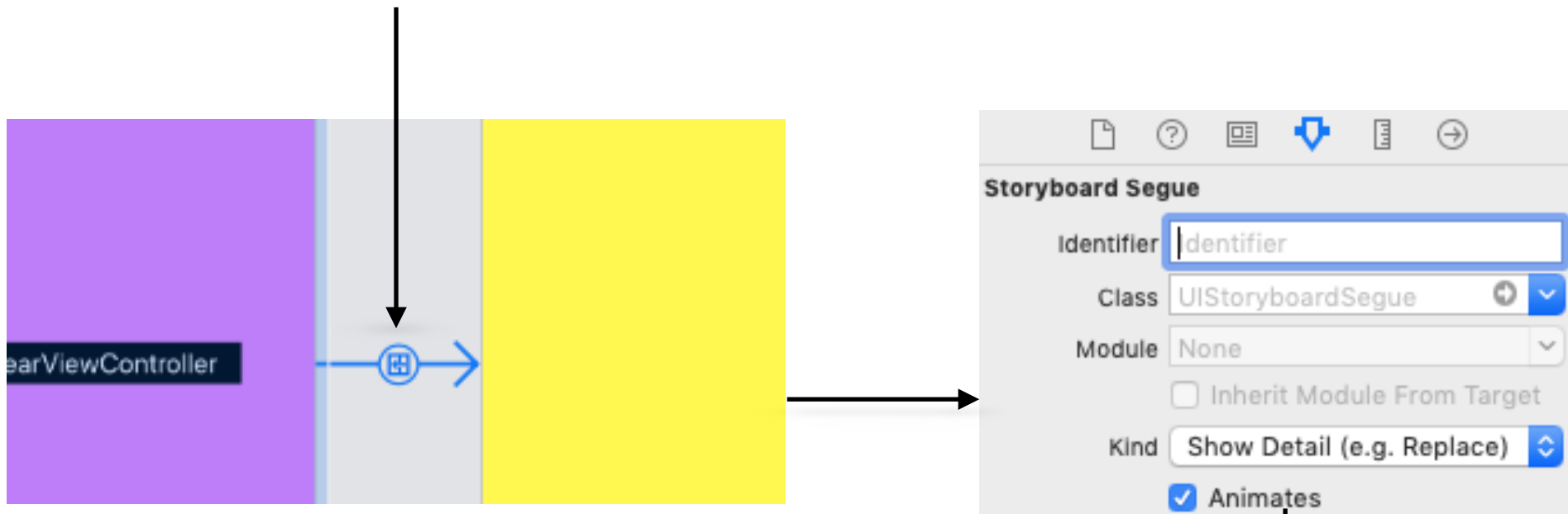
- Now a new ***[view controller.swift]*** file will be created.
- Insert a ***view controller(child)*** from library in main story board.
- Once it is created select the ***view controller icon***.
- Go to ***Inspectors*** side bar (right).
- Select ***identity inspector*** tab.
- Choose the ***view controller name*** in the ***class*** as the ***view controller.swift file*** created corresponding to this ***view controller(child)*** in ***main story board***.



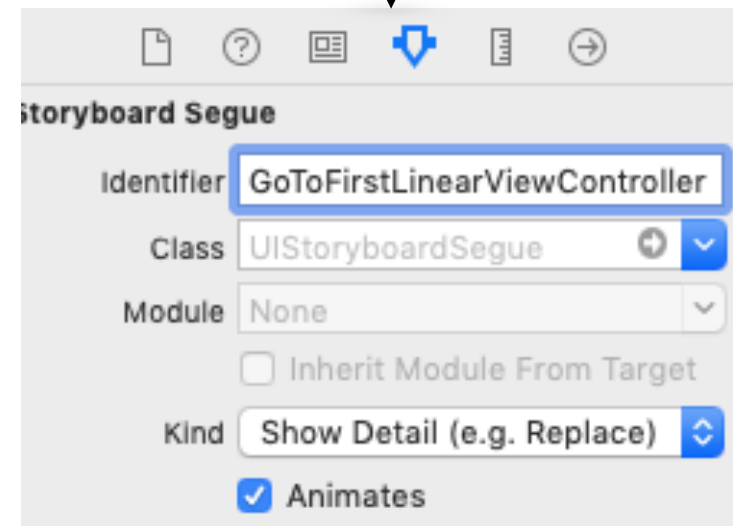
NAVIGATE THE VIEW CONTROLLER

- To navigate to the **view controller(child)** from the **view controller(parent)** in the **main storyboard**.
- Select the **small view controller icon** of the view controller from where it has to navigate.
- Now simultaneously hold **control key** and the **primary key** in mouse and drag the **connection destination view controller**.
- From the **pop-up** box you can choose any but for the demo "show" is chosen.
- Now there is a **connection segue(arrow)** between the **view controller(parent)** and the **view controller(child)** which indicates the **direction of the flow of connection**.





- Once the **connection segue** is created select the **segue** go to the **inspectors** side bar and select **attribute inspector**.
- Create a **name** for the **segue connection** in the **identifier section** which is used in the **backend** of the button to **navigate** to the corresponding **view controller**.



BUTTON OPERATION

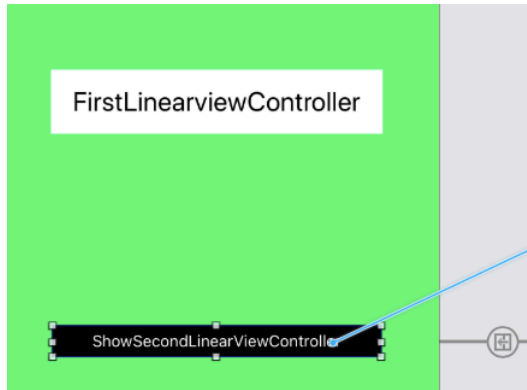
- To establish the connection given between ***view controller(parent)*** and ***view controller(child)***, a ***button action*** should be given as input.
- Insert a button from ***library*** to the ***view controller(parent)*** in ***main story board***.
- Now open the corresponding ***view controller.swift file*** in ***assistant editor*** for a parallel view of both ***main story board*** and ***view controller.swift file***.
- Select the ***button*** of the ***view controller*** in the ***main story board*** simultaneously hold ***control*** and click ***primary key*** in mouse on the button selected and ***drag the connection*** to the ***main class*** of the ***view controller.swift file*** to initialise the operation.
- In the ***Connect pop-up*** box choose ***action*** in connection section and name the button.
- A ***button method*** will be created with a name of the button given with a blank area to set the ***operation***.
- To direct the ***button*** to ***navigate*** from the ***view controller(parent)*** to ***view controller(child)*** add the line to the give blank area of the ***button method***
[self.performSegue(withIdentifier:"identifier name in segue connection", sender: self)].



butt

Button - Intercepts touch events and sends an action message to a target object when it's tapped.

Item **Bar Button Item** - Represents an Item on a UIToolbar or UINavigationController object.



```
8
9 import UIKit
10
11 class FirstLinearViewController: UIViewController
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
```

Insert Outlet, Action, or Outlet Collection

ShowFirstP

ShowSecond

ShowThirdP

Connection: Action

Object: View Controller

Name: button_5

Type: Any

Event: Touch Up Inside

Arguments: Sender

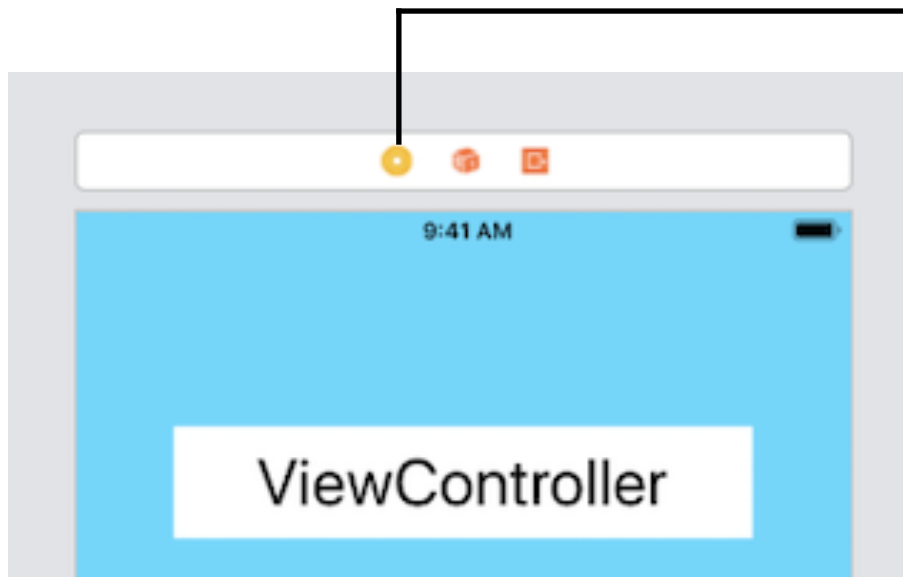
Cancel Connect

```
@IBAction func
}
```

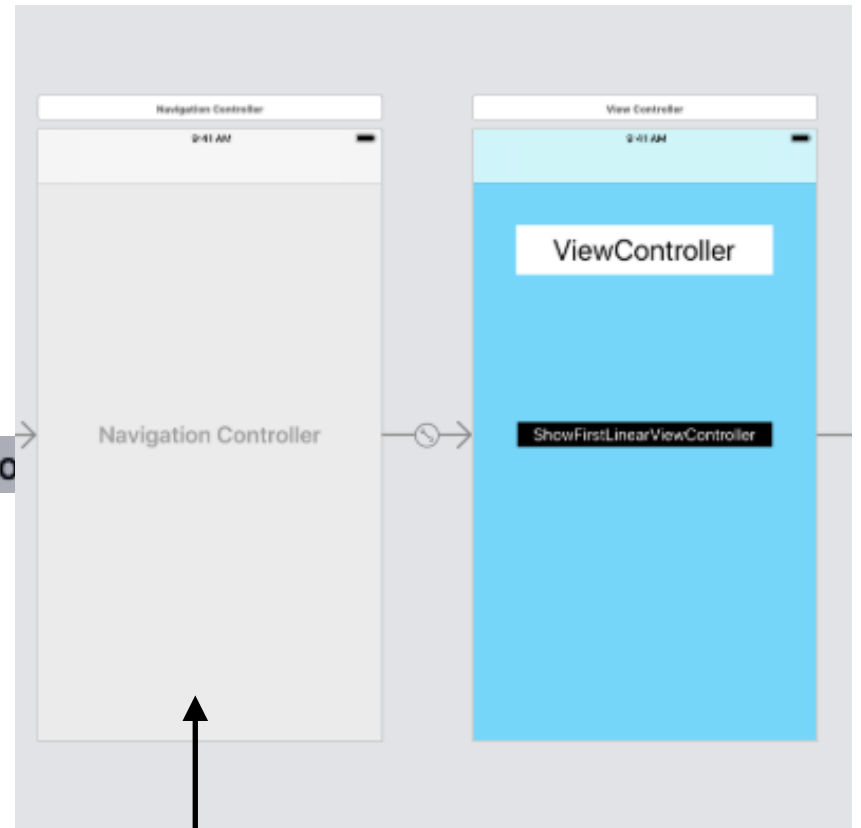
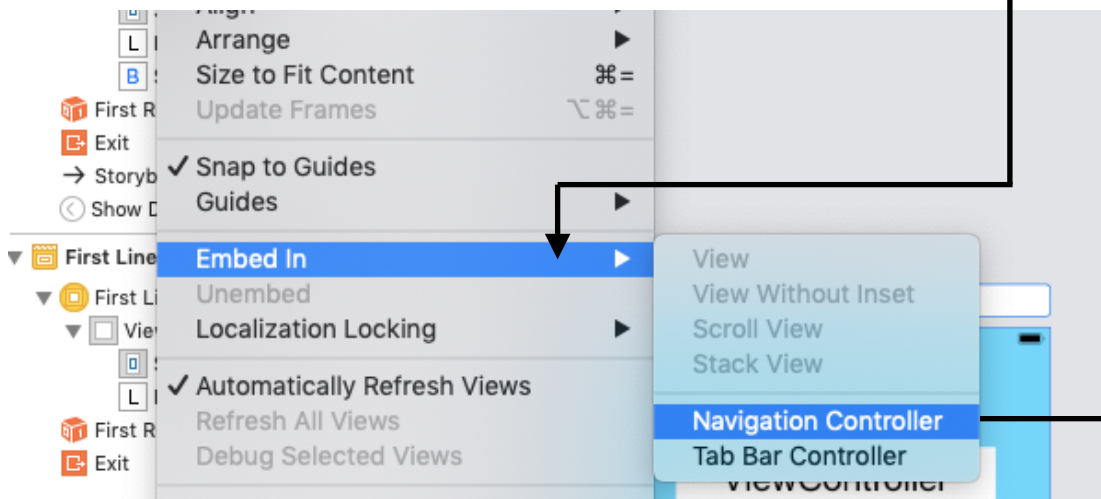
```
10
11 class FirstLinearViewController {
12
13
14
15
16 @IBAction func button_2(_ sender: Any) {
17     self.performSegue(withIdentifier: "GoToSecondLinearViewController", sender: self)
18 }
```


INITIALISE NAVIGATION CONTROLLER FOR BACK BUTTON

- Click the ***small view controller icon*** from the ***view controller(parent)*** to which it has to navigate back from ***view controller(child)***.
- Click on "***Editor***" on the top menu bar.
- Click on "***Embed in***" and select "***Navigation Controller***".
- A ***navigation controller*** will be created before the ***view controller(parent)*** and the ***initial segue*** will be moved to ***navigation controller***
- Now the ***back button*** for the top left corner in the ***view controller(child)*** will be automatically created for ***navigating back*** from the initial path of the ***view controller***.
- Once ***navigator controller*** is created it creates ***back navigation button*** for every ***view controller*** navigated in "***show***" type.

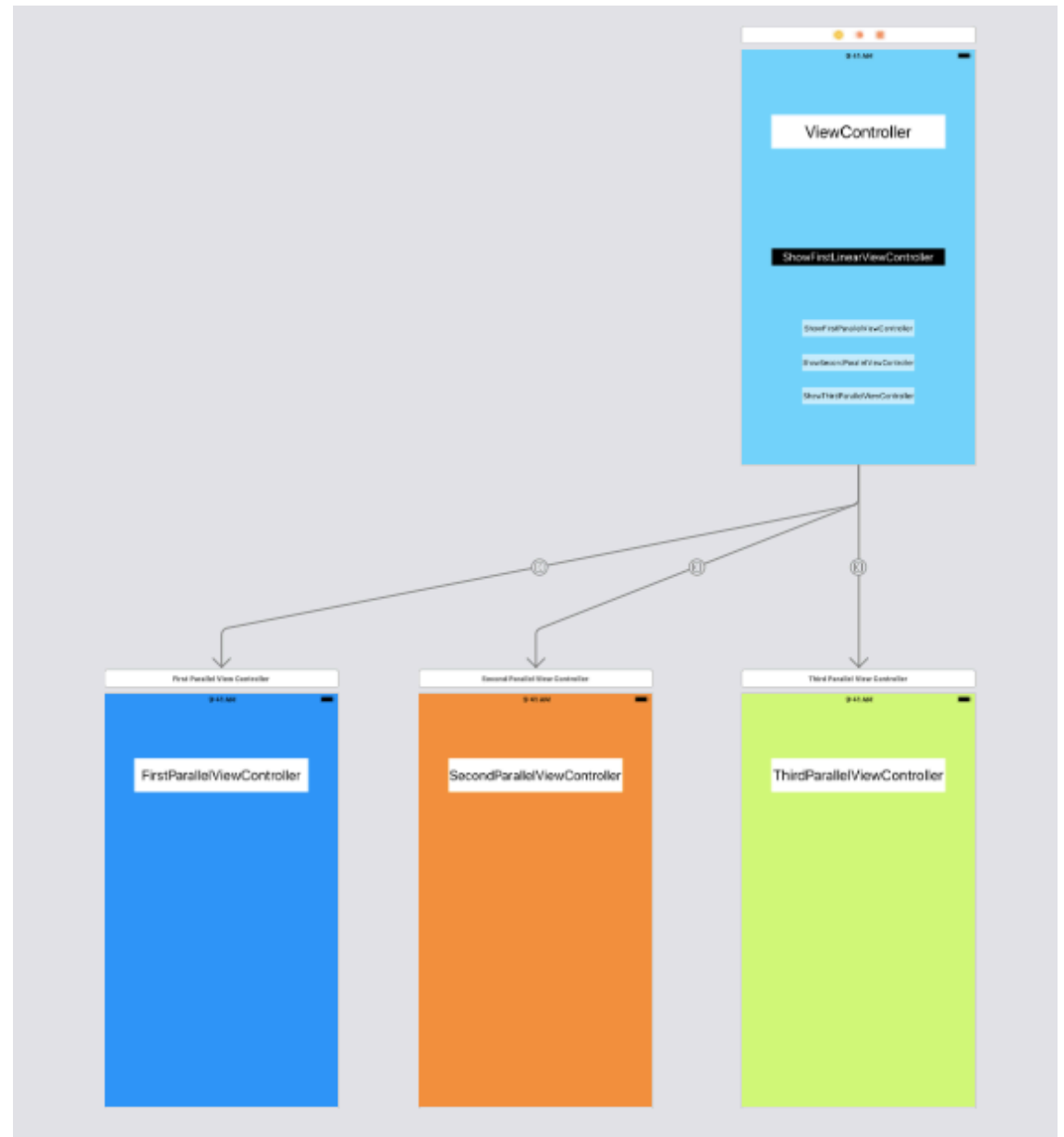


Apple Xcode File Edit View Find Navigate Editor Pro



NAVIGATION TYPES

- **View controller(parent)** with three individual **view controller(child)** with three individual buttons in **view controller(parent)** navigating each **view controller(child)**.



- For a **view controller(parent)** only one **view controller(child)** is navigated with a **single button**.
- That **view controller(child)** will navigate to another **view controller(sub-child)** with a **button** in **view controller(child)** and continues the same way.

