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 activities and exchanges data among these activities.

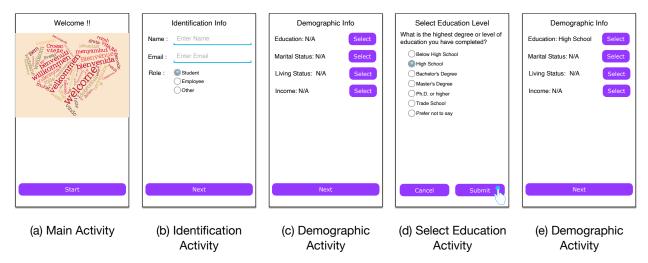


Figure 1, App Wireframe

Part 1, Main activity (5 Points, In Class):

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

- 1. The activity displays the welcome photo as shown in the figure.
- 2. Clicking the "Start" button should start the "Identification" activity.

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

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

- The activity requests the user's name, email, and role. Create a Response class to hold these attributes, the class should implement Serializable or Parcelable interface.
- 2. Make appropriate Toasts whenever 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 a Toast message indicating that the corresponding input is required.
 - b. If all the input is correctly provided, create a Response object initialized with the provided input. Start the Demographic activity and send it the Response object.

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

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

- 1. The activity 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 activity should receive a Response object from the Identification activity, 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 activity. Upon returning from the Select Education activity, the selected education level value should be displayed in the TextView as shown in Figure 1(e).

- b. For marital status, launch for result the Select Marital Status activity. Upon returning from the Select Marital Status activity, the selected marital status value should be displayed in the TextView as shown in Figure 2(d).
- c. For living status, launch for result the Select Living Status activity. Upon returning from the Select Living Status activity, the selected living status value should be displayed in the TextView as shown in Figure 2(d).
- d. For annual income, launch for result the Select Income activity. Upon returning from the Select Income activity, the selected income value should be displayed in the TextView as shown in Figure 2(d).
- 4. Clicking the "Next" button should:
 - a. If any of the inputs are missing, then show a Toast message indicating that the corresponding input is required.
 - b. If all the input is correctly provided, update the Response object received from the Identification activity to include the user selections. Start the Profile activity and send it the Response object.

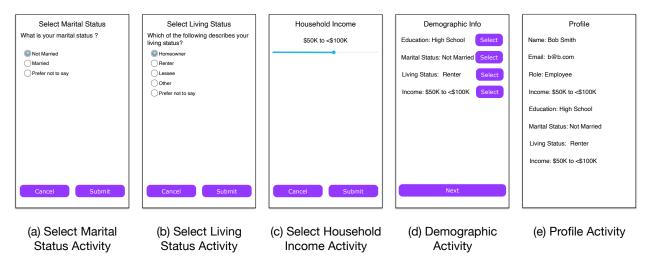


Figure 2, App Wireframe

Part 4, Select Education activity (10 Points, In Class):

- 1. Clicking on the "Select" button beside the Education label in the Demographic activity should launched this activity for result. This is shown in Figure 1(d).
- 2. The user is able to select one of the options provided in the radio group.
- 3. Clicking "Submit" should send back the selected value to the Demographic activity and finish the current activity.
- 4. Clicking "Cancel" should simply finish the current activity which will display the Demographic activity.

Part 5, Select Marital Status activity (10 Points):

- 1. Clicking on the "Select" button beside the Martial Status label in the Demographic activity should launched this activity for result. This is shown in Figure 2(a).
- 2. The user is able to select one of the options provided in the radio group.

- 3. Clicking "Submit" should send back the selected value to the Demographic activity and finish the current activity.
- 4. Clicking "Cancel" should simply finish the current activity which will display the Demographic activity.

Part 6, Select Living Status activity (10 Points):

- 1. Clicking on the "Select" button beside the Living Status label in the Demographic activity should launched this activity for result. This is shown in Figure 2(b).
- 2. The user is able to select one of the options provided in the radio group.
- 3. Clicking "Submit" should send back the selected value to the Demographic activity and finish the current activity.
- 4. Clicking "Cancel" should simply finish the current activity which will display the Demographic activity.

Part 7, Select Income activity (10 Points):

- 1. Clicking on the "Select" button beside the Income label in the Demographic activity should launched this activity for result. This is shown in Figure 2(c).
- 2. The user is able to select the income level from 0 to 4 using the slider.
 - 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 TextView when the slider is moved as shown in Figure 2(c).
- 3. Clicking "Submit" should send back the selected value to the Demographic activity and finish the current activity.
- 4. Clicking "Cancel" should simply finish the current activity which will display the Demographic activity.

Part 8, Profile Activity (10 Points):

- 1. This activity should receive the completed Response object from the Demographics activity.
- 2. Display the responses as shown in Figure 2(e).

Part #	Features	Total
Part 1	(In Class) Main Activity: UI Completed and clicking on the "Start" button, starts the Identification Activity.	5
Part 2	(In Class) Identification Activity: UI Completed and clicking on the "Next" button starts the Demographic activity and sends it the Response object. Validation completed correctly.	10
Part 3	(In Class) Demographic Activity: UI Completed and clicking on the "Select" button for Education launches the "Select Education" activity for result.	5
Part 4	(In Class) Select Education Activity: UI Completed and clicking on the "Submit" button sends the result back to the Demographic Activity.	10
Part 3	(In Class) Demographic Activity: Upon returning from the Select Education activity the selected education level is displayed in the TextView.	5
Part 5	Select Marital Status Activity: UI Completed and clicking on the "Submit" button sends the result back to the Demographic Activity.	10
Part 6	Select Living Status Activity: UI Completed and clicking on the "Submit" button sends the result back to the Demographic Activity.	10
Part 7	Select Income Activity: UI Completed and clicking on the "Submit" button sends the result back to the Demographic Activity.	10
Part 3	Demographic Activity: UI Completed and clicking on the other "Select" buttons triggers the corresponding launch for result. Upon returning the selected result is displayed.	20
Part 3	Demographic Activity: Clicking on the "Next" button starts the Profile activity and sends it the Response object. Validation completed correctly.	5
Part 8	Profile Activity: UI Completed, receives the Response object and displays the information correctly.	10
	Total	100
Table 1: Grading Key		