

Washington State University
School of Electrical Engineering and Computer Science
Spring 2017

CptS 479 Mobile Application Development in iOS

Homework 6

Due: February 21, 2017 (11:59pm)

General Instructions: Put the entire app directory into one zip file and submit as an attachment under Content → Homework 6 for this course on the Blackboard Learn system by the above deadline. Note that you may submit multiple times, but only the most recent entry submitted before the above deadline will be graded.

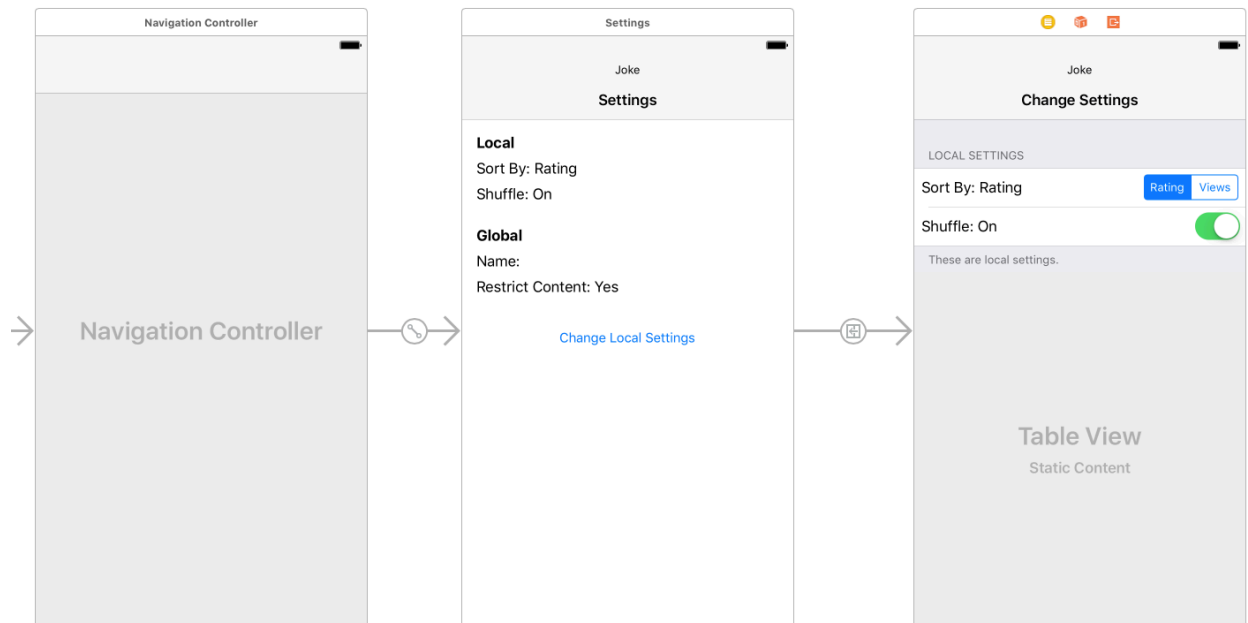
For this homework we will implement a standalone app called JokeSettings to learn how to manage local and global settings for an app. You should start a new Xcode project for this homework; do not work from the previous Joker apps. We will manage to local settings (set within the app) and two global settings (set in the device's global settings). The two local settings will control how jokes will be sorted (by Rating or by Views), and whether jokes will Shuffle or not when we ask for a new joke. The two global settings will store the user's Name, and whether or not the app should Restrict Content (e.g., no jokes with foul language). See screenshots below. Specifically,

1. Create a new Xcode project for a single view application called JokeSettings.
2. Add a Settings Bundle to your app via File→New→File. Modify the Root.plist under the Settings.bundle to contain a group title. A text field for setting "Name" and a toggle switch for setting "Restrict Content".
3. Embed your Main view in a navigation controller.
4. The Main view should display the two local settings ("Sort By" and "Shuffle") and the two global settings ("Name" and "Restrict Content"). The "Sort By" setting is a string whose value is either "Rating" (default) or "Views". The "Shuffle" setting is a Boolean, which is displayed as "On" (default) or "Off". The "Name" setting is an arbitrary string (default is the empty string). The "Restrict Content" setting is a Boolean, which is displayed as "Yes" (default) or "No". This Main view should be updated whenever the view appears. Note, you will also need to update the Main view when the app returns to the foreground via the "applicationWillEnterForeground" AppDelegate method.
5. Add a Table View Controller to the Storyboard. Create and assign a new UITableViewController class to this view. Add a button "Change Local Settings" to the Main view that segues to this Table view. Setup the navigation title and prompt on each view appropriately.
6. In the Table view, set the table to be Static and Grouped with one section and two rows. Give the section a header and footer. The first row should display the "Sort By" setting and use a

segmented control to choose between “Rating” and “Views”. The second row should display the “Shuffle” setting and use a switch to choose between “On” and “Off”.

7. The Userdefaults.standard shared instance should be appropriately modified when the “Sort By” or “Shuffle” settings are changed. This same shared instance can be accessed in the Main view, so there is no need for any prepare-for-segue or unwind-segue operations.
8. Be sure auto layout constraints are set so that all the view elements are appropriately placed in the views, regardless of device orientation.

Storyboard:



JokeSettings page within device Settings:

