BAIT2073 Mobile Application Development
Academic Year 2023/2024
Practical Test (Set 0)

Instruction:

1. Create a new Android project using the **Empty Views Activity** template.
2. Name the **project**, **package** and **folder** following the pattern below:

   Set[SetNumber][FullName]

	Example
Project Name	**Set0LiawChunVoon**
Package Name	com.example.**set0liawchunvoon**
Folder Name	**Set0LiawChunVoon**

3. Delete unused testing folders/packages.
4. Delete testing related lines in module-level gradle file.
5. Enable **view-binding**. You must use view-binding in your codes.
6. Use meaningful variable and component names.
7. Follow the programming conventions as in the practical.

Submission:

1. Generate, copy and paste the **APK** file into the project root folder.
   [Build] > [Build Bundle(s) / APK(s)] > [Build APK(s)]

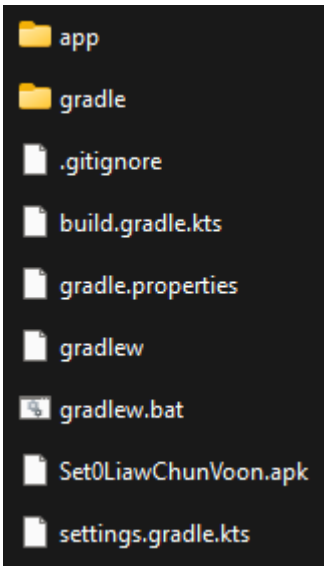
2. Name the **APK** file following the pattern below:

   Set[SetNumber][FullName].apk

	Example
APK File	**Set0LiawChunVoon**.apk

3. Clean the project to reduce file size.
4. Close the project.
5. Delete the following machine-dependent folders/files:
   - **.gradle** folder
   - **.idea** folder
   - **local.properties** file

6. **Compress** the project folder (**zip** format), **upload** to Google Classroom and **turn-in** your work.

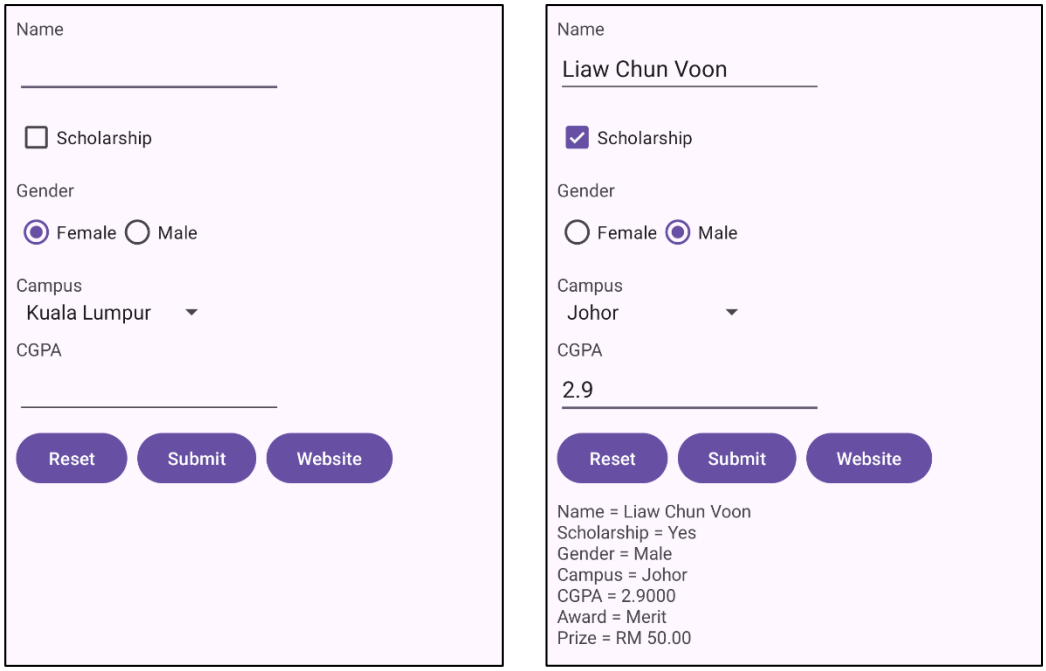


Sample project folder (final)

Question:

Create a mobile app to calculate bachelor degree award and book prize based on CGPA.

Main Activity



Sample layout (your layout can be different)

Cursor focus should be default to the **first** input when the mobile app is started.

(A) Reset Button

Reset all input and output components. Place **cursor focus** on the **first** input.

(B) Submit Button

Obtain 5 inputs from the user, which include:

Input	Data Type	Remark	Input Validation
Name	String	Max length = 50. Plain text.	Cannot empty.
Scholarship	Boolean	-	-
Gender	String	Radion button group with 2 options: • Female (default) • Male	-
Campus	String	Spinner with 3 entries: • Kuala Lumpur (default) • Penang • Johor	-
CGPA	Double	Max length = 6. Number (decimal). Default -1.0.	Cannot < 0.0 or > 4.0.

Perform **simple input validation** on the following 2 inputs. Use **Toast** to show simple error message:

- **Name**
- **CGPA**

Then, calculate the **Award** (String) and **Prize** (Double):

CGPA	**Award**	**Prize**
>= 3.7500	Distinction	100.00
>= 2.7500	Merit	50.00
>= 2.0000	Pass	0.00
Below	Fail	0.00

Finally, display the outputs based on the following formats:

Value	Format
Name	-
Scholarship	“Yes” or “No”.
Gender	-
Campus	-
CGPA	4 decimal places.
Award	-
Prize	2 decimal places, prefix with “RM”.

(C) Website Button

By using **implicit intent**, visit to the website at **https://example.com**.