Washington State University School of Electrical Engineering and Computer Science Spring 2021

CptS 479 Mobile Application Development **Homework 4**

Due: February 17, 2021 (11:59pm)

General Instructions: Put the entire app directory into one zip file and submit as an attachment under Content → Homework 4 for this course on Blackboard Learn 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.

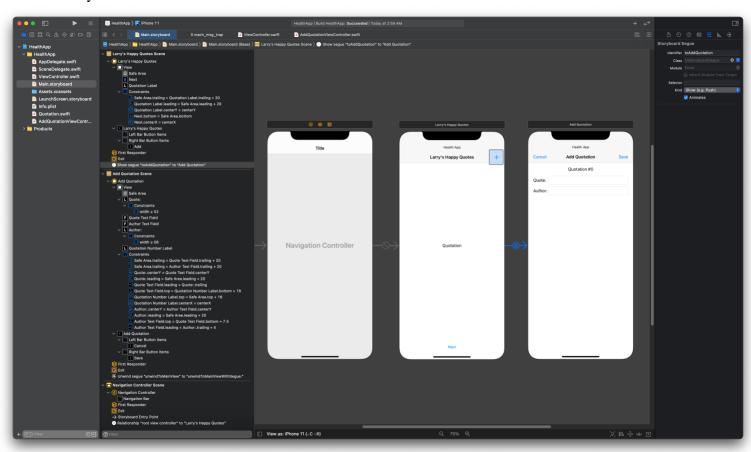
This homework builds on HW2 by moving the add quotation functionality to a second view and using a navigation controller to move between views and manage titles. See screen shots below. Specifically,

- 1. First, ensure that your HW4 app has all the required functionality of HW2, except as changed below. Part of HW4's grade will be based on proper HW2 functionality.
- 2. From the main view remove the "Health App" label, "<your_name>'s Happy Quotes" label, "Quote:" label and text field, "Author:" label and text field.
- 3. Embed the main view in a navigation controller. Set the main view's navigation item prompt to "Health App" and title to "<your_name>'s Happy Quotes"
- 4. Add a Bar Button Item to the right side of the main navigation bar and set it's System Item attribute to "Add" (should appear as a "+" sign).
- 5. Add a new View Controller to the Storyboard. Create a new view controller class for this view called "AddQuotationViewController" in a new file with the same name.
- 6. Create a "Show" segue from the "Add" bar button on the main view to the AddQuotation view. This should create a navigation bar on the AddQuotation view. Set this navigation bar's prompt to "Health App" and title to "Add Quotation". Set the segue's identifier.
- 7. Below the navigation bar in the AddQuotation view, add a label that displays "Quotation #<n>", where <n> is the number of the next quotation to add, i.e., the number of current quotations plus one. This information should be passed from the main view to the AddQuotation view using the prepare for segue on the "Add" button segue.
- 8. Add the "Quote:" label and text field, and the "Author:" label and text field below the quotation number label. Be sure to constrain these elements appropriately so that the labels stay in place even if you type a long quote or author.
- 9. For all the text field handling that was in the main view controller in HW2, move this functionality to the AddQuotation view.
- 10. In the AddQuotation navigation bar, add a Bar Button Item to the left side (overwriting the Back button) and set its System Item to "Cancel". Add a Bar Button Item to the right side

and set its System Item to "Save". If the Cancel button is tapped, then the app should use an unwind segue to return to the main view and no quotation should be added, regardless of what text was entered in the text fields. If the Save button is tapped, then the app should use an unwind segue to return to the main view. If there was some text in the Quote text field, then a new quotation with the appropriate quote and author should be added to the end of the quotations cycled through with the Next button on the main view. If the Quote text field was empty, then no quotation should be added, but the app should still return to the main view.

- 11. As in the HW2 app, initialize the app with at least three quotations.
- 12. Test your app using the iPhone 11 simulator, which is the same simulator we will use to grade your app.
- 13. Be sure that auto layout constraints are set so that the view elements are appropriately displayed with no overlap or trimming regardless of device orientation.

Storyboard:



Simulator:

