

## Lab 3 – Tip Calculator

CS2351M, Intermediate Mobile Application Development: iOS

### Introduction

The purpose of this lab is to give you practice using the following new UI Controls

- UIImageView
- Slider
- UIAlertController
- Switch

### Tip Calculator (Group A assignment)

Create a calculator that has:

- An image of food or a restaurant (or whatever) at the top
- A TextField for entering the total amount of the meal
- A slider with a minimum of 0 and a max of 20 (or whatever values your generosity dictates) to determine the tip percentage
  - The tip percentage and amount will be shown in labels
- A TextField for entering the tax percentage
  - The tax amount will be shown in a label
  - There will be a switch for turning tax on or off
- A label that displays the total
- An Action Sheet that is triggered when you turn on or off the tax calculation. The Action sheet will ask the user if they really want to turn this calculation on or off (two separate messages).

The Actions that should be handled are shown below. All of these actions should be handled by a single action method. The method should update all the calculations.

- Slider values changing
- Meal amount value change
- Tax percentage value change
- Tax switch value change

A suggested layout for the screen is shown on the next page.

### Alternative lab assignment

Propose an app of your choice that uses all the same controls as the Tip Calculator described above. (The alternative assignment option is open to both group A and B.)

### Submission

#### Beta Version

- Zip the solution folder. (Remove the *bin* and *obj* folders before zipping.)
- Put the screen shots in a document, label each screen shot, and upload the document.
- Post both files in the Beta + Code Review forum

### 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.

Important notes:

- Delete the *obj* and *bin* folders out of your solution before you zip it. Otherwise it will be too large to upload.
- If your solution is still too big to upload you can put it in an online git repository using a service like GitHub and put a link to the repository in a document and upload it (don’t use the assignment comments)
- If you are not familiar with Git, you can share your work with me using an online cloud storage service like Dropbox, GDrive, OneDrive, or iCloud. Put the link in a document and submit it in place of the zip file. Please don’t put the link in the assignment comments.

## Tip Calculator

Image

Amount

Service

Poor

Excellent

Tip

Tax



Percentage

Amount

Total