

Goal:

The goal of this assignment is to become more familiar with creating a rudimentary iPhone application using custom UIViewController subclasses, Storyboards, SDK provided container view controllers, and simple SDK provided views (buttons, labels, etc).

Deliverables:

A modified version of the provided project which has three different custom UIViewController subclasses named MainViewController, DetailViewController, and ModalViewController. The user interface (view) elements for these view controllers should be created via a main Storyboard file. The root view controller of the application should be a UINavigationController, and the MainViewController should be presented initially.

MainViewController: This view controller should be presented inside of a UINavigationController instance. It's navigation item should have the title "Main View" and contain a bordered style UIBarButtonItem with the title "Show Image". The "Show Image" button should present an instance of the ModalViewController full screen using the cover vertical or flip horizontal modal transition style. In order to support dismissing the presented ModalViewController instance a ModalViewControllerDelegate protocol should be adopted by the MainViewController instance and the MainViewController instance should be assigned as the delegate of the ModalViewController. Lastly the main area of the view should have a UIButton instance that has the title "Show Details" that presents an instance of the DetailViewController by pushing it onto the presenting UINavigationController instance.

DetailViewController: This view controller should be pushed onto the UINavigationController instance that is the root view controller of the window when the "Show Details" UIButton of the MasterViewController is pressed. The navigation item for this view controller should have the title "Detail View". Additionally the main part of the view should contain a label that shows the number of times that an instance of DetailViewController has been presented. Finally, the back button provided automatically by the UINavigationController should not be broken.

ModalViewController: This view controller should be presented full screen by the MainViewController using a cover vertical or flip horizontal transition style. A navigation bar should be present at the top of this view controllers view that has the title "Modal View" and a right bar button that has the SDK provided Done button style. The rest of the view should contain an instance of UIImageView that presents some appropriate image, which will need to be included in the project resources. To dismiss the modally presented view controller there should be a ModalViewControllerDelegate protocol which is adopted by the MainViewController. When the user taps the Done button on the navigation bar, some message which has normal delegate message naming conventions, should be sent to the delegate instance. When the message is received by the delegate, the delegate should dismiss the ModalViewController.

The created code files should be organized appropriately (i.e., Controller class should be in the Source/Controller folder, image files should be in an asset catalog in the Resources folder, etc).

Documentation:

- “UIViewController” (Class Reference)
- “View Controller Programming Guide for iOS”
- “View Controller Catalog for iOS”
- “UICatalog” (Apple Sample Code)
- “Storyboard”
- “Interface Builder”
- “Model-View-Controller”
- “Delegates and Data Sources”
- “Target-Action”