

User-centered Design
COSC 2628
Assignment 3

Assessment Type	Group assignment with individual component. Groups as allocated via tutorials and created on Canvas. Submit online via Canvas→Assignments→Assignment 3 GROUP and Assignment 3 Individual. Marks awarded for meeting requirements as closely as possible. Clarifications/updates may be made via announcements/relevant discussion forums.
Due Date	Sunday 1st November 2020, 11:59pm (Group), 3 rd November 2020 11:59PM (Individual)
Marks	25 (Group) + 5 (Individual)

1. Overview

The objective of this assignment is to design a prototype for a **mobile** application based on your group's choice of project for assignment 1. This mobile application can either be for the Android or iOS platform. These three projects are based on real world client briefs. **As you will be using data gained in assignment 1 for assignment 3, you cannot change projects halfway through.**

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:

- CLO2: Understand the components of a design plan and apply user-centred design process from requirement gathering to user studies and evaluation.
- CLO3: 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.
- CLO5: Apply software and paper prototyping tools to design user interfaces that take into account human capabilities and constraints, users' needs, usability goals and user experience goals.
- CLO6: Synthesize the design and evaluation of various components of user interface effectively in teams and peer-review team members' works and contributions.

3. Assessment details (Group)

Target Users

The university assumes that the main target users are RMIT students who are currently attending classes in campus as well as staff. It is your task to research this and provide structured user groups with their own needs and goals as well as the personas.

Functional Requirements

Based on your findings in Assignment 1, implement **at least four** main features in your prototype. This does not include minor supporting functions such as logging in, registering, log out and changing password. Each feature has to be complete in terms of a critical path based on your key path scenario.

Tips

- 1) There are multiple ways to fulfill the requirements but look at similar applications to see what worked and what did not.
- 2) Try not to approach the problem from a technical point of view. Think about what the users want at this stage and how your app would achieve both the client's and the users' goals.

Software tool for prototyping - Figma

Figma (<http://www.figma.com>) is an online prototyping tool that supports all fidelities and collaborative efforts. To register a free education account, please register using your rmit email address and it will be upgraded from a trial.

For assignment 3:

Figma has a powerful editing set of tools for you to design your interfaces, and it supports many UX libraries around. For example for your wireframes here you can use this: <https://www.figma.com/resources/assets/wireframe-kit/>

Other options: You can also try Axure, Proto.io or lucidchart.

Deliverables:**Prototype Component – as a link in the introduction of the report.**

The prototype will be based on your project file residing on the Figma Platform. Assessment of prototype will include:

- 1) Fulfilling the functional requirements brief.
 - *Do you have all the features requested? Did you provide examples of user inputs?*
- 2) Page layout and navigation patterns used.
 - *Is the layout suitable to your form factor?*
 - *Are you grouping the wrong elements together?*
- 3) Intuitive design and aesthetics.
 - *Look at the principle of affordance.*
 - *Was the application easy to understand, with proper use of colors and element sizes?*
 - *Do the patterns fit the mobile platform?*
- 4) Interactions actually working as intended.
 - *Does your prototype provide example inputs?*
 - *Does your prototype provide example responses to user inputs?*

Report Component

The **PDF report component** contains two main sections:

Section 1: User Testing

A report of one user test per member in your team. Run the user test online with a real world target user. Follow these steps:

- 1) Recruit your user. Ensure you screen them by asking some basic questions. Include your recruitment method in your report.
- 2) Prepare a brief script and use attachment 1 as a template. Ensure that the scenarios are the same across all the tests done by your group and **only share the scenarios** with the user.
- 3) Run the test at the allotted time with your user. We recommend creating a meeting on Teams and invite your user as a guest. Share your prototype link and send them the scenarios. Next request your user to share their browser tab so you can observe

their actions and also listen to them thinking aloud as they work on those tasks. You may record the session with their permission but do not submit the recordings, they are just raw data for your analysis.

4) Ask the user some post test questions and thank them.

5) Analyse your observations and feedback to produce your report.

In your report, provide:

- a) Your methodology (recruitment and running of the tests)
- b) Results of the test - what went well, and what did not,
- c) any improvements **you recommend and have implemented**, and
- d) the filled in template (attachment 1) for all tests.

Section 2: Pattern Description

Describe the main patterns that you have used to build your prototype. In this section, provide all the screens that you have created, label and annotate each one. This is so if your prototype becomes unrecoverable, we still have a record of your work. It is also a good way for us to understand your design.

Ensure your design is final before completing this section.

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 user testing session.

You will reflect on your user testing experience by answering three questions. In this quiz you will also be required to submit a short 1-minute video of yourself and a photo ID. You can access this quiz via Assignment 3 – 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.

Attachment 1:

User Test #		
Date:	Time:	Facilitator:
Task 1	Insert scenario for the user.	
Observations:		
Task 2	Insert scenario for the user.	
Observations:		