HCI Design Brief

Project: *Name of project*

*Name of Client*

Author: Name

S Number: Number

*Workshop:* Day, Time, Instructor

Table of Contents

1 Introduction 1

1.1 Purpose of this document 1

1.2 Scope of this document 1

1.3 Background 1

1.4 Problem statement 1

1.5 Proposed solution 1

2 Audience 1

2.1 User Research - Desired 1

2.2 User Research – Actual 1

2.3 Human Factors 2

3 Usability 2

3.1 Usability Tools 2

3.2 Usability Findings 2

3.3 Usability Objectives 2

4 Design 3

5 Prototype 3

5.1 Stage One – Low-Fidelity Prototype 3

6 Discussion – User Involvement 4

7 Testing 4

7.1 Test Plan 4

7.2 Test Results and Analysis 5

7.3 Findings and Recommendations 5

8 Discussion – Accessibility 6

9 Prototype 6

9.1 Stage Two – High-Fidelity Prototype 6

10 Discussion – Domains 6

11 Discussion – Emerging Technology 6

# Introduction

## Purpose of this document

Give a brief statement outlining what this document is and what you aim to provide in this document.

## Scope of this document

Define the scope of your document – what will your document cover, and what is outside the scope of this document? (For example, level and amount of design, degree of functionality)

## Background

What is the background of the project? Why is it being done?

## Problem statement

What problem are you addressing? What is the value/benefit for the client and user if this problem is solved?

## Proposed solution

What solution have you come up with to solve the problem? What technology will your solution utilise? Why have you chosen this solution?

# Audience

## User Research - Desired

If you were able to utilise the full range of user research activities with your actual client, what user research activities would work best to find out about your audience? Why? How would you implement your chosen activity?

## User Research – Actual

*What user research activities were you able to complete given the constraints of this assessment? What did you find? Based on your findings, complete this table to describe your user groups, based on the outcomes of your user research activities or other research. What are their characteristics that are relevant to this product? How will each of these characteristics influence your design choices?*

|  |  |  |
| --- | --- | --- |
| **Characteristic** | **User group 1** | **User group …** |
| Age |  |  |
| Gender |  |  |
| Knowledge of technology |  |  |
| Other characteristic 1 |  |  |
| Other characteristic … |  |  |

## Human Factors

What key human factors apply to your audience? How will they affect interaction with your product? How will this influence your design choices?

# Usability

## Usability Tools

You determine the usability needs for your product based on research, and your understanding of the needs of your audience. You use the usability tools to do this.

Apply the usability tools to your identified audience. Describe specifically how you did this, and include your tools as an appendix

For example, how many people did you interview/survey? How many cards and people did you use for your card sorting exercise? How many surveys did you distribute and how many responses did you receive etc. Include photos or digital responses in your appendices.

## Usability Findings

What did you find out about the usability needs for this product? Present your findings from the application of your tool.

<This will be a persona, the outcome from a card sorting exercise, a task analysis, a use case, or the outcome from a survey>

## Usability Objectives

Usability objectives need to be clear, defined, and measurable and based on your research and analysis. What level of usability do you wish to achieve? How will this be measured and success understood (you will complete testing and evaluation in section 7)?

|  |  |  |  |
| --- | --- | --- | --- |
| **Aspect of solution** | **Usability goal** | **How is this measured?** | **Success criteria** |
| *Opening the app* | *Users can open the application with little to no difficulty* | *Time taken to successfully open the app on a test phone* | *90% of testers can open the app within 10 seconds of identifying the appropriate icon.* |
|  |  |  |  |
|  |  |  |  |

# Design

Apply the usability design guidelines to choose your design elements. Describe your visual design choices, such as:

* Layout,
* Visual elements,
* Icons,
* Graphics,
* Style,
* Colour palette,
* Fonts,

This section deals with the individual elements of your design (such as buttons or icons), with full designs in section 5. You need to include sketches, sample elements, etc, to support your discussion, explanation, and **justification** of your choices. Why have you made these design choices? Connect back to your analysis. Give each design element a unique identifier (a number that you can link to in your work – for example, if you have a series of icons then you might label each icon as IC1, IC2 etc)

# Prototype

This section applies your visual design choices into a complete mockup and product structure. You will complete a low-fidelity prototype for stage one in this section, and a high-fidelity prototype for stage two in section 9.

## Stage One – Low-Fidelity Prototype

Use any of the design tools covered in the course to develop a prototype for your product – this might be photos of sketches, hand drawn outlines, wireframes etc. Mock up at least 3 examples (ie, a minimum of 3 screens, or 3 product states). Give each a title and a description explaining how each example would be used.

# Discussion – User Involvement

Describe your approach if you have used actual participants in your work so far – what worked, what didn’t, and what did you learn?

How would you involve the user in your project if you did have access? What effect would that have on your approach? What would that change about the way you have worked?

# Testing

## Test Plan

Detail your testing plan for your design, following the approach outlined in the module book and covered in the workshop. Develop an evaluation consent form for your sessions and include this as an appendix – there is a sample template available on the course site. Your test plan should include:

* Testing purpose and goals – why are you testing this product at this time? What do you want to achieve? This can be written at a high level.

for example: Identify obstacles to enrolling in courses through the enrolment site.

* Participant characteristics – who will participate in your evaluation and testing activities? How many people? What roles do they represent?

for example:

|  |  |
| --- | --- |
| **Characteristic** | **Desired number**  **Of participants** |
| Undergraduate Student  Postgraduate Student | 11  5 |
| **Total number of participants** | 16 |

* Method – describe the approach you will take: how will you carry out the testing, how will the test session run? Include
  + a description of your approach,
  + an outline of the session and session timing
* Task list – this is simply a prioritised list of the specific tasks that the participant will complete. It should include a task description, detail around the materials needed for the session, a description of task success, and any benchmarks, such as timing.

for example:

**Task** Select courses for enrolment

**State** Website with three tabs leading to course

selection

**Successful completion** Participant selects correct courses

**Benchmark** Participant selects courses appropriate to

their major and prerequisite state, with no

errors.

* Data to be collected and evaluation measures. This can include measureable attributes such as error rates and time to perform a task, as well as experience aspects such as the participant’s opinions and ratings. Select data measures that suit your research questions.

for example: To answer the question “What obstacles do students encounter as they complete their course enrolment, whether through a desktop or a mobile device?”, I will collect data for:

* + Number of steps to complete task
  + Number of tasks completed with or without assistance
  + Number of ‘false starts’ and steps involved
  + Appropriateness of enrolment functions to the participant’s tasks
  + Perceived amount of time and number of steps
  + Usefulness of terms and labels

## Test Results and Analysis

Provide a summary and analysis of your test results. Detail dates of tests, participants, test results, and notes relating to the outcome. Include quantitative and qualitative results as needed in summary form. Include pictures of people evaluating your designs/prototype from your testing sessions in an appendix. Include scans or photos of your completed consent forms in an appendix.

## Findings and Recommendations

Review your test results for your initial design against the needs of your defined audience and the goals you established in section 3.

Give your findings and a clear list of recommendations for revisions to your design.

# Discussion – Accessibility

What are the accessibility implications for the product that you have designed?

How easy would it be for someone with accessibility needs to interact with your product?

What might you need to change?

# Prototype

This section takes your low-fidelity prototype from stage one, and revises it based on your evaluation and testing and accessibility considerations as a high-fidelity prototype for final submission.

## Stage Two – High-Fidelity Prototype

Use any of the design tools covered in the course to develop a digitally rendered prototype for your product. Mock up at least 3 examples (ie, a minimum of 3 screens, or 3 product states). Give each a title and a description explaining how each example would be used, and outline any revisions made to your prototypes as a result of testing.

# Discussion – Domains

You have designed a product for a specific situation and installation. How easily could your design adapt to a different domain? Discuss using a specific example (for instance, if you have designed a product for a work situation, how would it work in a recreational or home situation?).

What opportunities are available for your design in a different domain?

# Discussion – Emerging Technology

Identify one emerging technology and describe how it could transform your product.

What would you like to do with your product if there were no constraints?