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

CptS 479 Mobile Application Development **Homework 3**

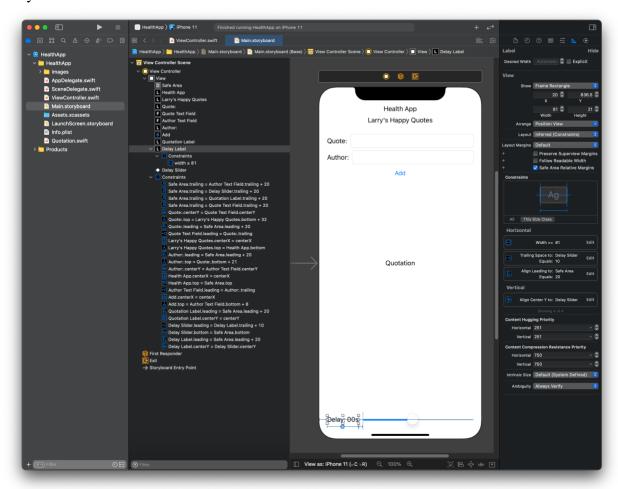
Due: February 10, 2021 (11:59pm)

General Instructions: Put the entire app directory into one zip file and submit as an attachment under Content → Homework 3 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 replacing the Next button functionality with an automatic advance to the next quotation after some delay that is controlled by a slider. See screen shots below. Specifically,

- 1. First, ensure that your HW3 app has all the required functionality of HW2, except for the Next button, which should be removed. Part of HW3's grade will be based on HW2 successful functionality.
- 2. At the bottom of the view, add a "Delay: 00s" label on the left side and a slider to the right of the label. Layout the slider first to be 20 points from the right safe area and 0 points from the bottom safe area. Layout the label to be vertically centered to the slider and 0 points from the left safe area. The label should use a ≥ width constraint just wide enough to display the widest label, and the slider should use all remaining horizontal space. See the "UI Design" lecture video for an example of how to do this.
- 3. The slider should have an initial value of 5, minimum of 1, and maximum of 10. This value represents the number of seconds delay before advancing to the next quotation. As the slider value is changed, the delay label should also change to display the current value of the delay.
- 4. When the app starts, the auto-advance feature should begin immediately. Use a Timer to implement this feature. You do not need to use the MyTimer class from the lecture. Any changes to the delay via the slider should immediately reset the delay time accordingly.
- 5. As in the HW2 app, initialize the app with at least three quotations. New quotations should be added to the end of the list of quotations and displayed at the end of the current cycle through the quotations.
- 6. Test your app using the iPhone 11 simulator, which is the same simulator we will use to grade your app.
- 7. 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:

