

Lab 2 for Group B – Adaptive UI

CS2351M, Intermediate Mobile Application Development: iOS

Introduction

The purpose of this lab is to give you practice setting UI constraints to:

- Position UI elements relative to their super-view or other elements
- Center UI elements on the screen
- UI layout should respond to both screen size and orientation

Four-Function Calculator

Create a calculator that has:

- buttons for ten digits and an enter button
- buttons for the four math functions and equals
- A display that shows the numbers as they are entered and that shows the result of a math operation.

The “keyboard” and “display” should all be centered in the screen. The controls should stay centered when you run the app with different size screens and the controls should expand on larger screens and shrink on smaller screens so that their sizes are proportional to the screen size.

Note that you do *not* need to adapt to screen rotation and you do not need to use size classes.

Alternative lab assignment

Build any app that has a grid of buttons and/or labels. There should be at least 12 controls on the screen. The controls should be centered on the screen and their sizes should be proportional to the screen size. An example would be a Mine Sweeper game.

Submission:

Take four screen shots of the app running that show it on a:

- Small screen, portrait orientation
- Small screen, landscape orientation
- Large screen, portrait orientation
- Large screen, landscape orientation

Beta Version

- Exchange solutions with someone from the other lab assignment group so that you can do code reviews for each other.

Release Version

Revise your code and upload it to the Moodle Lab Release assignment along with the code review your lab partner gave you. Complete the “Release” column of the review to show what you revised.