

## CSC 471 Mobile Application Development for iOS

### Programming Assignment 7: Mock Remote Control III

#### Due Date & Submission

- Assignment due on Tuesday March 1, 2022, 11:59pm
- Submit your assignment in D2L Dropbox.
- Submit a single zip file that contains the contents of the project folder
  - To zip your project folder: Ctrl-click your project folder and select “Compress ...” from the context menu.
- **It is mandatory to use Xcode 13, Storyboard, and Swift 5.5 for this assignment.**
- Include only your source code files, including
  - \*.swift, \*.plist, \*.xib, \*.storyboard
  - image files
  - project files (.xcodeproj)
  - test folders
- You must use a unique prefix for the project name. (I suggest you use your last name and first initial as your prefix.) **Please use the same prefix for all your assignments.**
  - Note you only need to use the prefix for the project name. It is not necessary to use the prefix on other files in your project.
- Do not include unused or unrelated files.
- Before you submit, build and run the project, make sure everything compiles and works. Close your project before zipping the folder.
- Here are the most common reasons assignments are marked down:
  - Project does not build.
  - Project does not build without warnings.
  - One or more items in the Requirements section were not satisfied.
  - A fundamental concept was not understood.
  - Code is sloppy and hard to read (e.g. indentation is not consistent, etc.).
  - Your solution is difficult (or impossible) for someone reading the code to understand due to lack of comments, poor variable/method names, poor solution structure, etc.
- Bonus points.
  - Bonus points may be awarded to projects with *exceptional* qualities in one or more aspects.
  - Bonus points will only be awarded after all the required elements have been satisfied.
  - Bonus points will not be awarded merely for extra amount of work (or code).
  - Extra and sloppy code may cause your assignments to be marked down.
  - Bonus points are awarded at the sole discretion of the instructor.

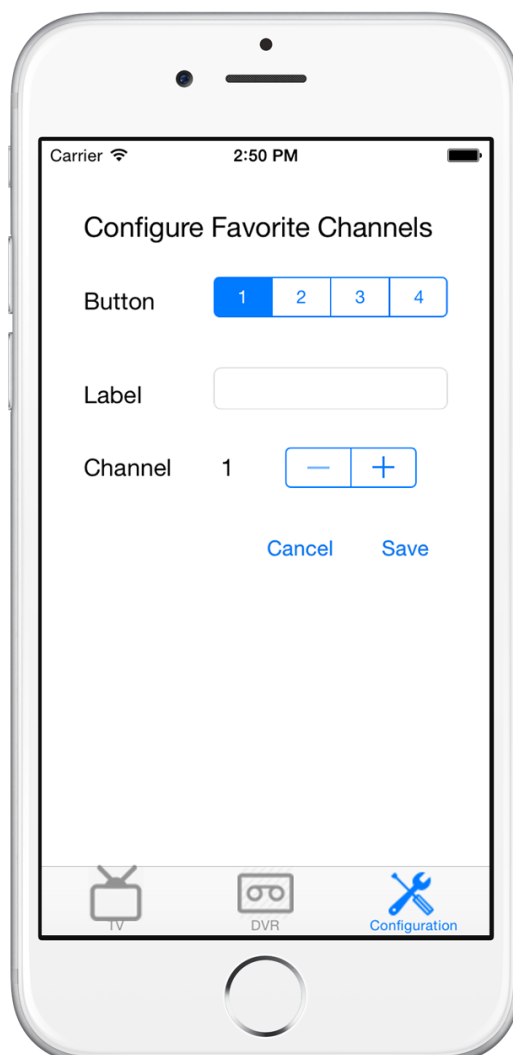
- Include a note in the comment in D2L describing the part(s) should be considered for bonus points.

## Goals

- Developing a tabbed application with multiple screens
- Sharing data among different view controllers.

## Assignments

1. Create a tabbed version of mock remote control. This version of the app will consist of 3 tabs. The first two tabs will be similar to the TV and DVR remote control as described in Programming Assignment #6.
2. The third tab is a configuration panel for the favorite channels in the TV remote control, similar to the one below.



- a) The segmented control allows you to select which of the four favorite channel buttons is to be configured. The favorite channel buttons are numbered 1 – 4 from left to right.
  - b) The text box allows you to enter a short label to be displayed on the favorite channel button. The label must be between 1-4 letters in length. If the label is too long or too short, an alert should popup with an appropriate message.
  - c) The channel number should be in the range of 1-99. The widget next to the channel number is a Stepper object for selecting an integer value.
  - d) The Save button saves the current configuration, while the Cancel button will ignore the current values, and the configuration of the favorite buttons will remain unchanged.
- 3. If the new configuration is saved, the favorite channels in the TV remote should reflect the new configuration, i.e., the label and channel number will be adjusted according to the configuration.
  - 4. It is not required to save the configuration data in a file.
  - 5. **Important:** You are required to use auto-layout in all the scenes, for the portrait mode only.

## Hints

- 1. Consider using a separate model class to represent the configuration data.
- 2. The controllers for the TV remote and the configuration panel both need to have access to the configuration data object.