## COSC 4355/6355 – Introduction to Ubiquitous Computing

# Exercise - 5

October 06, 2022

# **Objective**

Create a simple 'UH Parking' info app.

#### **Motivation**

Table view, auto layout, urls, json parsing, stacked views, data transfer.

# \*\*\*Must Follow\*\*\*

You must follow the rules below. Otherwise, you will get 50% of your actual score.

- 1. Start your XCode project "Exercise5\_LastName\_FirstName" (replace LastName with your last name and FirstName with your first name).
- a. **DON'T DO** the following:
  - i. Start with any other project name and change the zip file name later.
  - ii. This will not be accepted at all.
- 2. You must have to do the exercise compatible with **XCode version 13.4.1** or **XCode version 14.1**.

### **Tips**

- · Read the question carefully, then start coding!
- Build, Build, and Build
  - o If you add anything on storyboard -> Build
  - o If you make a reference from storyboard -> Build
  - o Do not wait until finishing all parts and build.
  - o It is easier to debug after each single feature added.



## **Details**

Create a multiple view iPhone application using Swift as a programming language. Start your XCode project "Exercise5\_LastName\_FirstName" (replace LastName with your last name and FirstName with your first name).

[3 pts] Design your interface to look like the screenshots [Figures 1, 2, 3]

- Design your UI for all iPhone devices (starting from iPhone 8) in Portrait [Figures 1, 2] and Landscape [Figure 3] mode
- Pay attention to images, icons, colors, fonts and font sizes

[5 pts] Application gets the data from the remote json file, located at the address: <a href="https://cpl.uh.edu/courses/ubicomp/fall2022/webservice/parking/parkinglots.json">https://cpl.uh.edu/courses/ubicomp/fall2022/webservice/parking/parkinglots.json</a>
You need to download and parse that file. Data is populated to the cell prototype. At the initial [Figure 1] screen parking zone logo and the amount of free spots are depicted. At the details [Figure 2] screen parking map, parking lots and general info are depicted.

[1 pts] Screens are always showing valid information from the JSON file. Details screen is always showing correct parking zone info.

[1 pt.] Add a splash screen, add a proper icon for the app.

#### **Submission**

Zip XCode project and submit to the blackboard. The name of your zip file will be automatically "Exercise4\_LastName\_FirstName.zip" (LastName is your last name and FirstName is your first name). One submission per person.



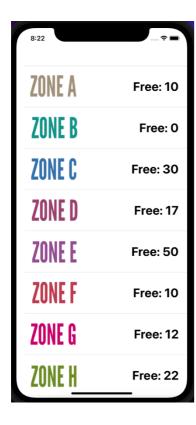




Figure 1 Figure 2

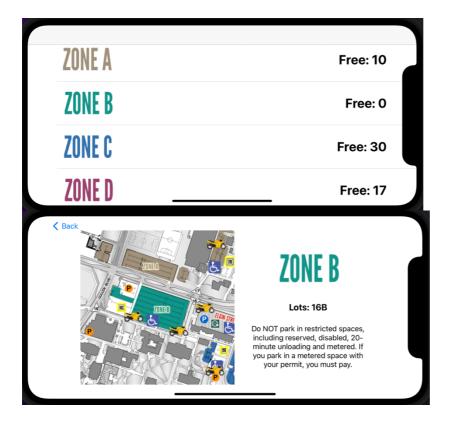


Figure 3

HOUSTON