

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

CptS 479 Mobile Application Development in iOS

**Homework 3**

Due: January 31, 2017 (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 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.

1. For this homework we will begin to implement the ability to add comments about jokes. For now, we'll do this as a standalone app called "Commenter" that allows multiple comments to be entered, timestamped, and stored. And when requested, all the comments will be printed to the console.
  - a. Create a new iOS single-view application project in Swift and call it "Commenter".
  - b. Add a file called "Comment.swift" containing a class called "Comment" with two variables: "comment" of type String and "date" of type Date. Include an init() method that takes a String argument, which is assigned to your "comment" variable, and sets the "date" variable to the current date and time.
  - c. In the Storyboard, add the title label "Commenter" centered near the top of the view. Add the label "Comment:" below the title and left justified in the view. Add a text field to the right of the "Comment:" label, whose leading edge is 8 points from the "Comment:" label, and whose trailing edge is right-justified to the view. Connect the text field to the view controller as an Outlet.
  - d. Below the "Comment:" and text field line, add a centered button titled "Add". Connect this button to the view controller class as an Action, which when tapped, will first check if the comment text field is empty. If not, it creates a Comment instance, adds it to an array of Comments, which you should maintain in your view controller class, and clears the text field.
  - e. Below the "Add" button, add another centered button titled "Print All". Connect this button to the view controller class as an Action, which when tapped, will print all the comments to the console, each proceeding by its date.
  - f. Be sure to implement the UITextFieldDelegate protocol and necessary protocol methods in your app. Tapping Return while in the text field should cause the keyboard to disappear.
  - g. As always, be sure auto layout constraints are set so that all the view elements appropriately placed in the view, regardless of device orientation.

