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

CptS 479 Mobile Application Development in iOS **Homework 8**

Due: March 7, 2017 (11:59pm)

General Instructions: Put the entire app directory into one zip file and submit as an attachment under Content \rightarrow Homework 8 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 you will use gestures to accomplish two functionalities for your Joker app. First, you will use swipe gestures to move back and forth through the list of jokes. Second, you will use tap gestures to select a star rating for each joke. Again, you can start with Homework 2 level functionality, but we'll be replacing the main view with just a display of the entire joke, including the answer line, but adding the star ranking. See screenshots below. Specifically,

- 1. To the Joke class, add a "rating" variable whose initial value is 0. Make sure you have at least three jokes stored initially. There is no need to implement the addition or deletion of jokes.
- 2. Modify the Storyboard to have "Joke Rater" at the top, followed beneath with the "Joke #" (which should display the number of the joke in the jokes array), then the three lines of the joke, then "Answer:", then the answer line, and finally a centered row of five image views, each 32x32 in size. The image views should contain a 32x32 image of either a gold star or a gray star (or whatever you want) to indicate the rating of the joke.
- 3. Add two swipe gestures to the main view using the Storyboard drag-and-drop method, one a left swipe and one a right swipe. Implement swipe handler IBAction's for these (you actually only need one), and connect the gestures to the handler(s). Swiping to the left should advance to the next joke, and if you swipe left on the last joke, the view should change to the first joke. Swiping right should show the previous joke, and if you swipe right on the first joke, the view should change to the last joke.
- 4. Programmatically add a tap gesture to each of the five star image views. Specifically, create five tap gesture recognizers, set their delegates to the main ViewController (self), and add each to one of the star image views. Each tap gesture recognizer should be initialized with a handler method that sets the joke's rating accordingly and displays the proper number of stars. This star rating should be retained, at least while the app is running, so that each time a joke is displayed, its last selected rating will also be displayed.
- 5. As always, be sure auto layout constraints are set so that all the view elements are appropriately placed, regardless of device orientation.

Storyboard:



Main View, unrated joke:



Main View, rated joke:

