Module Nmae: Mobile Applications for Technologists
Module Code: COMP1836

Assignment Part 1

Submission Date: 11th December 2023 @ 2000

WARNING:

All submitted work will be electronically scanned for plagiarism and the use of Artificial Intelligence (AI) software. The work that you submit must be your own; any material from other sources must be correctly cited and referenced. If unreferenced material is detected a student will be reported for plagiarism. If AI is used in the production of this work, university regulations require that this fact is clearly stated on the report. Use of AI which has not been acknowledged is an academic misconduct offence and again will lead to a report of plagiarism.

Brief

The main aim of this assignment is to develop and test student's understanding and practical skills in mobile app design.

Coursework Submission Link

- Moodle submission link

Learning Outcomes

On completion of the assignment, the student will develop: 1. Understanding of the basic principles of mobile app design. 2. Skills in designing a mobile app.

The task

This assignment consists of two tasks:

1. **Task 1**. Investigating the main principles of mobile app design using a variety of literature sources (e.g., books, journal articles, online resources). Find 5 to 10 relevant literature sources related to the main principles of mobile app design, analyse them, and write up a list of the main design principles and features that a good mobile app should have to appeal to customers. Explain how you are going to incorporate these features in the app you will be developing.

2. **Task 2**. Design a mobile app for rental deals of your choice. Explain how you have created the design specifying the theme you have chosen, the type of layout used, and the steps taken in developing the app design. Include a picture of the running version of the app using the emulator.

The app should have an opening screen with the following elements:

- A title.

- Either a drop-down list or radio buttons to choose the type of rental item.

- A dynamic ImageView.

- A TextVew and stylized button for displaying the rental item image and the lease price for the rental item chosen by the customer.

- Specifications or details for the rental item.

- Use a theme that displays an **action bar** with an icon of your choice in the finished layout.

  The icon can be chosen from Android studio free icons' library at e.g., https://icon-library.com/png/544636.html. (Hint: You can find more icons' libraries available when you type in google "android studio free icons library").

- You must choose an API level that captures at least 70% of devices.

Deliverables

You should submit a formal report using the following template https://moodlecurrent.gre.ac.uk/mod/resource/view.php?id=2620342. The main body of the report should be up to 5 pages long, the appendix - up to 5 additional pages and **must be submitted as a PDF**.

The main body of the report should have the following sections; - abstract, - introduction, - two sections with appropriate titles for task 1 and task 2, including subsections where applicable, - a conclusion, - and a list of references. - The list of references should be formatted following the Harvard referencing system http://www.citethisforme.com/harvard-referencing. The appendix should include the code for all XML files, clearly marked with their names.

Marking Scheme

This first part of the assignment contributes 30% of the total coursework mark. The marks are distributed as follows:

1. Task 1 = 30%

2. Task 2 = 60%

3. Report structure and presentation = 10%

Full rubric below:

Rubric Task 1: Investigating Mobile App Design Principles (30%)

Criteria	Excellent (25-30)	Proficient (15-24)	Basic (5-14)	Limited (0-4)
Research & Analysis	Thorough research and analysis of 10 or more relevant literature sources.	Research and analysis of 5-9 relevant literature sources.	Research and analysis of fewer than 5 relevant literature sources.	Limited or no research evident.
Design Principles & Features	Comprehensive list of main design principles and features for mobile apps.	Clear list of main design principles and features for mobile apps.	Some design principles and features listed.	Lacks a list of design principles and features.

Criteria	Excellent (25-30)	Proficient (15-24)	Basic (5-14)	Limited (0-4)
Explanation of Incorporation	Clear explanation of how these principles will be incorporated into the app's development.	Adequate explanation of how these principles will be incorporated into the app's development.	Vague or incomplete explanation of how these principles will be incorporated into the app's development.	Fails to explain how these principles will be incorporated into the app's development.

Rubric Task 2: Designing a Mobile App (60%)

Criteria	Excellent (50-60 points)	Proficient (30-49 points)	Basic (10-29 points)	Limited (0-9 points)
Design Explanation	Detailed explanation of the design process, including theme, layout, and development steps.	Explanation of the design process with minor gaps.	Limited explanation of the design process.	Fails to explain the design process.
App Design Quality	Creative, well-thought-out app design that incorporates all required elements.	App design meets the minimum requirements but lacks some creativity or polish.	App design meets the minimum requirements but lacks creativity and polish.	App design is incomplete or significantly deviates from the requirements.
Presentation	Presentation of a running version of the app using an emulator, demonstrating functionality.	Presentation of a running version of the app with minor issues.	Attempt to present a running version of the app with significant issues.	Fails to present a running version of the app.

Criteria	Excellent (50-60 points)	Proficient (30-49 points)	Basic (10-29 points)	Limited (0-9 points)
API Level Choice	Appropriate choice of API level capturing at least 70% of devices.	Choice of API level captures some of the target devices.	Choice of an inappropriate API level.	Choice of an API level that is incompatible with the project's goals.

Rubric: Report Structure and Presentation (10%)

Criteria	Excellent (8-10 points)	Proficient (5-7 points)	Basic (2-4 points)	Limited (0-1 points)
Report Structure	Well-structured and organised report, easy to follow.	Reasonably well-structured and organised report.	Report structure and organisation could be significantly improved.	Report structure and organisation are severely lacking.
Grammar & Formatting	None or very few grammatical and formatting errors.	Some minor grammatical or formatting errors.	Noticeable grammatical and formatting errors.	Numerous grammatical and formatting errors.
Citation & Referencing	Adherence to citation and referencing guidelines.	Adherence to citation and referencing guidelines with a few issues.	Inconsistent adherence to citation and referencing guidelines.	Fails to adhere to citation and referencing guidelines.