#### 7: STATE PARKS III

FALL 2019

Due: Noon, October 15

# **Description**

In Part III of this app you will use appropriate container controllers to provide a better user experience including a walkthrough to explain your app's features to a user. A walkthrough is a presentation of your app's features that explains how your app works, shown to the user upon app start-up, before they are allowed to interact with the main functions of the app. You should not create a new project. Instead, create a new storyboard and associated controllers/views. Your app uses the same data as in the previous assignment.

### **App Requirements**

The essential elements your app should support include the following.

- Parks and Photos should be presented using a UISplitViewController to manage the
  tableview of photos and captions and a detail controller displaying the image full screen with
  caption overlaying it. This image does not need to be zoomable. We won't include
  collection views in this assignment. Sections should contain the park name and again be
  collapsable.
- 2. When the app first starts the user should be presented with a walkthrough illustrating 3 features of your app on 3 separate pages containing screen shots of your app. You must use a UIPageViewController for this feature. The three features are: (1) collapsable sections; (2) tappable cells to display image; (3) full image view with caption. Each feature should be illustrated with a screen shot and appropriate annotations. The walkthrough should utilize a UIPageControl element and give the user a clear indication of how to advance to each page of the walkthrough using either swipes or taps, possibly utilizing buttons in the shape of arrows.
- 3. Your app must be universal and must support device rotations.

# **Testing**

Be sure to thoroughly test all possible interactions with your app. Tapping, rotating, etc. Be sure the split view behaves properly in both orientations. Use a consistent design in your view controllers and be sure that all user interaction is natural.

### **Hints**

- 1. Your walkthrough should utilize good MVC structure and be easily extended to include additional pages in the walkthrough.
- 2. Even though you are not creating a new project for this assignment, you may want to look at the code provided when you do create a project using the Master-Detail template. The App Delegate contains custom code to initialize the splitViewController.
- 3. Be sure your UISplitViewController is your app's initial view controller. Modally presenting the walkthrough from it would be a good idea.
- 4. The walkthrough must use a UIPageViewController. This controller will need to be contained in another (root) viewController to allow the placement of the UIPageControl over it.

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- 5. Ensuring that the walkthrough always appears when the app starts can be a bit of a challenge. You should use a segue from an initially appearing view controller to your walkthrough view controller. The trick is to ensure one of your view controllers (probably the table view controller) always appears on startup. This is not always the case when using split view controllers (e.g., iPad in portrait mode). Study the UISplitviewController documentation for how to change the default behavior.
- 6. A segue can originate from a view controller itself, rather than from a UIControl object. This kind of segue must be triggered programmatically with the UIViewController's performSegue(withIdentifier: sender:).
- 7. Screen shots can be taken in the simulator using #S. You need only have screen shots from one device size, e.g., just the iPhone.
- 8. The Preview app in OS X (the default app for viewing images) has some simple tools for adding annotations (including texts, arrows, rectangles) to images.

# **Troubleshooting**

1. Don't forget to support the UISplitView delegate to manage the collapsing of the secondary view controller.

#### **Submission**

Your submission should be pushed on the master branch. Be sure to verify that your project builds and remove all cruft.