Mobile App Development

In-Class Assessment 2 (1 Hour and 15 mins)

Basic Instructions:

- 1. This is an In Class Assessment, which counts for 10% of the total course grade.
- 2. This assessment is an individual effort. Each student is responsible for her/his own assessment and its submission.
- 3. Once you have picked up the assessment, you may not discuss it in any way with anyone until the assessment period is over.
- 4. During the assessment, you are allowed to use the course videos, slides, and your code from previous home works and in class assignments. You can use the internet to search for answers. You are NOT allowed to use code provided by other students or solicit help from other online persons.
- 5. Answer all the assessment parts, all the parts are required.
- 6. During the assessment the teaching assistants and Instructors will pass by each student and ask them to demonstrate their application. Your interaction with the teaching assistants and instructors will be taken into consideration when grading your assessment submission.
- 7. Please download the support files provided with the assessment and use them when implementing your project.
- 8. Your assignment will be graded for functional requirements and efficiency of your submitted solution. You will loose points if your code is not efficient, does unnecessary processing or blocks the UI thread.
- Create a zip file which includes all the project folder, any required libraries, and your presentation material. Submit the exported file using the provided canvas submission link.
- 10. Do not try to use any Social Messenger apps, Emails, Or Cloud File Storage services in this exam.
- 11. Failure to follow the above instructions will result in point deductions.
- 12. Any violation of the rules regarding consultation with others will not be tolerated and will result disciplinary action and failing the course.

In-Class Assessment 2 (100 Points)

In this assignment you will get familiar with Android Activities.

Setup Instructions:

- 1. You are provided with a skeleton application which includes all the layout files and activities required for this assignment, so please use the provided skeleton app.
- 2. In the "strings.xml" file change the "your_fullname" item to show your full name, this will be used for grading during the assessment session.



Figure 1, Application User Interface

Part 1 Main Activity (55 Points):

Fig 1(a) shows this activity. Please follow the following tasks:

- 1. Clicking the "Set Weight" button should:
 - a. Start for Result the "Set Weight" activity
 - b. Upon returning from the "Set Weight" activity, the received weight value should be displayed as shown in Fig 1(c).
- 2. Clicking the "Set Gender" button should:
 - a. Start for result the "Set Gender" activity
 - b. Upon returning from the "Set Gender" activity, the received gender value should be displayed as shown in Fig 2(b).
- 3. Create a Profile class that will store the weight and gender. The Profile class should implement the Serializable interface.
- 4. Clicking the "Submit" button should:
 - a. If the weight is not selected then show a toast indicating that weight is required. Similarly if the gender is not selected, then show a toast message indicating that gender is required.
 - b. If weight and gender have been selected, then create a Profile object containing the selected weight and gender, and send the Profile object in the Intent to start the Profile activity as shown in Fig 2(c).
- 5. Clicking the "Reset" button should reset the activity to initial state shown in Fig 1(a).

Part 2 Set Weight Activity (15 Points):

Fig 1(b) shows this activity. Please follow the following tasks:

- 1. Clicking the "Set" button should:
 - a. If no weight is entered show a Toast indicating that the weight is required.
 - b. If a weight is entered then:
 - i. Send the entered weight as a **Result**
 - ii. Finish the current activity, which should return to the Main Activity.
- 2. Clicking the "Cancel" button should:
 - a. Finish the current activity which should return to the Main Activity.

Part 3 Set Gender Activity (15 Points):

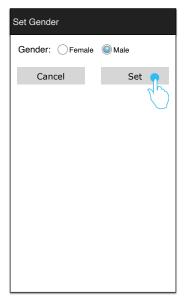
Fig 2(a) shows this activity. Please follow the following tasks:

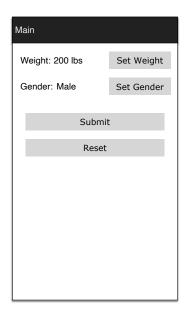
- 1. Clicking the "Set" button should:
 - a. Get the selected gender from the radio group then:
 - i. Send the selected gender as a **Result**
 - ii. Finish the current activity, which should return to the Main Activity.
- 2. Clicking the "Cancel" button should:
 - a. Finish the current activity which should return to the Main Activity.

Part 4 Profile Activity (15 Points):

Fig 2(c) shows this activity. Please follow the following tasks:

- 1. This activity should receive the Profile object which contains the selected weight and gender values. The received values would be presented as shown in Fig 2(c)
- 2. Clicking the "Close" button should:
 - a. Finish the current activity which should return to the Main Activity.







(a) Set Gender

(b) Main Screen

(c) Profile Screen

Figure 2, Application User Interface

Section:	
Student Name:	
Student ID:	

Part #	Features	Total	Grade	Comments		
Start Set Weight Activity for P1 Result and Display received results correctly.		20				
Start Set Gender Activity for P1 Result and display received results correctly.		20				
P1	P1 Start Profile Activity and send the Profile object correctly.					
P1 Reset button and bring back the UI to initial state.		5				
P2	Send the weight value back to the Main Activity.	10				
P2	Cancel finishes the Activity.	5				
P3 Send the gender value back to the Main Activity.		10				
P3	Cancel finishes the Activity.	5				
P4	Receives Profile object and displays it correctly.	10				
P4	Close finishes the Activity.	5				
	Total	100				
Table 1: Grading Key						