

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

CptS 479 Mobile Application Development in iOS

Homework 7

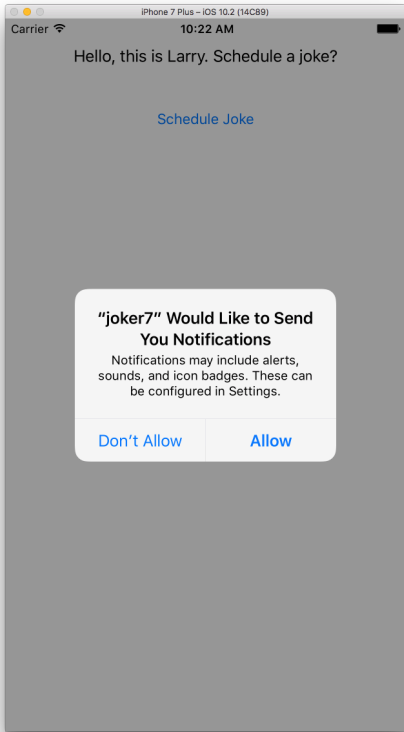
Due: February 28, 2017 (11:59pm)

General Instructions: Put the entire app directory into one zip file and submit as an attachment under Content → Homework 7 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.

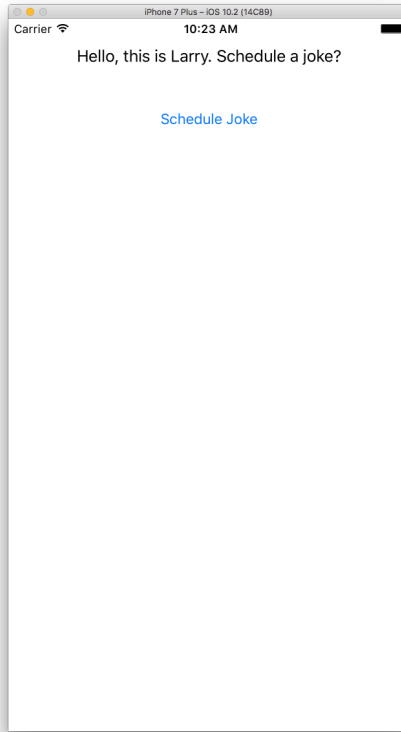
For this homework we will use alerts and local notifications to present our jokes to the user. You can start with one of the existing versions of your Joker app, or create a standalone version, but minimally the app will have to maintain several jokes and randomly choose among them (i.e., Homework 2 level functionality). But instead of displaying the joke in the view, we will generate a notification to display the first three lines of the joke, and then an alert to display the answer line. See screenshots below. Specifically,

1. First, make sure your app asks for authorization to display alert notifications (no need to check for badge and sound notifications), and that upon re-entering the app, the `applicationWillEnterForeground` method will re-check that alert notifications are still allowed. If alert notifications are not allowed, then your app should not attempt to schedule them.
2. In the Main view of the app, instead of displaying the lines of the joke and the Answer button, replace these with a “Schedule Joke” button, and an initially empty message label below the button. When the button is tapped, if notifications are not allowed, then the message should say “Notifications disabled”. If notifications are allowed, then the message should say “Joke scheduled”. In this case, the app will choose a random joke and schedule a notification for five seconds later whose content body is composed of the three lines of the joke. The notification should appear whether you are inside or outside the app.
3. When the notification appears, if the user taps the notification, then if they are in the Joker app already, an Alert appears with the Answer line and a single “Okay” option. If they are not in the Joker app, then the user should be taken to the Joker app, and then the same Alert should appear. Tapping the “Okay” option will clear the alert and should remove the “Joke scheduled” message. Note that swiping up on a notification dismisses it and no alert should display.
4. As always, be sure auto layout constraints are set so that all the view elements are appropriately placed, regardless of device orientation.

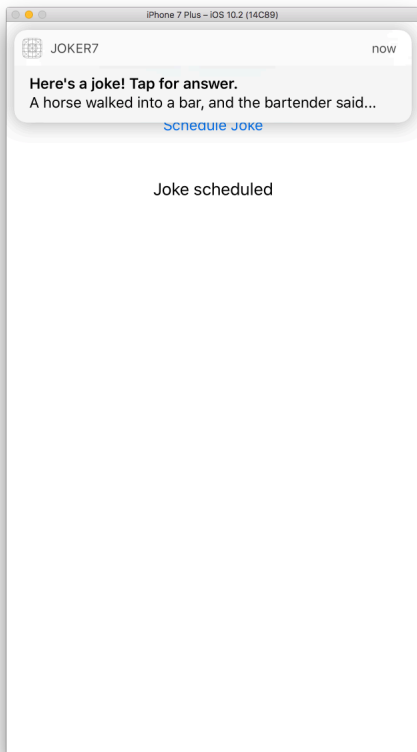
Initial Authorization Request:



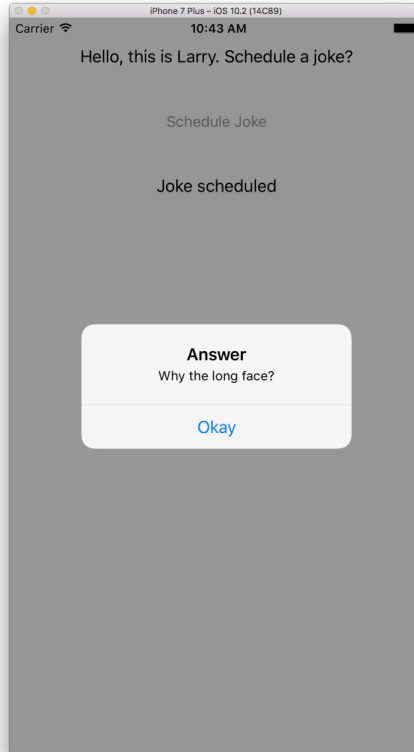
Main View:



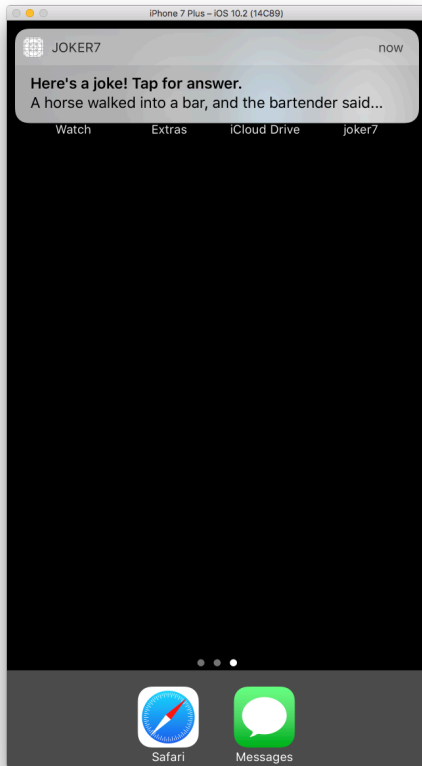
Joke Notification while in App



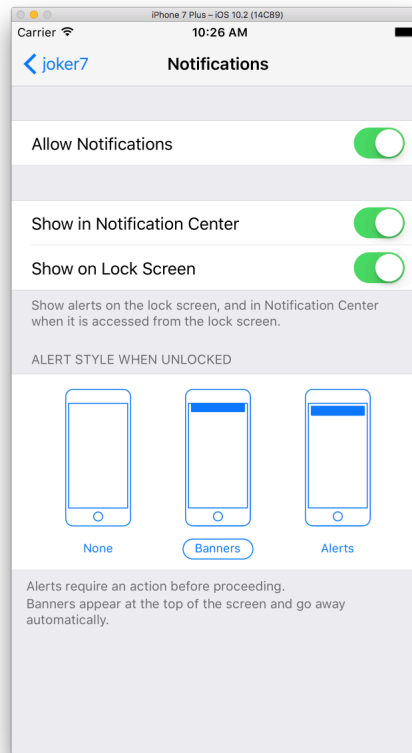
Joke Answer via Alert



Joke Notification while outside App



Notifications Settings for App



Attempt to schedule joke if notifications disabled

