



# **COSC2653 User-centred Design**

Assessment 2: Application Prototype Design



Assessment type: Design document and high-fidelity

Figma prototype

Word limit: N/A



Due Date: 6th February 2022 by 11:59PM (AEST) Pt 1

6th March 2022 by 11:59PM (AEST) Pt 2



Weighting: 20% Part 1

20% Part 2

### **Overview**

The objective of this assignment is for you to design a prototype for **a mobile application** that allow users to gift jewelry to someone located around the world on either the iOS **or** Android platform. The prototype can be in either **portrait or landscape mode** of the application.

Assessment 2 is split into two deliverables.

### Part 1: Design document

Submission: Design document PDF

Worth: 20 marks

### Part 2: Prototype (high-fidelity)

Submission: Figma prototype link, to be included in Design document

Worth: 20 marks

### **Assessment criteria**

This assessment will measure your ability to:

- Create a design document using the interaction framework.
- Produce an interactive prototype based on design document.





## **Course learning outcomes**

This assessment is relevant to the following course learning outcomes:

- 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.





#### **Assessment Details**

### The Client

The client is a major jewelry retail agency with presence in the global market. This client recently partnered with one of the biggest logistics companies in the world to develop a mobile application that allows users to quickly purchase and deliver customized gifts to anyone anywhere within 20 countries. This application should be designed towards these goals:

- 1. During purchases, they want their customers to be able to customize the jewelry with engravings on the jewelry itself and on the gift boxes.
- 2. Customers can also craft gift messages to be included with the delivery as a card.
- 3. Both the customers and the gift recipient (if not secret) can easily track their gifts all the way to completion of delivery.
- 4. Bonus: Customers can view their order history and accrue loyalty points.

### **Target Users**

The client assumes that the main target groups are users who wishes to gift items to friends, partners or family around the world and wants it to be very personalized. 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 the client's needs, prepare at least **three core** features. You can also propose other features that are cogent to what the client is trying to achieve. Please note that the check out system is done via Paypal ONLY and you do not have to provide mock ups for this part of the experience.

Example feature: Being able to browse and add jewelry to their shopping cart.

Note: Logging in, settings and other ancillary features are not considered core.

# **Tips**

- 1. Begin by understanding the goals stated by the client. Then start the design framework process like what you have learnt in the course.
- 2. Speak to potential users if you can, to see what their mindset and thoughts are.
- 3. There are multiple ways to fulfil the requirements but look at similar applications to see what worked and what did not. For example, would a map make sense? Should the map be the default screen? How would you populate the map to make it easier to understand?
- 4. 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.
- 5. Give your app a name.





# **Prototype Instructions and Tools**

### Figma app

Figma is a web-based prototyping app with a range of collaborative features. Figma will allow you to build high-fidelity prototype screens required for this project.

The Figma Professional account is available free for students enrolled in this course.

To activate your free Professional account, you will need to verify your student status using your RMIT email address.

### Follow these instructions to verify your email and gain access to your Figma Pro account.

If you have any questions about accessing your Professional account, please contact your Learner Success Advisor for support.

### Important notes

- DO spend some time familiarizing yourself with the Figma app. Refer to your learning content (Task 7.3.3) for guidance.
- Please specify the platform you are working on. (iOS or Android)
- Have a look at similar applications and conduct critical reviews prior to starting your work. This way you can avoid many mistakes made.
- Please insert the link to your project on Figma in your PDF submission, preferably in the introduction section.





# Screen editors

# Prototyping platforms

Figma
SketchApp (Mac only)
GIMP 2 (Win, Mac, Linux)
Adobe Suite (Win, Mac)

Figma Invisionapp - SaaS UXPin - SaaS Marvelapp - SaaS

...even Paint

Balsamig

Lucid chart Proto.io Axure RP

Colour palette for design: https://coolors.co/

### **Deliverables**

### Part 1: Design Document (20 marks)

This report is mainly for you to introduce your design and fill it with screenshots and wireframe of your prototype. Marks will be given for:

- 1. Introduction (What is this project about? Who are the potential user groups?)
- 2. Three example personas and three context scenarios.
- 3. At least **two** keypath scenarios for two separate major functions with low fidelity wireframes.
- 4. Discussion of design principles used in your prototype. You can include wireframes created and annotate them in this section of the report.
- 5. Discussion of main features you have decided to include in your design. Why did you choose these features?

This document does not have a page limit as to provide you with flexibility on the wireframes.





# Part 2: Prototype (20 marks)

The prototype will be based on your project file residing on the Figma platform. Marks will be given for:

- 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 placing of items.
  - Look at the principle of affordance.
- 4. Interactions working as intended.
  - Does your prototype provide example inputs?
  - Does your prototype provide example responses to user inputs?



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### **Referencing guidelines**

Use <u>RMIT Harvard</u> 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 <u>RMIT Easy Cite</u> 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**

You must submit your report via Canvas as a **PDF file upload**. The PDF must contain a link to your high-fidelity prototype that is working and public.

#### 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 <u>assessment declaration</u>.





Criteria	Ratings						
PART 1	HD	D	C	P	N	DNS	
Users, personas, context scenarios	Provides a comprehensive introduction to the project and document.	Provides a good introduction to the project and its goals but may have missed detail on the purpose of the document or vice versa.	Provides an introduction to the project but lacks details as to the goal and the purpose of the document.	Provides an introduction to the project but lacks several details as to the goal and the purpose of the document.	Provides an introduction that lacks many details and poorly describes the goal and the purpose of the document.	Users, personas, and/or context scenarios not provided	
	User groups are thoroughly described for the target application and contain specific attributes that are relevant and distinct.	User groups are described for the target application and contain specific attributes that are relevant.	User groups are described for the target application and contain specific attributes that are sufficiently descriptive.	User groups are described for the target application and contain specific attributes that are sufficiently descriptive but may not	User groups are described for the application, but attributes are poorly described and are not enough to differentiate the groups.		
	Personas contain all the necessary elements, are not	Personas contains all the necessary elements, are not based on real people	Personas are lacking certain elements, are not based on real	be enough to differentiate the groups.	One persona is provided with one context scenario.		
	based on real people and are representative of the user groups.	and are representative of the user groups.  Two to three personas	people and are representative of the user groups.	At least two personas are provided with less than one context scenario per persona.	Personas are not based on real people but are lacking several elements. Personas do not fit the		
	At least three personas are provided, with one context scenario per	are provided, with one context scenario per persona.  Context scenarios are	Two to three personas are provided, with one context scenario per persona.	Personas are not based on real people but are lacking certain elements. Personas	user groups.  Context scenarios did not show the motivations of the persona, or did not		
	persona.  Context scenarios are clearly illustrated and	clearly illustrated and show the motivation of the persona, proper story setting and	Context scenarios are illustrated and show the motivation of the persona. The context	only fit the user groups roughly.  Context scenarios did	actually mention the persona as the actor. There was no proper resolution. Narrative flow		
	show the motivation of the persona, proper story setting, and a	resolution of the story. The context scenario is high level and has a	scenario is a sufficiently high level and has a	not show the motivations of the persona, or did not	is illogical or contains gaps.		



resolution to the story. The context scenario is high level and has a narrative that flows logically.

narrative that flows logically.

narrative that flows logically.

actually mention the persona as the actor. There was no proper resolution. Narrative flow is slightly illogical or contains gaps.

5pts 5 - 4 pts 4 - 3.5 pts3.5 - 3 pts3 - 2.5 pts2.5 - 0 pts0-0 pts

# Key paths and wireframes

Description

Wireframes provided are easy to understand (proper sizing, labelled with clear lines).

Keypaths contain all relevant transition arrows that originate from the interaction element to the next screen. Flow can be clearly followed.

Keypaths are based on the context scenario and use the persona as the actor.

The persona's actions are clearly described, as well as the systems reactions or feedback sequence.

Wireframes provided are easy to understand but may lack labelling or are not formatted properly in a few areas (too large/small, not labelled, too messy).

Keypaths contain relevant transition arrows that originate from the interaction element to the next screen. Flow can be clearly followed.

Keypaths are based on the context scenario and use the persona as the actor.

The persona's actions are described but the system response was

Wireframes provided are complete but contain some formatting issues (too large/small, not labelled, too messy).

Keypaths contain transition arrows that do not originate from the interaction element. Slightly difficult to follow the flow.

Keypaths seem somewhat separate from the context scenario or did not use the persona as the actor.

Description of the persona's actions and system response could Wireframes provided are not complete and contain some formatting issues (too large/small, not labelled, too messy)

Keypaths lacking transition arrows. making it quite difficult to follow the flow.

Keypaths seem separate from the context scenario or did not use the persona as the actor.

Description of the persona's actions and system response could use more details and are too generic.

Wireframes provided are not complete and contained several formatting issues (too large/small, not labelled, too messy).

**Keypaths lacking** transition arrows making it quite difficult to follow the flow.

Keypaths seem unrelated to the context scenario or did not use the persona as the actor.

Description of the persona's actions and system response was very brief and generic.

Key paths and/or wireframes not provided.



not sufficiently elaborated on or provided.

use more details and are too generic.

	5 – 4 pts	4 – 3.5 pts	3.5 – 3 pts	3 – 2.5 pts	2.5 – 0 pts	0–0 pts	5pts
Design principles	Design principles provided are relevant, accurately chosen and analysis is contextually tied to the design.	Design principles provided are relevant, accurately chosen.  Analysis provides	Design principles chosen demonstrate understanding of the subject but some choices are not	Some of the design principles chosen do not match the design and are not accurately described.	None of the design principles chosen match the design and or are incorrectly described.	Design principle theory not included	
	Analysis is properly formatted so that it was easy to follow the design principles	cogent and strong rationale for the principles.  Analysis is backed by	sufficiently explained or accurate.  An explanation is provided for each	An explanation is provided for each principle but could use some more	An explanation is provided but not for every principle and/or is not justified.		
	touted.  Analysis provides cogent	screenshots that are mostly properly	principle but could use some more	justification.	There are too few design principles showcased.		
	and strong rationale for the principles.	formatted and labelled.	justification.	There are too few design principles	Analysis is not backed by		
	Analysis is backed by screenshots that are		Analysis is backed by screenshots but only for some of the	showcased.  Analysis is not backed	screenshots or any other supporting materials.		
	properly formatted and labelled.		principles and/or are not properly formatted.	by screenshots or any other supporting materials.			
	5 – 4 pts	4 – 3.5 pts	3.5 – 3 pts	3 – 2.5 pts	2.5 – 0 pts	0–0 pts	5pts
Feature list discussion	Each feature provided ties back to the client's goals.	Each feature provided ties back to the client's goals.	Most features provided tie back to the client's goals.	Some features provided do not tie back to the project and client's goals.	Features provided do not tie back to the project and client's goals.	Feature list not included	



Each feature has a sufficient description that clearly describes what it allows the user to accomplish and the value it brings.

Each feature has a description that describes what it allows the user to accomplish and the value it brings.

Although each feature has a description it is too vague and not clear specifically how it benefits the user.

Although each feature has a description it is too vague and not clear specifically how it benefits the user.

Not every feature has a description and/or it is too vague and does not describe how it benefits the user.

	5 – 4 pts	4 – 3.5 pts	3.5 – 3 pts	3 – 2.5 pts	2.5 – 0 pts	0–0 pts	5pts
	The HD is the highest-	For the credit and	For the credit and	The Pass description	Describe what the	Fail statement for	
Criterion 1	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.	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.	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.	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 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.	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	It's normal to juggle	It's normal to juggle all	student achievement.			
	vague or subjective words that are open to interpretation (for example, "good" is less specific than "comprehensively").	all the criteria as you go to make the levels work, as you write these levels expect to change the HD as well.	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: 20 pts

Criteria Ratings Pts



PART 2	HD	D	С	P	N	DNS	
Prototype eatures	Prototype has all necessary features laid out in Part 1, and has covered the required core	Prototype has all necessary features laid out in Part 1, and has covered the required core functionalities as	Prototype has covered the required core functionalities as part of the requirement, but one feature may not be	Prototype did not cover all the core features or one or more of them did not work.	Prototype did not cover all the core features or many of them did not work.	Prototype features not evidident	
	functionalities as part of the requirement.	part of the requirement.	complete.	Some features were not interactive from starting point to the	Many features were not interactive from starting point to the end state.		
	Each feature is interactive from starting point to the	Each feature is interactive from starting point to the	interactive from starting point to the end state. There are	end state. There were some issues with the hotspots.	There were several issues with the hotspots.		
no issues with the hotspots.  Each feature is connected for the start.  Example user in are provided for feature to show interaction.  Content in each feature are self-	end state. There are no issues with the hotspots.	end state. There are slight issues with the hotspots.	some issues with the hotspots.  There are some	There are confusions as to how each feature is accessed for example	There are many confusions as to how each feature is accessed for example unable to		
	Each feature is clear on how to access it or to start.	Each feature is clear on how to access it or to start.	confusions as to how each feature is accessed for example	unable to easily go the right screen.	easily go the right screen.  Example user inputs were		
	Example user inputs are provided for each	Example user inputs are provided for each	unable to easily go the right screen.	Example user inputs are not provided for some features to showcase	not provided for features to showcase interaction.		
	feature to showcase interaction.	feature to showcase interaction.	Example user inputs were provided for only some features to	interaction.  There are external links	There are external links provided instead having them in-app.		
	feature are self-	Some of the content in a core feature leads to	showcase interaction.	provided instead having them in-app.			
	contained in the application instead of leading to an external link.	external sources.	There are external links provided instead having them in-app.				
	7 – 5.6 pts	5.6 – 4.9 pts	4.9 – 4.2 pts	4.2 – 3.5 pts	3.5 – 0 pts	0-0 pts	7pts



#### There is a clear There is a clear The navigation patterns The navigation patterns The navigation patters Prototype navigation are not clear in terms of navigation pattern navigation pattern used can be a bit used can be clearer in **Prototype** not evident provided that is easy to provided that is easy clearer in terms of terms of providing a providing a starting point, navigation understand in terms of to understand in providing a starting starting point, however and/or are not functional. access, labelling and it is functional. terms of access. point, however it is Description affordance. functional. Flow of each task is not Flow of each task is Flow of each task is not intuitive from starting Flow of each task is mostly intuitive from Flow of each task are intuitive from starting point to completion. intuitive from starting starting point to somewhat intuitive point to completion. point to completion. completion. from starting point to Escape hatches either do completion. Escape hatches for only not exist or do not return Escape hatches for all Escape hatches for all some screens exist and to a logical point in the screens exist and return screens exist and Escape hatches for may not return to a navigation. to a logical point in the return to a logical most screens exists and logical point in the application. point in the return to a logical point application. Navigation pattern application. in the application. chosen is not consistent Navigation pattern with platform Navigation pattern chosen fits the platform Navigation pattern Navigation pattern chosen is not consistent conventions. chosen fits the chosen fits the platform conventions. with platform platform conventions. conventions. conventions. Icons, labelling and Icons, labelling and navigation bars are Icons, labelling and navigation bars are all Icons, labelling and Icons, labelling and missing and/or are not fitting and easily navigation bars are navigation bars are navigation bars are easily understood. understood. fitting and easily fitting and easily fitting and easily understood with a understood with some understood with a few exceptions. exceptions. several exceptions. 7 - 5.6 pts4.9 - 4.2 pts4.2 - 3.5 pts0-0 pts 7pts 5.6 - 4.9 pts3.5 - 0 ptsScreen layout makes Screen lavout Visual language is Visual language is Visual language is Did not provide a layout slightly inconsistent inconsistent throughout perfect sense and is generally makes inconsistent or Layout and or aesthetic clear and neat. sense and is clear and throughout the the application. unrecognizable aesthetics presentation throughout the neat. application. Patterns used differ in Patterns chosen fit the application. Description Patterns used differs n purpose and do not Patterns chosen fit terms of sizing and/or impede the user in the purpose and terms of sizing and/or colors from feature to Patterns used are terms of cognitive load. colors from feature to generally do not feature. inconsistent in terms of impede the user in feature. sizing and/or colours Patterns follow platform terms of cognitive from feature to feature. Some patterns are conventions. load. Patterns chosen fit the arbitrarily used, do not purpose and do not fit purpose.



6 – 4.8 pts	4.8 – 4.2 pts	4.2 – 3.6 pts	3.6 – 3 pts	3 – 0 pts	0-0 pts	6pts
	language throughout the application.	action items etc.		interface.		
the application.	Consistent visual	colors are used for	interface.	to understand the		
language throughout		experience, specific	to understand the	or making it more difficult		
Consistent visual	action items etc.	assist in the user	making it more difficult	terms of visual language		
	colors are used for	Colors sometimes used	visual language or	creating confusion in		
action items etc.	experience, specific		confusion in terms of	across the interface,		
colors are used for	assist in the user	confusion.	in some areas, creating	Too many colors used		
user experience, specific	Colors generally used	do not create	Too many colors used			
Colors used assist in the		consistent, match and		and create confusion.		
	confusion.	Fonts used are	confusion.	completely inconsistent		
confusion.	and does not create		but do not create	Fonts used are		
and does not create	consistent, matching	bit overzealous.	somewat inconsistent,			
consistent, matching	Fonts used are	content. Padding was a	Fonts used are	padding was overzealous.		
Fonts used are		focus was still on		from the context. And/or		
,	reasonable.	dedicated to UI, but	bit overzealous.	focus being removed		
overzealous, if any.	Padding is	much of the screen	content. Padding was a	dedicated to UI, with the		
content. Padding is not	is still on content.	There was a bit too	UI, but focus is still on	Too much screen		
UI, focus is still on	dedicated to UI, focus	terms of cognitive load.	the screen dedicated to	purpose		
There is not too much of the screen dedicated to	There is not too much of the screen	impede the user in	There is too much of	nurnoco		

# **Criterion 1**

Description from the assessment criteria goes here.

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.

Be specific, avoid using vague or subjective words that are open to

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.

It's normal to juggle all the criteria as you go to make the levels 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.

It's normal to juggle all the criteria as you go to make the levels work, 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.

Often when you write this level you will

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.



interpretation (for example, "good" is less specific than "comprehensively").

work, as you write these levels expect to change the HD as well. as you write these levels expect to change the HD as well. 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: 20 pts