**Introduction**

The purpose of this lab is to give you practice using a TabBarController and the AppDelegate.

**Flash Card App – Group A**

Create an app that simulates flash cards. It will be a Tabbed Application. The first view will simulate the front of a flash card. It will display a question and a picker for entering the answer. The second view will simulate the back of the card. It will display whether the answer and was right or wrong. If it was wrong it will display the right answer.

You can provide a “new question” button on the first view, or you could have the new question presented automatically whenever the first tab button is selected. The questions can be hard coded in a Quiz class or read from a file. You should have at least 10 questions. The questions can be selected randomly or you can present them in sequence (show the next one in the list every time the user gets a new question). All the quiz logic should be in it’s own class.

Optional feature: Keep track of right and wrong answers and display the score somewhere (first view, second view, or in an alert).

**Distance converter – Group B**

Create an app that converts distance measurements. There will be an “English” tab that converts measurements between the following units: inches, feet, yards, and miles. It will have an input text box, an output text box, a button, and two Pickers. Users will enter a number, then select the type of input units using one picker. Then they will select the output units using the second picker. When they click the button the measurement they entered will be converted to the correct value for the output units.

The second tab will be a “Metric” tab. When the user selects this tab, the measurement entered on the first tab’s view will be displayed on the second one. On the second tab (Metric), the units will be centimeters, meters, or kilometers, as appropriate. The calculations will all be done in a separate class.

**Alternative lab assignment:**  
Propose an app of your choice that uses the TabBarController and a Picker.

**Submission:**

Zip the solution folder and upload it after deleting the bin and obj folders.  
Put the screen shots in a document, label each screen shot, and upload the document.  
Upload the completed code review form for the code review you got.  
Upload a copy of the code review form for the code review you gave.