

COSC2653 User-centred Design

Assessment 1: User-centred design survey



Assessment type: Report

Word limit: 15 pages maximum



Due Date: 9th January Sunday 11:59pm (AEST)



Weighting: 30%

Overview

The objective of this assignment is to perform an analysis and a short survey on a mobile or desktop application on either the iOS, Android or Windows platform (choose one). This application should be commercial and have a decent user base.

This assignment is worth 30 marks total and the deliverable will be a multi-part report numbering no more than 15 pages.

Assessment criteria

This assessment will measure your ability to:

- Identify appropriate user groups (5 marks)
- Choose a sample application and conduct a task analysis (5 marks)
- Conduct a heuristic analysis (5 marks)
- Apply and describe research methodology (8 marks)
- Report your analysis and findings (7 marks)
- Apply appropriate formatting to the report

Course learning outcomes

This assessment is relevant to the following course learning outcomes:

- CLO1 Analyse users' needs, usability goals and user experience goals of a small-to-medium-sized software application.

- 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.
- CLO4 Create a 'usability checklist' that enhances the usability of a web or mobile application, in order to summarize and explain usability concepts, relevant.
- 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.



Assessment Details

Part 1: Analysis of Application (15 marks)

Start here by introducing and discussing the application that you will be studying.

This part should contain these sections:

1. **Who are the intended users? (5 marks)**

Provide a list of user groups that you think is being serviced by the application. 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. **What were the main tasks that the users are expected to accomplish? (5 marks)**

Define the main purpose of the application. 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.

3. **Analyse the application based on user interface guidelines such as Krug's or Nielsen's usability guidelines. (5 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 you 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 Report (15 marks)

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 system that you have initially identified in Part 1, Q1. You will then analyse the data to see if the findings match your initial thoughts and write your arguments and findings in the report. You are not required to use statistics at this point.

You are required to survey **at least five** users. It is recommended that you approach closed communities instead of mass recruitment for your users.

Marks will be given for:

1. **The correctly identified users were the ones who were surveyed. (2 marks)**

Please include a screener question to ask the users if they are in fact using or have used the application in question.

2. **Survey participants were clearly described. (3 marks)**

You do not need to include all the raw data but in your report you should have at least a table showing the attributes of your survey participants so that they roughly match the user groups that you have defined in Part 1.1.

3. **Survey questions were designed properly and with relevance. (3 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. For example, if you have identified that a huge problem with the application is how the user cannot see their progress during a task, you should ask questions pertaining to this issue in your survey.

You are advised to use Microsoft forms. You **must** include a link to the survey in your report. Your tutor needs to have access to the responses spreadsheet (you need to share the access to the forms with your tutor).

4. **Arguments were supported with screenshots and user comments. (7 marks)**

You need to have 5-40 valid survey responses. This will be validated by the survey data recorded in the Google spreadsheet.

Based on your results, discuss what were the thoughts and sentiments of your survey participants in terms of the usability of the application you are studying. In particular, discuss if the findings match your analysis in Part 1.3. Provide screenshots and sample user comments to support your arguments.

Report Formatting

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. **This count does not include the cover page, table of contents, references or any appendices.**

Important Notes:

- If your report is over the limit of 15 pages you may lost up to 20%.
- Games applications are excluded from this assignment scope.
- If you are planning to use an internal product please ensure that you have sufficient clearance as you will be required to provide screenshots in your report.

Referencing guidelines

Use [RMIT Harvard](#) referencing style for this assessment. If you are using secondary sources, include these as a final slide in your PowerPoint deck.

You must acknowledge all the courses of information you have used in your assessments.

Refer to the [RMIT Easy Cite](#) referencing tool to see examples and tips on how to reference in the appropriated style. You can also refer to the library referencing page for more tools such as EndNote, referencing tutorials and referencing guides for printing.

Writing resources

Most of your report should be your own writing: try not to use quotations from your references unless there is something exceptional about the way they express a particular idea. Note that you must attribute original ideas, even when you describe them in your own words.

Your writing must be correctly spelled and grammatically correct, so that it is easily comprehended by the markers: they will not spend extra time to decipher poorly written text in order to guess what you're trying to say. If English is not your first language, then write mostly simple, straightforward sentences: just say what you want to say, and don't worry about sounding literary or poetic.

The following resources would also be useful to you:

- Assistance with English language skills is available from the [Learning Skills Unit/Writing Skills](#).
- If your written English skills are insufficient or have difficulties formulating a report then we recommend you seek advice at the [student information centre](#).

Submission format

Submission is via PDF format ONLY via Canvas as a file upload.

Late penalties

Late submissions of assignments will be penalised as follows:

Time submitted after due date	Late penalty
0 to 4:59 minutes	No late penalty
1 day to 5 days	10% off final mark for every day late
More than 5 days	100% penalty (you will get 0 marks)

Academic integrity and plagiarism

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 the University website.

Assessment declaration

When you submit work electronically, you agree to the [assessment declaration](#).

Criteria	Ratings						Pts
	HD	D	C	P	N	DNS	
Proper user groups identified	User groups identified with correct attributes that are relevant to the client brief.	User groups identified with correct attributes that are relevant to the client brief.	User groups may require further investigation with regards to differentiation factor.	User groups provided may not suit the client's brief or are just repeats with little to no differentiation factor.	User groups provided do not suit the client's brief or are just repeats with little to no differentiation factor.	User groups not provided	
	Attributes are clear and there is clear differentiation between the groups.	Attributes are mostly clear and there is clear differentiation between the groups.	Attributes are generally suitable and demonstrate a knowledge of the user type.	Attributes labels provided with no values.	Attributes labels and values not provided.		
	Number of groups has met or exceeded requirement.	Number of groups has met the requirement.	Number of groups met or may be less than required.	Number of groups are less than required.	Number of groups are less than required.		
	5 – 4 pts	4 – 3.5 pts	3.5 – 3 pts	3 – 2.5 pts	2.5 - 0 pts	0–0 pts	5pts
Sample application chosen and task analysis conducted	Demonstrates an excellent understanding of the concept of target audience by choosing an application that matches the one in the client brief.	Demonstrates a very good understanding of the concept of target audience by choosing an application that mostly matches the one in the client brief.	Demonstrates a good understanding of the concept of target audience by choosing an application that partially matches the one in the client brief.	Demonstrates an understanding of the concept of target audience by choosing an application that somewhat matches the one in the client brief.	Fails to demonstrate an understanding of the concept of target audience by choosing an application that does not match the one in the client brief.	No analysis provided	
	Provides an excellent report on competitors that matches the scope of the project.	Provides a very good report on competitors that mostly matches the scope of the project.	Provides a good report on competitors that partially matches the scope of the project.	Provides a report on competitors that somewhat matches the scope of the project.	Provides a poor report on competitors that does not match the scope of the project.		
	Includes a task analysis that contains the main		Includes a task analysis that contains some of	Includes a task analysis that contains a few of	Includes a task analysis that contains a few to		

	<p>features of the application with a complete and specific breakdown of the main tasks with comments that demonstrate knowledge of usability concepts.</p> <p>The analysis is supported by screenshots that are clear, properly sized, cropped and labelled.</p> <p>The analysis contains no errors with regards to usability claims.</p>	<p>Includes a task analysis that contains most of the main features of the application and a mostly complete breakdown of the main tasks with comments that demonstrate knowledge of usability concepts.</p> <p>The analysis is supported by screenshots that are mostly clear, properly sized, cropped and labelled.</p> <p>The analysis contains few to no errors.</p>	<p>the main features of the application and a partially breakdown of the main tasks with comments that demonstrate knowledge of usability concepts.</p> <p>The analysis is supported by screenshots that are generally clear, properly sized, cropped and labelled.</p> <p>The analysis contains few errors with regards to usability claims.</p>	<p>the main features of the application and some mention of usability issues that were not explored.</p> <p>The analysis is supported by screenshots that are somewhat clear, properly sized, cropped and labelled.</p> <p>The analysis contains some errors with regards to usability claims.</p>	<p>none of the main features of the application and/or a poor breakdown of the main tasks with few or no comments that demonstrate knowledge of usability concepts.</p> <p>The analysis is supported by screenshots but they are blurry, improperly sized, or not labelled.</p> <p>The analysis contains many errors with regards to usability claims.</p>		
	5 – 4 pts	4 – 3.5 pts	3.5 –3 pts	3 – 2.5 pts	2.5 - 0 pts	0–0 pts	5pts
Heuristic analysis	<p>Demonstrates excellent classification and application of heuristics. The heuristics chosen make sense.</p> <p>Analysis contains specific usability issues that were explored in depth. Exact cause of the issue(s) and their impact on tasks are clearly identified and articulated.</p>	<p>Demonstrates very good classification and application of heuristics. The heuristics chosen make sense.</p> <p>Analysis mostly contains specific usability issues that were explored in depth. Exact cause of the issue(s) and their impact on tasks are</p>	<p>Demonstrates good classification and application of heuristics. The heuristics chosen generally make sense with few exceptions.</p> <p>Analysis contains specific usability issues that were explored in some depth. Exact cause of the issue(s) and their impact on</p>	<p>Demonstrates good classification and application of heuristics. Some heuristics may not make sense or have been misclassified.</p> <p>Analysis contains specific usability issues that were explored but were lacking in depth. Although an explanation was</p>	<p>Demonstrates poor classification and application of heuristics. The heuristics were wrongly applied, don't make sense or have been misclassified.</p> <p>Analysis does contain specific usability issues and/or they were not explored sufficiently. Exact cause of the issue(s) and their impact on tasks</p>	Failed to classify or apply heuristics	

	Supporting screenshots provided are clear, properly sized, cropped and labelled.	mostly clearly identified and articulated. Supporting screenshots provided are mostly clear, properly sized, cropped and labelled.	tasks are partially identified and articulated. Supporting screenshots provided are partially clear, properly sized, cropped and labelled.	provided, the analysis does not present evidence to support the veracity of the claims. Supporting screenshots provided are somewhat clear, properly sized, cropped and labelled.	were not clearly identified and articulated. Supporting screenshots provided are blurry, improperly sized, or not labelled.	
	5 – 4 pts	4 – 3.5 pts	3.5 – 3 pts	3 – 2.5 pts	2.5 – 0 pts	0–0 pts
Methodology	<p>Report explains clearly methodology used to recruit participants via named channels, and how the survey was planned, with no ambiguities.</p> <p>Includes the entire survey form either in the body or in the appendix.</p> <p>Includes the datasheet from the survey in the body or in the appendix.</p> <p>Survey questions are within scope, relevant to the UI and able to provide a sufficiently clear research direction. It is easy to understand</p>	<p>Report explains clearly the methodology used to recruit participants via named channels, and how the survey was planned, with few ambiguities.</p> <p>Includes the entire survey form either in the body or in the appendix.</p> <p>Includes the datasheet from the survey in the body or in the appendix.</p> <p>Survey questions are within scope, relevant to the UI and able to provide a sufficiently clear research</p>	<p>Report explains the methodology used to recruit participants via named channels, and how the survey was planned, but with some ambiguities.</p> <p>Includes the entire survey form either in the body or in the appendix.</p> <p>Includes the datasheet from the survey in the body or in the appendix.</p> <p>Survey questions are within scope, relevant to the UI and able to provide a sufficiently clear research</p>	<p>Report somewhat explains the methodology used to recruit participants via named channels, and how the survey was planned, but with several ambiguities.</p> <p>Includes the entire survey form either in the body or in the appendix.</p> <p>Includes the datasheet from the survey in the body or in the appendix.</p> <p>Survey questions are generic or do not focus on UI. It is somewhat challenging to</p>	<p>Report does not explain the methodology used to recruit participants via named channels, and/or does not explain how the survey was planned.</p> <p>Does not include the entire survey form either in the body or in the appendix.</p> <p>Does not include the datasheet from the survey in the body or in the appendix.</p> <p>Survey questions are not within scope or are too short to explore the issues, nor are they relevant to the UI or are able to provide a sufficiently clear research</p>	<p>Report methodology and supporting data are not present.</p>
						5pts

that each question plays a role.	direction. Mostly, it is easy to understand that each question plays a role.	direction. It is somewhat easy to understand that each question plays a role.	understand that each question plays a role.	direction. It is difficult to understand the role that question plays.
Survey questions are not biased, too product-focused or ambiguous in meaning and language.	Survey questions are not biased, too product-focused or ambiguous in meaning and language.	Some survey questions are biased, too product-focused or ambiguous in meaning and language.	survey questions are not biased, too product-focused or ambiguous in meaning and language.	Survey questions are biased, too product-focused or ambiguous in meaning and language.
Survey has a comprehensive mix of open and closed ended questions.	Survey has a good mix of open and closed ended questions.	Survey has an acceptable mix of open and closed ended questions.	Survey is lacking a balance of open and closed ended questions.	Survey does not contain a comprehensive mix of open and closed ended questions.
Survey uses the Likert scale well and contains clearly defined qualifiers for each value.	Survey uses the Likert scale well and mostly contains clearly defined qualifiers for each value.	Survey uses the Likert scale and generally contains clearly defined qualifiers for each value.	Survey uses the Likert scale but several qualifiers for each value are not clearly defined.	Survey does not use the Likert scale or qualifiers for each value are not defined.

	8 – 6.4 pts	6.4 – 5.6 pts	5.6 – 4.8 pts	4.8 – 4 pts	4 – 0 pts	0–0 pts	8pts
Analysis and findings	Participant data is clearly presented in a table and/or chart at the beginning of the section.	Participant data is presented in a table and/or chart at the beginning of the section.	Participant data is presented in a table and/or chart at the beginning of the section.	Participant data is presented in a table and/or chart at the beginning of the section.	Participant data may be missing or insufficiently described.	Participant data and/or analysis submitted	
	Analysis provides a clear picture on the design direction of the application with regards to target audience, features that are high in demand as well as designs that should be avoided or be considered.	Analysis mostly provides a clear picture on the design direction of the application with regards to target audience, features that are high in demand as well as designs that should be avoided or be considered.	Analysis provides a picture on the design direction of the application but at times the connection between the findings and the data lacks clarity.	Analysis provides some direction for the design but it is not easy to see the connection between the findings and the data.	Analysis provides little design direction of the application and it is not easy to see the connection between the findings and the data.		
	Analysis is supported by screenshots, user		Analysis is generally supported by screenshots, user	Analysis is only lightly supported by screenshots, user comments and/or data from the survey. Or, there are too many	Analysis was hardly supported or there was not enough convincing information for the finding. Or, there were too many graphs		

comments and/or data from the survey.	Analysis is supported by screenshots, user comments and/or data from the survey.	comments and/or data from the survey.	graphs provided that only focus on displaying results rather than the analysis for the design direction to be taken.	provided that only focus on displaying the results.
Analysis considers the client's brief and is able to consolidate the data collected into specific strategies for the application design.	Analysis mostly considers the client's brief and is able to consolidate the data collected into specific strategies for the application design.	Analysis considers the client's brief and is able to consolidate the data collected into specific strategies for the application design.	Analysis considers the client's brief and is able to consolidate the data collected into specific strategies for the application design.	Analysis did not sufficiently consider the client's brief or did not able to consolidate the data collected into specific strategies for the application design.
Screenshots provided are clear, properly labelled and cropped where relevant.	Screenshots provided are clear, properly labelled and cropped where relevant, with a few exceptions.	Screenshots provided occasionally blurry, improperly labelled or not properly sized. relevant.	Screenshots provided are regularly blurry, improperly labelled or not properly sized.	Screenshots provided were blurry, improperly labelled or not properly sized.
It is clear how each analytical point can be traced back to the data.	It is clear how each analytical point can be traced back to the data.	It is clear how each analytical point can be traced back to the data.	It is not sufficiently clear how each analytical point can be traced back to the data. The participant data was lacking in terms of prose, tables and charts.	It is not clear how each analytical point can be traced back to the data. There was no clear participant data in the form of prose, tables or charts.
7 – 5.6 pts	5.6 – 4.9 pts	4.9 – 4.2 pts	4.2 – 3.5 pts	3.5 – 0 pts

Formatting

Confers penalty but does not contribute to marks.

<p>Consistently uses correct grammar (verb tenses, subject-verb agreement, pronouns etc.)</p> <p>Consistent use of appropriate vocabulary and sentence structure enabling unambiguous grasp of the meaning</p>	<p>Mostly uses correct grammar (verb tenses, subject-verb agreement, pronouns etc.)</p> <p>Mostly uses appropriate vocabulary and sentence structure enabling clear grasp of the meaning</p>	<p>Communicates meaning through use of clear and unambiguous language</p> <p>Consistent use of appropriate vocabulary and sentence structure enabling unambiguous grasp of the meaning</p>	<p>Generally, uses correct grammar (verb tenses, subject-verb agreement, pronouns etc.)</p> <p>Generally, uses appropriate vocabulary and sentence structure; some lapses causing lack of clarity</p>	<p>Incorrect use of grammar (verb tenses, subject-verb agreement, pronouns etc.)</p> <p>Vocabulary limited and frequently inappropriate; sentence structure often incorrect/does not convey meaning</p>	<p>Writing was not submitted</p>
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Correct punctuation and spelling	Correct punctuation and spelling	Consistent use of correct grammar (verb tenses, subject-verb agreement, pronouns etc.)	Adequate punctuation and spelling; some lapses	Inadequate punctuation and/or spelling
Communicates meaning through use of clear and unambiguous language	Communicates meaning through use of clear and unambiguous language	Correct punctuation and spelling	Generally, communicates clearly; some instances of incorrect use of language	Language fails to communicate meaning clearly

The HD is the highest-grade level. Match the verbs from the criteria in your description and add words that judge quality and quantity as appropriate. Your goal is to outline what a fully complete response to the assessment would look like.	For the credit and distinction levels you can leave some of the description the same between levels but there must be enough differentiation to make it possible to understand the different levels of achievement.	For the credit and distinction levels you can leave some of the description the same between levels but there must be enough differentiation to make it possible to understand the different levels of achievement.	The Pass description outlines the minimum standard of student achievement that still meets the criteria. Be careful of setting the bar too high here or you will not leave enough room to measure 3 levels up of student achievement.	Describe what the student would not do in the pass description. The student has tried to complete the assessment but has not integrated the knowledge sufficiently to a pass standard.	Fail statement for students who did not make an attempt. Write this as “did not complete” criteria, as if the student did not attempt to finish the assessment.
Be specific, avoid using vague or subjective words that are open to interpretation (for example, “good” is less specific than “comprehensively”).	It’s normal to juggle all the criteria as you go to make the levels work, as you write these levels expect to change the HD as well.	It’s normal to juggle all the criteria as you go to make the levels work, as you write these levels expect to change the HD as well.	Often when you write this level you will change all the other levels again.		
Preference words that describe the quality of the critical thinking rather than describe the quantity of the response where you can. For example, “meaningful insights” describes					

quality more accurately than “multiple insights,” although both terms describe a quality response.

Quantity words can be used in the description but are more open to interpretation (i.e. the difference between “some” and “mostly” isn’t always clear) so try not to use quantity words as the only signifier of quality where possible.

Total:

30 pts
