



## DESCRIPTION OF COURSEWORK

Course Code	SWE311
Course Name	Mobile Application System Design
Lecturer	Nurul Amera binti Muhamad Nazmi
Academic Session	2025/04
Assessment Title	Assignment 2

### A. Introduction/ Situation/ Background Information

This assignment will require students to demonstrate their knowledge of mobile application system design in terms of planning, design, workflow, ideas, content, and development that has been learned throughout the semester.

### B. Course Learning Outcomes (CLO) covered

At the end of this assessment, students are able to:

- CLO 1 Use current mobile application design for mobile application development.
- CLO 2 Apply knowledge and practical skills to design basic features in mobile application.
- CLO 3 Analyze related programming languages to develop basic features in mobile application.
- CLO 4 Display an awareness for continuous learning and analysis of mobile application technology.

### C. University Policy on Academic Misconduct

1. Academic misconduct is a serious offense in Xiamen University Malaysia. It can be defined as any of the following:
  - i. **Plagiarism** is submitting or presenting someone else's work, words, ideas, data or information as your own intentionally or unintentionally. This includes incorporating published and unpublished material, whether in manuscript, printed or electronic form into your work without acknowledging the source (the person and the work).

- ii. **Collusion** is two or more people collaborating on a piece of work (in part or whole) which is intended to be wholly individual and passed it off as own individual work.
  - iii. **Cheating** is an act of dishonesty or fraud in order to gain an unfair advantage in an assessment. This includes using or attempting to use, or assisting another to use materials that are prohibited or inappropriate, commissioning work from a third party, falsifying data, or breaching any examination rules.
2. All assessments submitted must be the student's own work, without any materials generated by AI tools, including direct copying and pasting of text or paraphrasing. Any form of academic misconduct, including using prohibited materials or inappropriate assistance, is a serious offense and will result in a zero mark for the entire assessment or part of it. If there is more than one guilty party, such as in case of collusion, all parties involved will receive the same penalty.

#### **D. Instruction to Students**

Work together in a team of five members. Complete all assignment requirements detailed in the section below. You must submit your Flutter project folder, an APK file, and a report in PDF format via Moodle (compressed zipped folder). All team members are expected to actively contribute to assignment. The individual assignment marks will be determined by the member's contribution to the assignment. The team leader is responsible for submitting the assignment and cover page along with your report. Save the folder as **TeamNumber.zip**.

(If your Android project folder is above 20 MB, you may put the project folder onto OneDrive and mention the share link on your report)

The deadline for this assignment is on **20 June 2025, 11:59 pm**. No submission will result in 0 marks for your Assignment. All submissions shall be made via the Moodle platform.

## E. Evaluation Breakdown

No.	Component Title	Mark
1.	Android App Development using Flutter	60
2.	Report (Include your name in the section of your writing)	30
3.	Presentation	10
	<b>TOTAL</b>	<b>100</b>

## F. Task(s)

### Task 1: Android App Development (60 Marks)

Develop a native mobile Android app using the Flutter framework, choosing one of the themes listed below:

- a) Food & Beverage
- b) Health & Fitness
- c) Education & Learning
- d) Travel & Tourism
- e) E-Commerce & Marketplace
- f) Gaming Comparison

You may reuse the app you created in Assignment 1 as your starting template.

Your app should meet the requirements below:

- a. At least SEVEN (7) screens, as specified below:
  - i. **Registration Screen**- Allows users to create a new account by entering personal details such as name, email, and password.
  - ii. **Sign-up & Login Screen** - Enables users to access the application using their registered credentials.
  - iii. **Main/Home Screen** – The default screen displayed after a successful login, providing navigation to other key features of the app
  - iv. **Profile Screen** – Displays user information and allows users to update their profile details.
  - v. **Settings Screen** – Provides options for users to adjust app preferences such as notifications, privacy, or language.

- vi. **Content/Feature Screen** – A core screen that delivers the main functionality of the app (e.g., list of items, services, or features depending on your app concept)
- vii. **Help/Support Screen** – Offers guidance, FAQs, or a contact option for users needing assistance.

If any of the screens mentioned above were developed for Assignment 1, you are allowed to reuse them.

[20 Marks]

b. User Registration and Login Authentication

- i. The user's sign-up details, including their username and password, should be saved in a database
- ii. User credentials must be verified before granting access to the main page.

[10 Marks]

c. Database Development.

- i. Create a database to store data related to the app's target subjects. Ensure users can perform CRUD (Create, Read, Update, Delete) operations on the records

[20 Marks]

d. Audio/Video Integration

- i. Incorporate at least one audio or video element on a selected screen within the app

[10 Marks]

## **Task 2: Report (40 Marks)**

Along with developing the app, you are required to submit a report that includes the following sections:

- a. Introduction
  - Objective: Define the problem and the purpose of developing the app
  - Target Market: Specify the age group and type of users your app is designed for

[5 Marks]
- b. System design
  - User Stories and Acceptance Criteria: Outline user stories and define the criteria for accepting features
  - Database Design: Provide details on the structure of the database used in the app

[15 Marks]
- c. Result
  - App Screens and Features: Use screenshots to clearly explain each screen in the app and describe its key features.

[10 Marks]

## **Task 3: Presentation (10 Marks)**

Each group is required to deliver a short presentation to showcase their mobile application.

The presentation should be clear, engaging, and structured around the following key areas:

- a) App Overview
- b) Key Features & Screens
- c) Design & Technical Highlights
- d) Team contribution & Reflection

[10 Marks]

## MARKING RUBRICS

Assignment 2 (30%)								
Score and Descriptors								
Criteria	Excellent (17-20)	Good (13-16)	Average (9-12)	Need Improvement (5-8)	Poor (1-4)	No Attempt (0)	Weight (%)	Mark
Android App Development (Task 1a)	Well-designed and highly intuitive interface along with necessary control buttons. The navigation between screens is smooth.	Fairly good design and intuitive interface along with necessary control buttons. The navigation between screens is generally smooth	In general, the layout design is acceptable, although there are minor flaws in the interface design.	The layout is poorly designed, resulting in a bad user experience.	The layout is poorly designed or almost incomplete	No attempt at this feature.	20	
	Excellent (9-10)	Good (7-8)	Average (5-6)	Need Improvement (3-4)	Poor (1-2)	No Attempt (0)		
Android App Development (Task 1b)	The signup process includes proper input validation or uses appropriate input fields. Login authentication can function without error.	The signup process neglects one or two required validations or uses a few unsuitable fields for user input. Login process can function without error.	One or a few major errors exist in either signup or login app logic. (e.g., user authentication fails even user inputs valid credential)	Most app logics trigger an error that results in a non-functional feature.	Almost all app logics do not work or trigger errors.	No attempt for this feature	10	
	Excellent (17-20)	Good (13-16)	Average (9-12)	Need Improvement (5-8)	Poor (1-4)	No Attempt (0)		
Android App Development (Task 1c)	Completeness of all CRUD operations that include (Create, Read, Update, Delete). The CRUD operations are free from any error.	Most CRUD operation logics work correctly, as expected.	The CRUD operation logic has one or a few noticeable errors (e.g., one or two CRUD operations are missing).	Most app logic triggers an error that results in a non-functional feature.	Almost all app logics do not work or trigger errors.	No attempt for this feature	20	
	Excellent (9-10)	Good (7-8)	Average (5-6)	Need Improvement (3-4)	Poor (1-2)	No Attempt (0)		
Android App Development (Task 1d)	The integration of audio/video aligns with the purpose of the app. It can play smoothly and permit the user to control it (play or pause, etc.)	The integration of audio/video generally aligns with the app's purpose. It can play smoothly but lacks user control.	The integration of audio/video is less relevant to the app's purpose. It can play but lacks user control.	Most app logics trigger an error that results in a non-functional feature.	Almost all app logics do not work or trigger errors.	No attempt for this feature	10	

	<b>Excellent (5)</b>	<b>Good (4)</b>	<b>Average (3)</b>	<b>Need Improvement (2)</b>	<b>Poor (1)</b>	<b>No Attempt (0)</b>		
Report – Introduction  (Task 2a)	The introduction is well written, with accurate and succinct points.	The introduction is well written but with one/two minor mistakes (e.g., a few irrelevant statements).	The introduction has a few major mistakes (e.g., a few incorrect facts/arguments).	The introduction has a lot of major mistakes or missing some required sections.	The introduction is missing most of the required major contents.	No attempt at this feature.	<b>5</b>	
	<b>Excellent (13-15)</b>	<b>Good (10-12)</b>	<b>Average (7-9)</b>	<b>Need Improvement (4-6)</b>	<b>Poor (1-3)</b>	<b>No Attempt (0)</b>		
Report – System Design  (Task 2b)	The user stories and acceptance criteria are well-written and cover all the app's functionalities. The database design clearly explains how the database supports the app's functionalities.	Missing a few essential user stories. The database design is fairly well written, with explanations of how the database supports the app's functionalities.	Missing quite a number of user stories. The database design is partially clear.	Missing many user stories. The database design is poorly presented, and there are lots of unclear statements.	Missing most of the required significant contents.	No attempt at this feature.	<b>15</b>	
	<b>Excellent (9-10)</b>	<b>Good (7-8)</b>	<b>Average (5-6)</b>	<b>Need Improvement (3-4)</b>	<b>Poor (1-2)</b>	<b>No Attempt (0)</b>		
Report – Result  (Task 2c)	The result is well written and structured. It is presented with accurate and clear explanations and screenshots.	The result is fairly well written and structured, with the necessary explanation and screenshots.	The result is slightly not readable/ understandable.	The result is difficult to read and understand.	Missing most of the required significant contents.	No attempt at this feature.	<b>10</b>	
	<b>Excellent (9-10)</b>	<b>Good (7-8)</b>	<b>Average (5-6)</b>	<b>Need Improvement (3-4)</b>	<b>Poor (1-2)</b>	<b>No Attempt (0)</b>		
Presentation (Task 3)	The result is well written and structured. It is presented with accurate and clear explanations and screenshots.	The audience was engaged by the presentation. Majority of presenters spoke at a suitable volume.	The audience was slightly engaged by the presentation. Minority of presenters spoke at a suitable volume.	The audience was distracted. Speakers could be heard by only half of the audience.	The audience was not engaged. Majority of presenters spoke too quickly or quietly making it difficult to understand.	No attempt at this feature.	<b>10</b>	
<b>TOTAL</b>							<b>/100</b>	
<b>Deduction for late submission or failure to adhere to the submission format.</b>							<b>0 - 10</b>	
<b>Final Team Mark</b>							<b>/100</b>	
<b>Individual penalties for unequal contribution, performance, and AI-generated content.</b>								
<b>Student Name: Student ID:</b>	Fill in your ID and Name here	Fill in your ID and Name here	Fill in your ID and Name here	Fill in your ID and Name here		Fill in your ID and Name here		
<b>Team Mark</b>								
<b>Mark Deduction</b>								
<b>Final Individual Mark</b>								

### Members' Contribution Sheet

<b>Team Member Name &amp; ID</b>	<b>Tasks and writing</b>	<b>Signature</b>
[Member 1 Name & ID]	-	
[Member 2 Name & ID]	-	
[Member 3 Name & ID]	-	
[Member 4 Name & ID]	-	
[Member 5 Name & ID]	-	

Note to students: Please include the marking rubric when submitting your coursework.