User-centered Design
COSC 2628
Assignment 1

Assessment Type	Group assignment with individual component. Groups as allocated via tutorials and created on Canvas. Submit online via Canvas→Assignments→Assignment 1 GROUP and Assignment 1 Individual. Marks awarded for meeting requirements as closely as possible. Clarifications/updates may be made via announcements/relevant discussion forums.
Due Date	Week 6, Sunday 30th August 2020, 11:59pm
Marks	15(Group) + 5(individual interview)

1. Overview

The objective of this assignment is to perform a competitive analysis and user research on a **mobile application** which you will be creating a prototype for in assignment 2. This assignment is worth **20 marks total** and the deliverable will be a multi-part report **numbering no more than 15 pages**.

The Projects
Choose one of the projects below. As you will be using data gained in assignment 1 for assignment 2 and 3, you cannot change projects halfway through. Ensure that you understand the requirements.

A: Daily Fitness app	B: Medicine reminder app	C: Budget and banking app
Goal: To encourage users to participate and to be more active daily and track their in-gym and remote class participation. Client: A large gym chain.	Goal: To provide users with an easy way to look up different kinds of medicine and track their intake plan. Client: A large pharmacy chain.	Goal: To help users manage their budget, savings and loans, as well as unexpected expenses. Client: A banking chain.

2. Learning Outcomes

Upon successful completion of this assignment you should be able to:
- Analyse users' needs, usability goals and user experience goals of a small-to-medium-sized software application.
- Understand the components of a design plan and apply user-centred design process from requirement gathering to user studies and evaluation.
- Critically analyse usability of sample interfaces and identify key features that make an outstanding user-centred interface, and evaluate the usability of a small-to-medium-sized software application.

3. Assessment details (Group)

Part 1: Competitive analysis

Start here by introducing and discussing the application that you will be studying. Include screenshots in each of your discussion to support your points. This part should contain these sections:

1) **Who are the intended users? 3 marks**

   Provide a list of user groups that you think is being serviced by the goal project or the main application you have chosen to analyse. Furnish each group with a description and a set of attributes. Look at similar applications to get an idea of who is the audience for this product.

2) **Who are the main competitors on the market? 1 mark**

   Define what the main competitors or similar applications out there are that should be considered. You could look for applications that are used in other tertiary education institutions or even one that has a broader target audience. Why did you choose these applications? Compare at least three.

3) **What are the main tasks that the users are expected to accomplish in these competitors? 2 mark**

   Define the main purpose of one of the applications. What sort of tasks are expected to be accomplished with it? Discuss how the tasks are helped or hindered by the application. You can list down the tasks. Provide screenshots.

4) **Analyse one application based on user interface guidelines such as Krug's or Nielsen's usability guidelines and heuristics.4 marks.**

   Now that you understand clearly what the application is supposed to do, and who are the users, discuss if the application is user friendly based on principles raised in classes and lectures. List down the problems that your team concluded that will present significant issues to the user in terms of achieving the goals of the task. You should include screenshots to support your analysis.

Part 2: Survey and design discussion

Next, create a brief survey that could be answered in less than 10 minutes. In this survey, you will gather data from the users of the app that you have analysed in 1.3 and 1.4. You will then analyse the data to see if there are insights you can use to help design your prototype. You are not required to use statistics at this point. You are required to survey **15 to 20** users. **Please attach or submit the User Research Template with the data and questions provided. You can ignore the observation sheet. PIF** should be completed for survey participants.

Conduct one online user interview per team member with a user that part of the target audience for your chosen project. Here you will be asking questions to investigate what are the problems faced by the user and how your potential product can benefit them.

Marks will be given for:

1) **Survey participants and methodology clearly described. 2 mark**

   You should have at least a table showing the attributes of your survey participants. Additionally you should also describe how you obtain your participants, from which channels and approach.

2) **Survey questions were designed properly and with relevance. 2 marks**

   Your survey should be properly designed, and have a direction on what you would like to research in regards to your application that is related to your analysis in **Part 1.3 and 1.4**. You need to use Google Forms. You need to have 15-20 valid survey responses. This will be validated by the survey data recorded in the Google spreadsheet.

3) Design directions discussed based on survey results and online user interviews. 5 marks

Based on your results, discuss what were the thoughts and sentiments of your survey participants in terms of their requirements for the application. Examples could include the look and feel of the application, the complexity of the app and core functionalities. Provide some example user responses and elaborate how these data drives the core functionalities of the application.

Report formatting

Penalties may be applied for a report that has formatting errors or did not adhere to the brief. To achieve maximum marks your work must fulfil these criteria:
- Have good use of layout and space.
- Be a professional report and language used.
- Have proper colours, fonts, and sizes.
- Be no more than 15 pages long.
- Have references where necessary.

4. Submission (Group)

You must submit all the relevant material as listed below via Canvas. A group will be available for your team, so any of the members can upload the assignment.

Include a PDF version of your report.

After the due date, you will have 5 business days to submit your assignment as a late submission. Late submissions will incur a penalty of 10% per day. After these five days, Canvas will be closed and you will lose ALL the assignment marks.

5. Individual Quiz Submission

Individual Component (5 marks) Interview Quiz on your online user interview.

You will reflect on your online user interview by providing a self-recorded video. The video should be around 2-3 minutes in length and be submitted via Assignment 1 – Individual Quiz on Canvas addressing the question in the Quiz.

Assessment declaration:
When you submit work electronically, you agree to the assessment declaration:
https://www.rmit.edu.au/students/student-essentials/assessment-and-exams/assessment/assessment-declaration

Peer Review: You will be asked to provide a review of your team member's contributions which will further inform the course instructors in assessing the contributions of each team member via https://rmit.sparkplus.com.au/login.php Information will be provided when the peer review has gone live.

6. Academic integrity and plagiarism (standard warning)

Academic integrity is about honest presentation of your academic work. It means acknowledging the work of others while developing your own insights, knowledge, and ideas. You should take extreme care that you have:

- Acknowledged words, data, diagrams, models, frameworks and/or ideas of others you have quoted (i.e. directly copied), summarised, paraphrased, discussed or mentioned in your assessment through the appropriate referencing methods,
- Provided a reference list of the publication details so your reader can locate the source if necessary. This includes material taken from Internet sites.

If you do not acknowledge the sources of your material, you may be accused of plagiarism because you have passed off the work and ideas of another person without appropriate referencing, as if they were your own.

RMIT University treats plagiarism as a very serious offence constituting misconduct. Plagiarism covers a variety of inappropriate behaviours, including:

- Failure to properly document a source
- Copyright material from the internet or databases
- Collusion between students

For further information on our policies and procedures, please refer to https://www.rmit.edu.au/students/student-essentials/rights-and-responsibilities/academic-integrity

7. Marking Guidelines

Please see rubric on the assignment page on Canvas.