## COSC 4355/6355 – Introduction to Ubiquitous Computing

# Exercise - 4

September 15, 2022

## **Objective**

Create a simple 'dice variation' game app.

#### **Motivation**

Tab bar controller, auto layout, 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 "Exercise4\_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**.

#### **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 "Exercise4\_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, 7]

- Design your UI for iPhone 11 in **Portrait** and **Landscape** mode
- Pay attention to images, icons, colors, fonts and font sizes

[4 pts] If user taps the button "Fight": randomly select dragon, update pictures of the dragons, update the score and 'battle result' text field.

Each dragon of the greater hierarchy level is stronger than the lower lever dragons (refer to 0\_Dragon\_hierarcy.jpg; left top - strongest, bottom right - weakest). Players can not draw same dragons (no draws).

When any player win 3 battles the game is over and when you click "Fight" battle result is updated accordingly [Figure 5]. When the game is over, pictures and text is not changing unless you restart the game (button "Restart").

Score tab always contains the actual information about players scores. [Figures 2,4,6,7]

[2 pts] If user taps button "Restart", game is restarted to the initial state [Figures 1,2]. Game can be restarted any time even if none of the players have won 3 battles.

[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







Figure 5 Figure 6





Figure 7