<TEAM LOGO>

<TEAM NAME>

<PROJECT NAME>

<APP NAME>

<Group Members and Student ID list here>

<Team Number>

<Tute day / Tute time>

Human Computer Interfaces ICTE 3002 / Advanced Human Computer Interfaces ICTE 5001

School of Electrical Engineering, Computing and Mathematical Sciences, Curtin University

Table of Contents

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Tip #1: The purpose of this template is to ensure you cover the main content required in your report. However, this report template is not absolute. Rather, it is a guide and you don't have to follow it exactly. You can add or replace some sections if needed. Following this template exactly does not guarantee full marks. Marks depend on the quality of the content of the report.

Tip #2: There is no minimum or maximum page limit but we suggest the report does not exceed **100** pages including screenshots. Note, the report must be professionally and succinctly written with emphasis on clarity. Content that is not essential should not be included. There may be a suggested word limit for some sections.

Tip #3: Optional: since we want to lift the design-game of our cohort, you may choose a document template to deliver a beautifully presented, visually appealing industry-ready report. Using a Canva template may be an easy way to achieve this. If you have experience - Adobe InDesign, Envato Elements or Microsoft Page Layout designs may be useful.

Tip #4: Read this whole document early in the course.

- **Tip #5:** We suggest using Chicago referencing style
  https://libguides.library.curtin.edu.au/uniskills/referencing
- **Tip #6:** Screenshots can help to provide visual cues – use large and clear screenshots. Label them "Image 1, Image 2…" Annotate elements of interest using (red) bounding boxes or arrows and text.

Tip: check the FAQ on announcement page for more up-to-date tips

*Recent changes to document are in blue.

1 Introduction

Describe the broad problem area, what led to the report, why you chose the project and why are you doing it and why is it important. The purpose and scope of the report.

2 Background

2.1 Project Description

Describe the project you are designing the user interface (UI) and user experience (UX) for. You can use content from your 'Worksheet 01 Project Proposal'.

- Describe your project - provide some context on the project domain:
  - Description, background and context, problems, user needs, existing solutions, and why they are lacking.
- What are the main problem statements, questions, or hypothesis being tested?
- Explain the nature of your approach to address the problem statement (i.e. that you are doing user-centric prototype design.)
- Briefly describe who are the users, why is this solution important and helpful to them?

- Briefly describe the design purpose you want to achieve when designing for this project - Is it about user-friendliness? Usability? Efficiency? Attractiveness?
- Provide an overview of this report including what to expect in different sections.

3   Team

3.1   Team Members

List the team members and their role.

3.2   Contribution Matrix

Create a matrix that lists everyone's contribution on each section. Multiple group members can contribute to any single section.

A visual matrix works better than a list/table. For example, the following matrix is more visual and works better than the one underneath it.

	Task A	Task B	Task C				
Student 1							
Student 2							
Student 3							
Student 4							

Student 1	Task A, Task B
Student 2	Task C
Student 3	
Student 4	

4   Software Engineering Lifecycle and Tools

Describe and show how you used the software lifecycle you chose for this project and justify your choice. You can use the knowledge from other units such as ISE (Introduction to Software Engineering) or OOSE (Object Oriented Software Engineering) for this section. E.g. Agile, Work Breakdown Structure, dependencies and milestones, Gantt, Burn-up chart, Kanban etc.

5   Design Thinking

5.1   Design Thinking Process

Include a diagram showing the iterative design thinking process you used. There are many on the internet. Describe how you used this iterative process to inform the user centric design of your app.

https://web.stanford.edu/class/me113/d_thinking.html

5.2   User-Centred Design

Describe how you involved the user in the user-centred design process.

5.3   User Interviews, Surveys, Questionnaires and Observations

Describe the demographic of the typical users of your system. What are their pain points, inefficiencies, frustrations, wants and needs etc.? You might try to understand how users currently use apps to achieve their needs, and what frustrations they have.

In order to understand users, you can conduct interviews, create surveys/questionnaires, or observe users in their context to gather user information. Use the "Research Participation Agreement" to ask your subjects for consent. Attach the interview questions, and survey/questionnaire forms in the Appendix. If you are able to source additional existing survey data that is relevant to your program, you can include this data with suitable references.

In a small-scale study such as this open-ended user interviews work the best. Aim to interview three users. In a real-world scenario 4-5 users is often sufficient to understand general trends.

5.4   Data Analysis

This section is important as you will need to synthesise interview, survey, observation results to understand your user base. Analyse the interview/survey responses and observations and use your findings in your user-centric design solution. The analysis may be qualitative or quantitative. Take note of the patterns that emerge from the data you collect. For example, the interview, survey/questionnaire result might demonstrate preferences, pain points, skillset etc. of the user group.

User data may be presented as a 'quick findings report'. Here is a guide: https://medium.com/thinking-design/creating-usability-reports-from-usability-test-findings-93fceceac571

5.5   Personas

Include your design thinking process used to develop several personas that represent your target demographic. The number of personas is up to you but must cover the types of users of your system. (Don't go overboard though). The personas you develop here can be placed into scenarios and user journeys later in the design process.

For every persona, describe their general daily routine (with respect to the app). Include the persona's background, motivations, and frustrations.

Include information about the persona that is useful to understand how they might use the system you are developing.

We show the initial development of a persona called 'Antoni' below (yours will be more detailed and visually appealing):

5.5.1   Antoni

Tip #7: Screenshot of your FigJam persona template works well here for visual appeal and simplicity.

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Antoni is the sales manager at Doles supermarket. He has to arrive at his office by 7:00AM every day. His daily morning routine is to check the stock and delivery schedule of the day. At the closing time, he needs to analyse the supply and demand statistics of the store and arrange a future order.

Background

- Male, 35 years old
- Occupation: Sales manager

Motivations

- Ensure sufficient stock and high sales.

Frustrations

- Freezing or crashing software
- Useless data from the software
- Takes too many steps to lodge an order

5.5.2   Jane

Jane is ….

Background

- …

Motivations

- …

Frustrations

- ……

5.5.3   <and so on …>

5.6   User journeys, User Flows, Empathy Maps

You might use user journeys, user flows, empathy maps etc. There are many tools and templates to help – select only some that are most relevant to your project.

5.7   User Stories

List User stories here

5.8   Use Cases

List Use Cases here

5.9   Competitor Analysis

List some of the similar competitor programs or real-world solutions and discuss their advantages and disadvantages. For example, if you are developing a jobs website, competitors may be other job websites or a bricks and mortar HR company. The competitor does not have to be in the same domain but just represent a company that is solving a problem well. Describe some features that the other company does successfully that your team can borrow to use in the context that is relevant to your app.

Choose two or three competitors. Include your design thinking workshop showing your thorough analysis of their features and processes and how they may be translated to your app.

5.9.1   <Competitor 1>

- Advantage
- Disadvantage
- Translation

5.9.2   <Competitor 2>

5.9.3   <and so on …>

5.10 Pain Points

After understanding your user – show your FigJam design thinking process to determine your user pain points i.e. use affinity mapping.

5.11 Problem Statement

Describe your design thinking process that led you to converge on the high-level problem you want to solve:

"How might we….<>"

Show and describe your FigJam ideation sessions and how they iterated.

5.12 Ideate Solutions

Describe how you brainstormed solutions and then converged on ideas that you could turn into functional and non-functional requirements in the next section.

Show and describe your FigJam ideation sessions and how they iterated.

6   Requirement Specification

Using knowledge from your earlier study in Introduction to Software Engineering (ISAD 1000), define several of your system's key functional and non-functional requirements. Ensure these requirements are good quality, well-thought out and specific to the key functionality you are designing in your app.

6.1 Functional Requirements

List the functional requirements of your system.

6.1.1 User Requirements

6.1.2 System Requirements

6.2 Non-Functional Requirements

List the non-functional requirements system. This includes usability, performance, reliability, security, and localization.

6.3 Hierarchical Task Analysis

Develop a Hierarchical Task Analysis of several key activities in your app (see Lecture 04). Provide a description of each HTA.

<Task 1>

This is only an example:

<Task 2>

<and so on...>
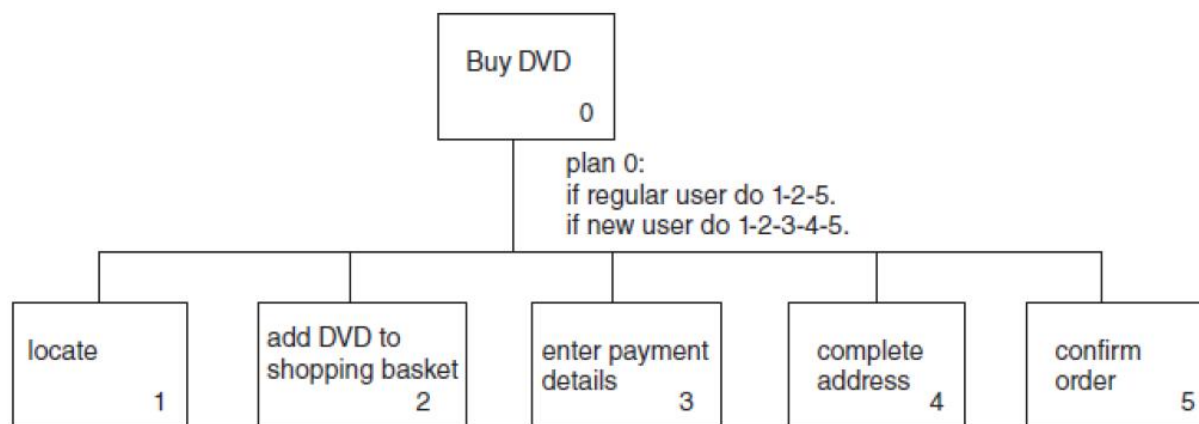
7 UI /UX Goals

7.1 Usability Goals

Describe what usability goals you want to achieve.

7.2 User Experience Goals

Describe what user experiences you want to achieve.

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8   UI/UX Design Principles

Discuss some of the following UI/UX design principles as relevant (use references here):

8.1   Design Principles

What design principles did you use? (i.e. Don Norman's 6 UI/UX Design Principles: visibility, feedback, affordance, constraints, consistency, mapping)

8.2   UI/UX Design Principles and Visual Design Principles

What web UI/UX design principles did you use? You don't need to cover all.

8.2.1   Layout

Spacing, relationships, scale, balance, contrast, gestalt

8.2.2   Hierarchy

8.2.3   Colour

8.2.4   Typography

Colour, complexity, space font size, uppercase, alignment, line length etc.

8.2.5   Imagery and copy

Choice and quality of content. Attractiveness of your app.

9   Usability Heuristics

What usability heuristics analysis did you consider? (https://www.nngroup.com/articles/ten-usability-heuristics/)

10 Wireframing

Use pen and paper (or tablet or online tool) to sketch your early wireframe.

11 Low-Fidelity Prototype

Following your wireframe design, this section showcases your low-fidelity prototype (Workshop 05.pdf). Include as many significant low-fidelity designs as you developed. Provide links to your Figma website. Speak to your tutor who can act as a client and ask them to accept a design to move to the high-fidelity stage with.

This section should go describe in detail and justify all the design choices you have made in the low-fidelity prototype relating to the UI/UX Design Principles above.

11.1 Design 1

11.2 Design 2 …

12 Expert Review

12.1 Performing Expert Review

Include your "Expert Review" of another team's design here (Workshop 05 – Expert Review.pdf). Evaluation framework will be discussed in lecture.

Email the "Expert Review" to the other team's Project manager, so they can act on the feedback.

Usability (strength/ weakness)	Describe the issue you are reviewing. What type of heuristic is applicable? • Usability heuristics • Design principles • Visual design fundamentals • Other (content, navigation)	Severity • High • Med • low	Recommendation • Fix • Investigate • Usability testing • User research	Best practise example

12.2 Revision Post Feedback

You have also received an "Expert Review" from another team in writing (attach to your appendix). Explain how you are choosing to accept/discard the suggestions in your hi-fi prototype.

13 High-Fidelity Prototype

Include here your high-fidelity prototype (Workshop 06.pdf). Include lots of screenshots and link to Figma.

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This section should go describe in detail and justify all the design choices you have made in the high-fidelity prototype relating to the UI/UX Design Principles above.

13.1 Design 1

13.2 Design 2 …

13.3 Design Specifications for Handoff

Also include details of the design specs such as style guide, colour, typography, assets and icons will you handoff to the developer.

14 Project Management

Describe the evaluation of your overall design process.

14.1 Meetings

Describe how you conduct meeting (frequency, deadline, communication platform, etc..)

14.2 Risk Management

Describe any risk to be considered when you are completing this project.

14.3 Milestones

Put your milestones timeline here.

14.4 Problems Encountered

Any unexpected obstacles? Put it here and describe how you address them.

15 Optional: Development (Bonus marks)

If you were a team that opted to start some development of your prototype. Please add a section here documenting what you have achieved. We will be able to give bonus marks. However, don't start coding until you have completed all the other requirements in this document.

16 Conclusion

Summarise the result of this project and what you will do with it next.

17 Acknowledgements

If there is anyone you want to acknowledge or thank for their contribution to your work – add them here. This might be experts, users, people that participated, another team that has given you feedback.

18 References

List any references you use for this report such as figures, tables, screenshots, or websites.

Use Chicago referencing style https://libguides.library.curtin.edu.au/uniskills/referencing

19 Glossary

20 Appendix

20.1   User Survey Responses

Include samples of survey/questionnaire questions and summary of responses.

20.2 Meeting Minutes

List all the meeting minutes that you record for this assignment.

20.3 Expert Review

The Expert Review you received from other team.

20.4 Record Keeping

20.4.1 Toggl tracking

You may like to use toggl to track each team members hours and present a neat summary here.

20.4.2 Links to Google Docs / MS Teams

20.4.3 Contribution Table

You may have done this in 3.2. Add a more detailed version here if you want to.

Create a table that lists team members contributions towards each section in this report. Multiple group members can contribute to any single section.

20.4.4 Other teamwork evidence

20.5 Figma Files

Filenames of any .jam or .fig (and/or any other relevant) files you have also uploaded to support your work.

20.6 <Any other appendix…>