Bachelor of Computing Systems		
Course No: ISCG 7424	**Mobile Software Development**	**Level: 7** **Credits: 15**

Student Name: Quinton Gillanders	**Student ID:** 1569640
Assessment Type: Design and Build Mobile App	**Weighting: 30%**
Due Date and Time: 28th April 12pm	**Total Marks: 100**

Student declaration

I confirm that:

- This is an original assessment and is entirely my own work.
- The work I am submitting for this assessment is free of plagiarism. I have read and understood the Academic Integrity Procedure (including the key principles about using the use of Generative Artificial Intelligence (GenAI) listed in Section 3.2). I have also read and understood the Student Disciplinary Statue.
- Where I have used ideas, tables, diagrams etc of other writers, I have acknowledged the source in every case.

Students Signature: Quinton	**Date:** 28/04/2025

Assessment Mapping

After completing this assessment, the student will have met the following learning outcomes:

Learning Outcome	Tasks
1. Acquire in depth knowledge of a range of advanced technical features that extend the standard software development environment to cater for the development of software for mobile devices by obtaining information from the internet, manuals, textbooks and supplied sample code.	1-9
2. Demonstrate the ability to successfully apply such features and techniques when writing code to solve selected problems in the given language for a mobile device	1-9

Assessment information/guidelines:

- This is individual assessment.
- Read the provided requirements.
- Design and build mobile application using Android studio.
- You are also required to build wireframes of your application.
- Brief report contain screenshots of your interfaces with brief explanation and above coversheet.
- You are allowed to use Generative AI tools (e.g., Copilot, ChatGPT) for assistance, but you must clearly document their use.
- After your reference list, include:
    - A list of GenAI tools used.
    - A brief explanation of how each tool contributed to your work (e.g., code suggestions, debugging help, UI design inspiration).
    - Ensure that all sources, including AI-generated content, are properly acknowledged and cited where applicable.

Assessment submission instructions:

You must upload following files via the link provided on the Moodle course page:

- Wireframes either in pdf or Microsoft word file format.
- Your android studio project with all necessary files (zip it).
- Add the above coversheet to your report and upload it on Moodle.

Design and Build Mobile Application

Assignment Tasks:

1. Project Setup:

Set up a new mobile application project using Android Studio.
Create the necessary project structure and configurations.

2. User Interface Design:

Design the user interface for the mobile application, taking inspiration from a booking platform like BookMe.co.nz.

3. Include the following key screens:

Homepage: Display featured deals and categories.
Deal Listings: Show a list of available deals with relevant information (e.g., title, image, price, discount, category).
Deal Details: Provide detailed information about a selected deal, including the category it belongs to.
Search: Allow users to search for deals based on keywords or categories.
User Profile: Display user details and any booked deals.

4. User Roles and Authentication:

Implement the concept of three user roles: customers, suppliers, and admin.
Design the login and registration screens for each user role.
Use dummy data to simulate the login and registration process for different users.

5. Front-End Implementation:

Implement the designed user interfaces using front-end technologies.
Create components for each screen and navigation between them.
Use dummy data to populate the deal listings and deal details screens, including categories.

6. User Interactions:

Implement user interactions.
Handle navigation between screens using appropriate navigation patterns.

7. Responsive Design:

Ensure that the mobile application is responsive and functions well on different devices and screen sizes.

8. Error Handling:

Implement basic error handling for scenarios such as failed data loading or incorrect user input.

9. User Experience (UX) Improvements:

Implement loading states to indicate data retrieval.
Add visual feedback for user actions (e.g., button press, loading indicators).

Presentation and Demonstration:

Prepare a presentation showcasing the front-end of the mobile application.
Demonstrate the application to the class, explaining the design decisions, user interactions, and user roles.

Submission:

Regarding submission check Moodle submission links and upload all the required files.

Grading Criteria:

The assignment will be evaluated based on the following factors:
Completeness and functionality of the front-end application.
User interface design and adherence to the provided requirements.
User experience and responsiveness of the application.
Implementation of user interactions and gestures.
Inclusion of user roles (customers, suppliers, admin) and category assignment to deals.
Error handling and loading state implementation.
Quality of the presentation and explanation during the demonstration.

Marking Schedule

Marks will be allocated for functionality, best practices such as application robustness, code elegance, maintenance and documentation.

Student ID:

Task	Marking Criteria	Marks Allocated	Your Marks
Screen Designs	Screen(s) designed with requirements in mind. Screens are aesthetically pleasing and allow for an intuitive and easy to follow form. Design of Home screen: 3 marks. Design of Deal Listings: 3 marks Design of Deal Details: 3 marks Design of Search Functionality: 2 marks Design of User Profile: 2 marks Inclusion of Deal Categories: 2 marks	15	
Front Implementation	Correct Project Setup and Structure: 6 marks Accurate Implementation of UI Components: 12 marks Navigation and Routing: 10 marks Usage of Dummy Data: 6 marks Responsiveness and Compatibility: 6 marks Error Handling and Loading States: 5 marks	45	
User Interactions and experience	Implementation of User Interactions: 4 marks Look and feel: 4 marks Responsiveness and Smoothness: 4 marks Visual Feedback: 3 Marks	15	
Users	Implementation of User Roles: 5 marks User Authentication (Login/Registration): 5 marks Sample user dashboard 5 marks	15	
Presentation and Demo	Clarity of Explanation: 5 marks Demonstration of Key Features: 5 marks	10	
You must give demo of your assignment and answer all questions about your code. 30 marks will be deducted if this is not done.			
Total Marks		**100**	

For each task scoring is limited to:

- Excellent: 90 - 100%
- Very good 75-90%
- Good: 55-75%
- Satisfactory: 25-55%
- Needs Improvement: 5-25%
- Not completed 0