

Lab 3 – Tip Calculator

CS235IM, 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

- Zip the solution folder and post it in the Beta + Review forum
(Don't forget to do a code review for your lab partner and post it in the forum)

Release

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Tip Calculator

Image

Amount

Service

Poor

Excellent

Tip

Tax



Percentage

Amount

Total

Alternative lab assignment

Create an app that uses all the UI elements listed below, that has a total of at least 15 UI element, and does some kind of computation :

- UIImageView
- Slider
- alertController
- Switch
- Button
- Label
- Text Field

SubmissionBeta 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.