

Lab 1 – Your First iOS App

CS2351M, Intermediate Mobile Application Development: iOS

Introduction

The purpose of this lab is to give you practice:

- Creating a simple UI
- Adding a class containing business logic
- “Wiring up” the UI by adding event handlers to the ViewController
- Configure the app using the info.plist file

Part 1: Hello iOS Exercise

Do the Phoneword exercise in the Xamarin [Hello iOS](#) Guide.

Part 2: Your First App

Group A: Roman Numeral Conversion App

If you are in Group A, create an app that converts decimal numbers to roman numerals and vice versa. The app only needs to work for numbers 1 through at least 10. Put the code for processing the conversion in it's own class. You are free to design the UI as you wish, but at a minimum it should have:

- One label with instructions for the user
- One TextField for entering either kind of number
- Two buttons, one to convert Roman numerals to decimals and another to convert decimal numbers to Roman numerals
- One label to display the results

Group B: MPG Calculator

If you are in group B, create an app that calculates MPG. The user will be able to enter the distance driven and the number of gallons used, press a button and see the MPG. Put the code that does the MPG calculation in it's own class (yes, it's a very small amount of code, but it's good to get in the habit of separating the UI from the business logic). Feel free to be creative with the UI design, but at a minimum it should have:

- One label with instructions for the user
- Two TextFields for entering miles and gallons.
- One button, to calculate the results.
- One label to display the results

Alternative lab assignment

If the assigned app doesn't get you excited, come up with your own idea for an app! Keep it simple, but it should include at least one TextField for input, one Label for output, a button, and a class containing code for doing some kind of processing.

Submission:

- Take a screen shot of the app from part 1 running in the emulator after it has converted a phone word into a phone number. (Show a phoneword that's not XAMARIN).
- Take two screen shots of the app from part 2 running and doing it's calculations.
- Put the screen shots in a document, label each screen shot, and upload the document.
- Zip the exercise and app solution folders and upload each zip file.