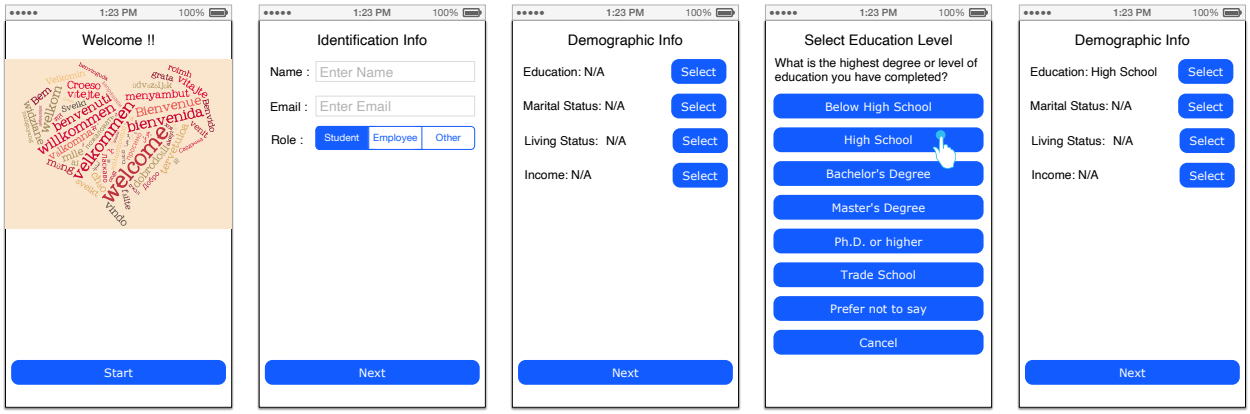
Mobile Application Development
Assignment 3 (100 Points)

Basic Instructions:

1. In every file submitted you MUST place the following comments:
    a. Assignment #.
    b. File Name.
    c. Full name of the student.
2. Each group is required to submit the assignment on Canvas.
3. **Submit Codes:**
    a. Zip all the project folder to be submitted on canvas.
4. Submission details:
    a. The file name is very important and should follow the following format: **Assignment#.zip**
    b. You should submit the assignment through Canvas: Submit the zip file.
5. **Failure to follow the above instructions will result in point deductions.**

In this assignment you will be building an application that uses multiple screens and exchanges data among these screens.



(a) Welcome (b) Identification (c) Demographic (d) Select Education (e) Demographic

Figure 1, App Wireframe

Part 1, Welcome UIViewController (5 Points, In Class):

The Welcome UIViewController displays the welcome screen as shown in Figure 1(a). Please follow the steps to build this UIViewController:

1. The UIViewController displays the welcome photo as shown in the figure.
2. Clicking the "Start" button should show the Identification UIViewController.

Part 2, Identification UIViewController (10 Points, In Class):

This UIViewController is shown in Figure 1(b). Please follow the steps to build this UIViewController:

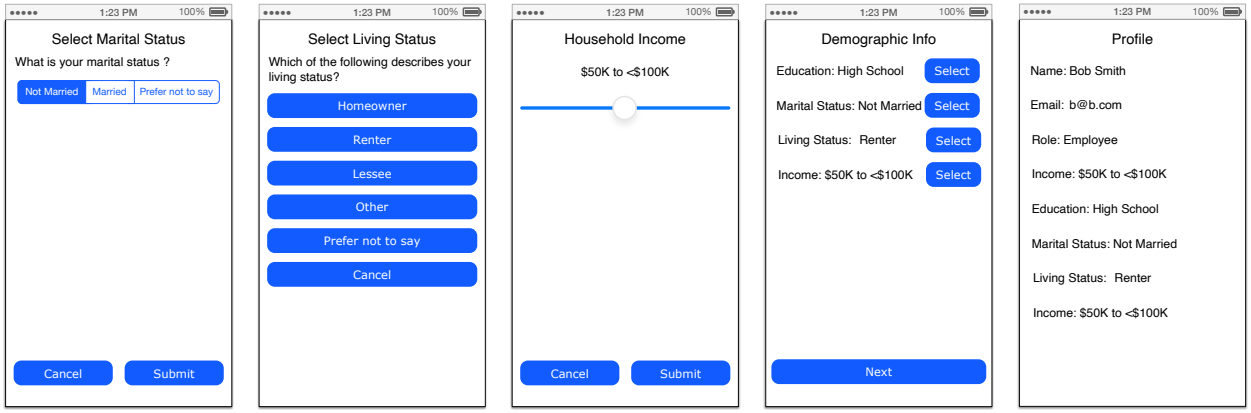
1. The UIViewController requests the user's name, email, and role. Create a Response class to hold these attributes.
2. Display alert dialog when any invalid input is detected after you click Next.
3. Clicking the "Next" button should:
   a. If any of the inputs are missing, then show an alert dialog message indicating that the corresponding input is required.
   b. If all the inputs are correctly provided, create a Response object initialized with the provided inputs. Segue to the Demographic UIViewController and send it the Response object.

Part 3, Demographic UIViewController (35 Points, Partial In Class):

This UIViewController is shown in Figure 1(c). Please follow the steps to build this UIViewController:

1. The UIViewController requests the user's education level, marital status, living status and annual income. Update the Response class to also hold these attributes.

2. Note that this UIViewController should receive a Response object from the Identification UIViewController, which should be used to continue to store the user provided input.
3. Clicking the “Select” button should:
   a. **(In Class)** For education level, launch for result the Select Education UIViewController. Upon returning from the Select Education UIViewController, the selected education level value should be displayed in the UILabel as shown in Figure 1(e).
   b. For marital status, launch for result the Select Marital Status UIViewController. Upon returning from the Select Marital Status UIViewController, the selected marital status value should be displayed in the UILabel as shown in Figure 2(d).
   c. For living status, launch for result the Select Living Status UIViewController. Upon returning from the Select Living Status UIViewController, the selected living status value should be displayed in the UILabel as shown in Figure 2(d).
   d. For annual income, launch for result the Select Income UIViewController. Upon returning from the Select Income UIViewController, the selected income value should be displayed in the UILabel as shown in Figure 2(d).
   e. Note that you should consider using “**Unwind Segues**” to pass data back to this UIViewController.
4. Clicking the “Next” button should:
   a. If any of the inputs are missing, then show a alert dialog message indicating that the corresponding input is required.
   b. If all the input is correctly provided, update the Response object received from the Identification UIViewController to include the user selections. Segue to the Profile UIViewController and send it the Response object.



(a) Select Marital Status Activity | (b) Select Living Status Activity | (c) Select Household Income Activity | (d) Demographic Activity | (e) Profile Activity

Figure 2, App Wireframe

Part 4, Select Education UIViewController (10 Points, In Class):
This UIViewController is shown in Figure 1(d). Please follow the steps to build this UIViewController:

1. Upon clicking on one of the buttons, send back the selected value to the Demographic UIViewController using Unwind Segue.
2. Clicking “Cancel” should simply dismiss the current UIViewController which will display the Demographic UIViewController.

Part 5, Select Marital Status UIViewController (10 Points):
This UIViewController is shown in Figure 2(a). Please follow the steps to build this UIViewController:

1. The user is able to select one of the options provided in the UISegmentedControl
2. Clicking “Submit” should send back the selected value to the Demographic UIViewController using Unwind Segue.
3. Clicking “Cancel” should simply dismiss the current UIViewController which will display the Demographic UIViewController.

Part 6, Select Living Status UIViewController (10 Points):
This UIViewController is shown in Figure 2(b). Please follow the steps to build this UIViewController:

1. Upon clicking on one of the buttons, send back the selected value to the Demographic UIViewController using Unwind Segue.
2. Clicking “Cancel” should simply dismiss the current UIViewController which will display the Demographic UIViewController.

Part 7, Select Income UIViewController (10 Points):
This UIViewController is shown in Figure 2(c). Please follow the steps to build this UIViewController:

1. The user is able to select the income level from 0 to 4 using the UISlider.
    a. The income levels are <$25K, $25K to <$50K, $50K to <$100K, $100K to <$200K, and >$200K corresponding to slider levels 0 to 4 respectively.
    b. Setup the correct slider handler to change the income level UILabel when the slider is moved as shown in Figure 2(c).
2. Clicking “Submit” should send back the selected value to the Demographic UIViewController using Unwind Segue.
3. Clicking “Cancel” should simply dismiss the current UIViewController which will display the Demographic UIViewController.

Part 8, Profile UIViewController (10 Points):
This UIViewController is shown in Figure 2(e). Please follow the steps to build this UIViewController:

4. This UIViewController should receive the completed Response object from the Demographics UIViewController.
5. Display the responses as shown in Figure 2(e).

Part #	Features	Total
Part 1	**(In Class)** Welcome VC: UI Completed and clicking on the “Start” button, segues the Identification VC.	5
Part 2	**(In Class)** Identification VC: UI Completed and clicking on the “Next” button segues the Demographic VC and sends it the Response object. Validation completed correctly.	10
Part 3	**(In Class)** Demographic VC: UI Completed and clicking on the “Select” button for Education segues to the “Select Education” VC.	5
Part 4	**(In Class)** Select Education VC: UI Completed and clicking on a choice button sends the result back using Unwind Segue to the Demographic VC.	10
Part 3	**(In Class)** Demographic VC: Upon returning from the Select Education VC the selected education level is displayed in the UILabel.	5
Part 5	Select Marital Status VC: UI Completed and clicking on the “Submit” button sends the result back using Unwind Segue to the Demographic VC.	10
Part 6	Select Living Status VC: UI Completed and clicking on a choice button sends the result back using Unwind Segue to the Demographic VC.	10
Part 7	Select Income VC: UI Completed and clicking on the “Submit” button sends the result back using Unwind Segue to the Demographic VC.	10
Part 3	Demographic VC: UI Completed and clicking on the other “Select” buttons triggers the corresponding segue and the Unwind Segues are implemented. Upon returning the selected result is displayed.	20
Part 3	Demographic VC: Clicking on the “Next” button segues to the Profile VC and sends it the Response object. Validation completed correctly.	5
Part 8	Profile VC: UI Completed, receives the Response object and displays the information correctly.	10
	Total	**100**

Table 1: Grading Key