ITP 342 Lab 6

Goal

- You will create an iPhone app to display places to visit in Los Angeles (or an area of your choosing) using a CollectionView and a WebView.

Assignment

- Create an application only for iPhone.
- Create a plist (property list) file containing an array of places. Each place object will be a dictionary containing name, website, and image. You need to have at least 6 places. The plist file will be in your project folder, not in the Documents directory.
- Create a model class to hold the plist. You may want to use the NSArray class method entitled initWithContentsOfFile: to load the places from the plist file.
- Create a class for the Collection View Controller and a CollectionViewController in the storyboard.
  - The class should have a private property of the model class.
  - For the cell in the storyboard, add an ImageView and a Label.
  - Create a class that inherits from UICollectionViewCell. The name of the class should end in CollectionViewCell. Add UIImageView and UILabel IBOutlets to set image and label for a particular place. Create a public method that sets up the cell by passing in a dictionary as an argument and then sets the image and text to display.
  - Change Scroll Direction to Horizontal for collection view in landscape view. Use the willRotateToInterfaceOrientation:duration: method.
  - Embed the CollectionViewController in a Navigation Controller.
- For the Detail View:
  - Create a class that inherits from UIViewController. The name of the class should end in DetailViewController. Create a public property to hold an NSDictionary object for a place. Update the title of the navigationItem to the place name.
  - Drag ViewController to the storyboard. Set the class identity to the class you created. Add a WebView to display the web page of the URL.
  - In the storyboard, create a push segue from the CollectionViewCell to the DetailViewController.
  - In the DetailViewController class, call the loadRequest: method for the WebView.
  - Add an ActivityIndicatorView that animates when the website is loading by adhering to the UIWebViewDelegate protocol. (Extra Credit)
- Making it work:
  - In the CollectionViewController class, implement the prepareForSegue:sender: method. Check to make sure the segue.identifier is equal to the string that you entered for the identifier in the storyboard. Get the index of the selected cell by calling the indexPathsForSelectedItems method for the instance of the

CollectionView (self.collectionView). Create an instance of the DetailViewController and set its place property to the selected place.

- Use AutoLayout to make the UI adjust properly in portrait and landscape modes. Align and pin elements and add constraints to the CollectionView and the DetailView.
- Clean up the code and UI so it looks nice.

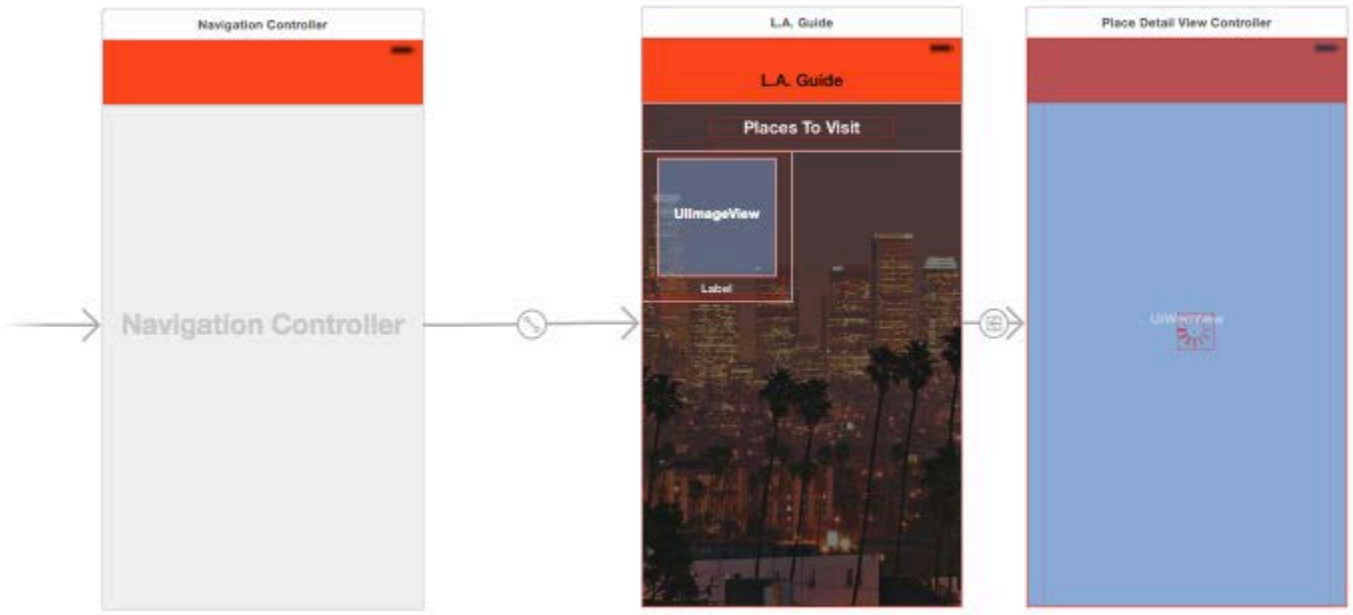
Grading (25 points):

- Plist file with at least 6 places; each place has a name, website, & image – 4 pts
- CollectionViewController class gets info from plist file – 2 pts
- CollectionViewCell in storyboard displays image and name – 2 pts
- CollectionViewCell class with public method to set up cell – 2 pts
- CollectionViewController class implements the data source methods – 2 pts
- CollectionViewController class segues to DetailViewController – 2 pts
- CollectionViewController handles the changing of the scroll direction with respect to the change in orientation – 2 pts
- DetailViewController displays web view – 2 pts
- DetailViewController displays name in navigation bar – 2 pts
- UI looks good in both portrait and landscape mode. Used constraints and auto layout – 5 pts
- Your name should be at the top of all of the .h & .m files that you create.
- Do not share your code with other students. Do not accept code from other students. If you need help, ask the lab assistants and instructor.

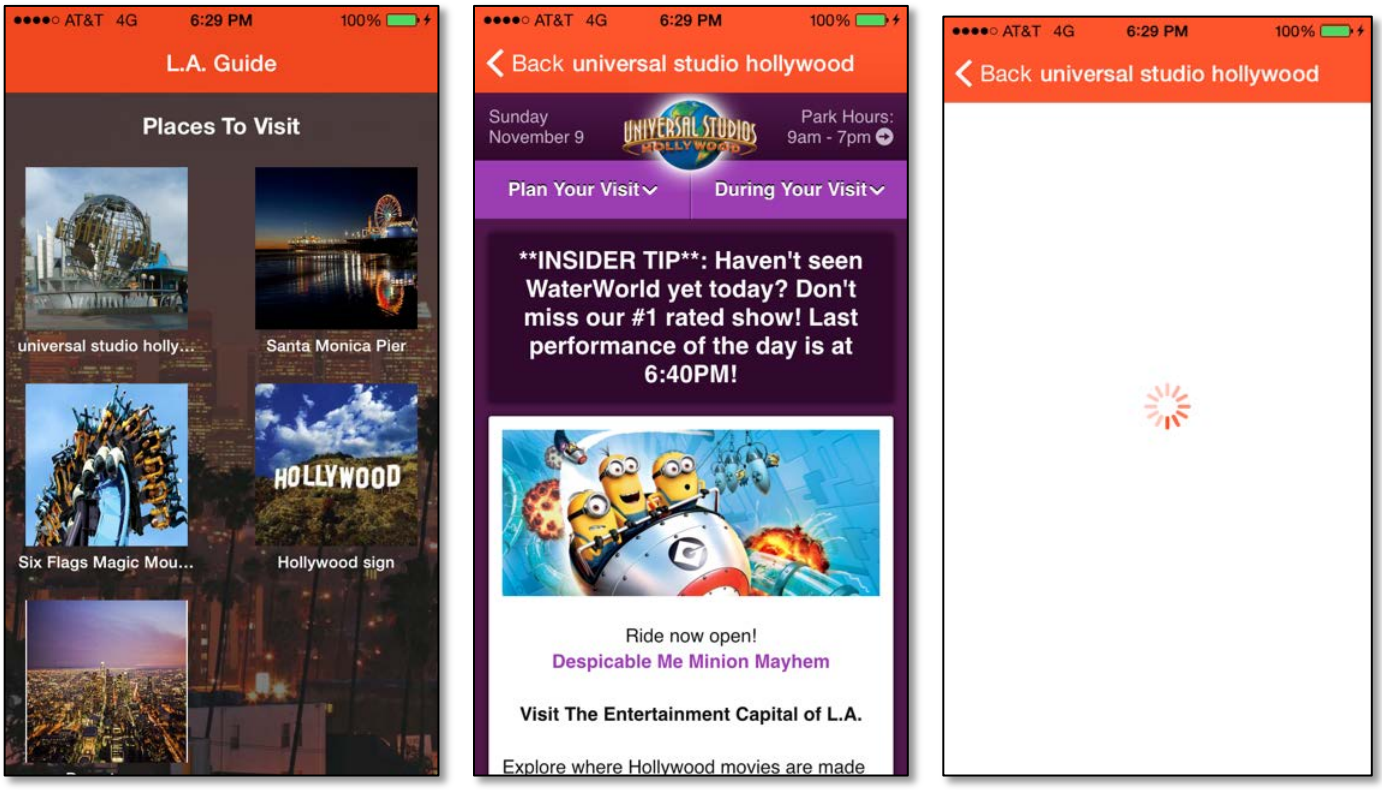
Extra Credit (5 points):

- Add activity indicator to WebView using webview delegate and UIActivityIndicator.
- Align the activity indicator to be displayed in the center in portrait and landscape modes.

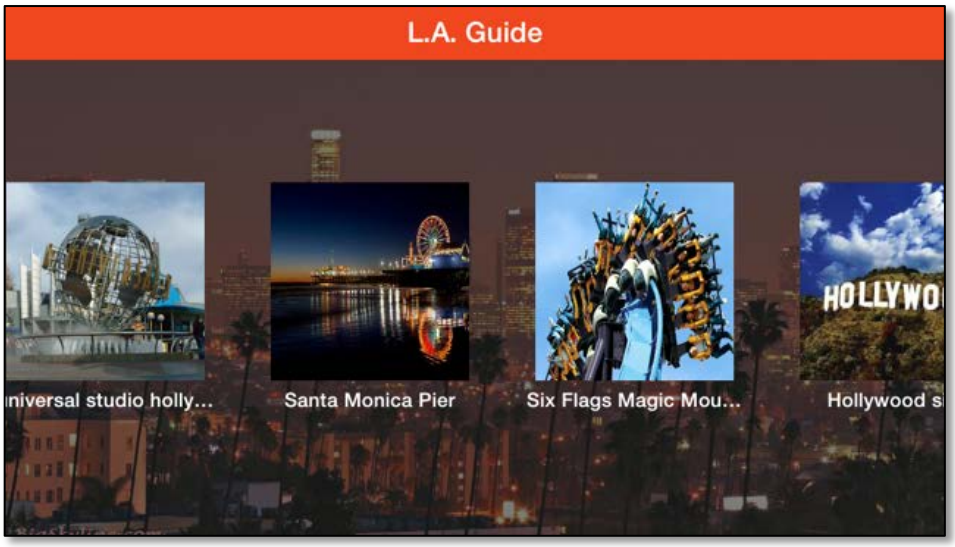
Storyboard of Poojan's app:



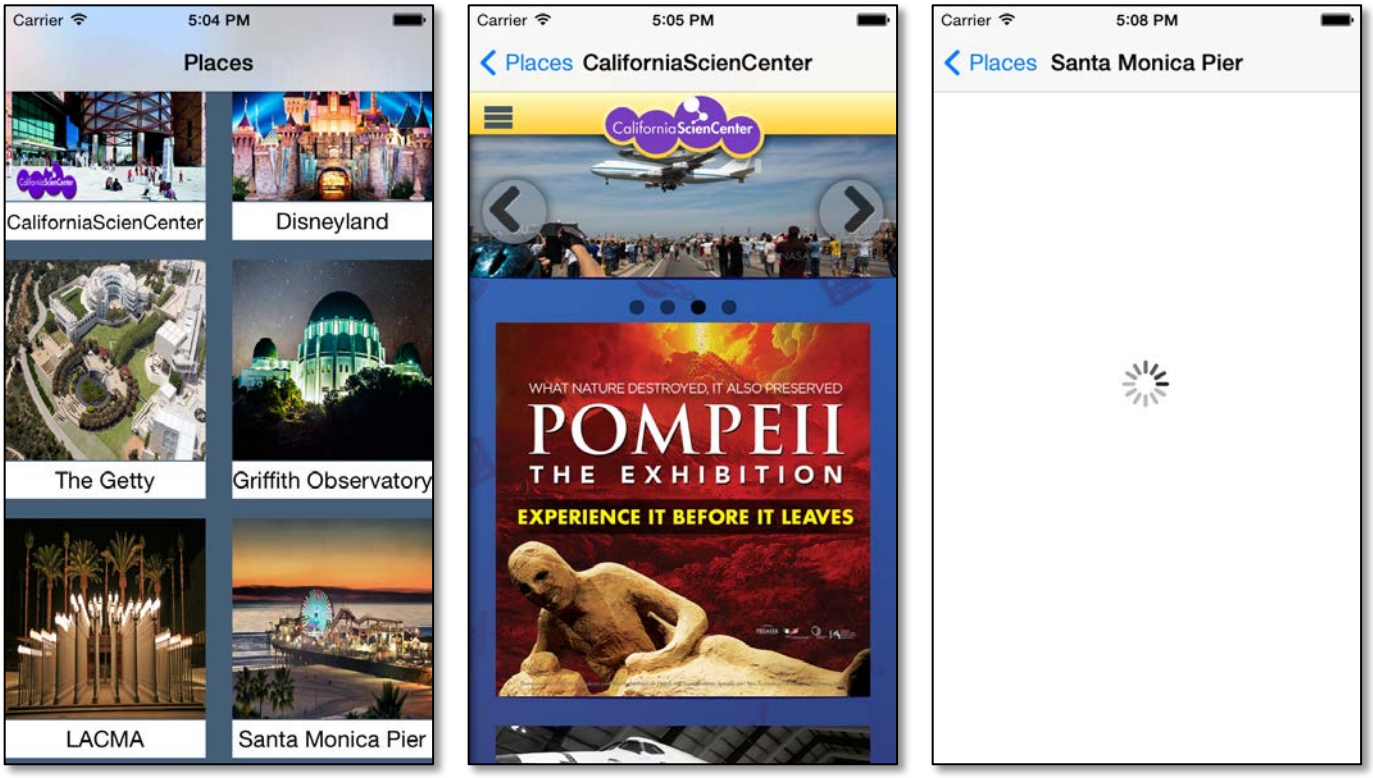
Poojan's app in **Portrait** mode:



Poojan's app in **Landscape** mode:



Trina's app in **Portrait** mode:



Trina's app in **Landscape** mode: