Curtin University

Discipline of Computing, School of Electrical Engineering, Computing and Mathematical Sciences

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

2022 Assignment 1 Brief

**** Read to the end of this document before starting ****

1 Overview

Design the **user interface** and **user interaction** for a software project using **user-centric design principles**.

2 Nominating Project

You will be assigned into teams of 3-5 students within your tutorial group. Each team will be assigned a team number, and together you will choose a team name. Your team is to design a user interface and user interaction for an allocated project. The user interface must be sufficiently complex allowing you to demonstrate the knowledge required for ICTE 3002/ICTE 5001.

Tip #1 – come prepared: View the '**Project List**' in Blackboard before attending your first tutorial in week 2. Also, be prepared to come with your own app ideas to discuss!

Action: Before the week 2 tutorial, your team will need to nominate your **three** preferred projects from the 'Project List' in Blackboard by writing your team number and team name in the available space next to particular projects in the Google Docs spreadsheet https://tinyurl.com/y2cmz9c9. There is a reserve spot as well so you can put your team details there even if another team has got first spot. Teams can nominate the same project as invariably projects will take different directions. However, we only aim to assign most projects only once.

Don't forget your own app idea is also a great possible project. It might be the opportunity to work on a **start-up idea** you have always wanted to develop. However, check with your tutor to see if your idea has potential for enough complexity. Ideas with themes around **social good** or some of the **17 United Nations Sustainable Development Goals (UNSDG)** https://sdgs.un.org/goals are encouraged.

If you want to add your own app idea, add it to the bottom of the Project List spreadsheet.

Action: Get your team Project Manager to email me Susannah.Soon@curtin.edu.au your three choices as well (just as a record). Put "Project nomination: team number – team name" in the email header.

The lecturer will allocate the projects as best they can. It will be a mix of first-come-first-served, suitability or project priority. We hope to make the allocations by your week 2 tute. So please nominate your team preference as soon as you can.

Some projects are high priority and may definitely be assigned, often this is because a staff member has offered to give advice (e.g. act as a user). This includes the Indigenous projects, human and emotion projects, and the physio and lunchbox project. There will also be a **consultation time** (TBA) where the lecturer and possibly another staff supervisor will be available to answer questions. If needed, we will add more project options.

If you do not nominate a project in good time, you will be allocated a project at random. Teaching staff will have final discretion on project allocation.

3 Project Proposal

Your team will need to write a project proposal describing your allocated project. **Your team Project Manager must upload the project proposal before your next tute.**

The project proposal should be written in a formal and professional manner including sufficient details to allow the company manager (unit coordinator/tutor) to decide if the project is viable. The app you design for your project needs to be sufficiently complex. Use the **"Worksheet 01 - Project Proposal.docx"**. The proposal should include the work covered so far including (see worksheet for more detail):

1. Why did your team choose this app?
2. Who will use your app?
3. User personas, user stories. Include links to FigJam and screenshots
4. Use case, user surveys
5. Design principle.
6. etc.

Tip #2 – all workshops contribute to assignment: Don't forget that the work that you do towards weekly 'status updates' such as this 'week 2 project proposal' can be used in the final Assignment 1.

You must follow good UI user-centric design and usability principles as discussed in the lectures; through your own research; or from resources such as the recommended textbook "Interaction Design: Beyond Human–Computer Interaction" by Helen Sharp, Yvonne Rogers & Jenny Preece, 4th/5th Ed.

For Assignment 1, there is no requirement to make a functioning interface. For example, if you design an interface for video player software, it must demonstrate good usability and interactivity. However, your design does not need to play the actual video file.

4 Teams

Each team member will have one or more specific roles. You are free to choose the roles, however the following are suggested:

- Project Manager (compulsory)
- Graphic Designer
- Psychologist
- Data Analyst
- Usability Engineer
- Document controller
- etc.

Although you each have a specific role, you can choose to work together on any specific aspect of the project. The project manager is responsible for the smooth running of the project, but this role is not dictatorial. The project manager is responsible for communication with management (lecturer). This includes arranging meetings, uploading reports to Blackboard, etc.

Not all "roles" will be required at all times, therefore it will be necessary for the people in idle roles to assist others as directed by the project manager. You will need to research your role to understand the duties involved.

All team members will need to **contribute equally** to the project regardless of your specific role. In particular, all team members are required to participate in the design (and in Assignment 2, the development) of the software. At the end of Assignment 1 each team member will have the opportunity to peer-review other members of their team.

5 Assignment 1 and weekly status updates

Each week new concepts will be covered in the lecture and tutes. Weekly tutorials will be scaffolded to help you develop your prototype design, and a **weekly 'status update' must be submitted to Blackboard before your next tute.** The weekly 'status update' is signed-off to ensure you are keeping on track. The submissions are not marked each week as they are for continuous improvement. Feedback will be given during tutorial, time permitting.

Tip #3 – continuous improvement: Treat the status updates as early draft work that you are continuously improving on throughout the weeks that can form the deliverables of Assignment 1.

The lecturer will act as both the manager of your software company, and as the client for the system. The tutor can also act as your client. Other staff members may be invited to act as clients from time to time. The clients will require **several design prototypes** using design tools such as **FigJam** and **Figma**. The clients can reject the design and ask for alternatives. This client

feedback will be given during tutorial time. Later in the course, teams in your tutorial group will also review your design and give you feedback to improve your design.

Tip #4 – Make a free Figma account and explore its functionality as soon as possible as this is the design tool we will be using. Check out FigJam whilst you are there.

The final **prototypes** will be delivered to the client via the project manager of your software company. Your **prototypes** must be accompanied by a **full, professional report** detailing all design choices and decisions. In this report, your team is required to document the design process from start to finish, including lifecycle model, all design thinking workshops, development of user personas, user journeys, pain points, solutions, hurdles, and milestones, competitor analysis etc., as well as low- and high-fidelity prototypes etc.

Use the template **"HCI – Assignment 1 Template.docx" as a guide**.

The report should be professional and written to an exceptional standard. This means **professional, succinct language** and no extraneous information that detracts from the core delivery of the design. Other supporting content should be attached as appendices, and referenced throughout the report e.g. meeting minutes, and project management milestones.

Tip #5 – use collaborative tools: Use a collaborative tool such as MS Teams (or Google docs) to work with your team on your document and organise your files, resources and references.

Tip #6 – video record sessions: When your team is doing your design thinking collaborative sessions – record your sessions (and save the automatic transcript) using MS Teams. Make sure you get everyone's permission first. Videoing your sessions serves as a great way to document ideas you have discussed as a team as it is easy to forget details on all the ideas generated.

Tip #7 - save your work: Ensure that you are keeping records all through your design thinking process in Figma and FigJam. Screenshot/export/save your prototypes at each iteration. You want to ensure a team member doesn't accidently delete or lose work!

6 Assignment 1 Deliverables

Ensure you submit the following parts for Assignment 1.

6.1 Written report

The Assignment 1 report using template **"HCI – Assignment 1 Template.docx"** and developed based on all the work you have done in the weekly tutorials (and corresponding uploaded in weekly status updates').

Ensure all **screenshots** and **links** to the **low-fidelity** and **high-fidelity prototypes** are clearly available.

There is also a way in Figma to 'Export' your work as a .png or .jpg which you might like to use to screengrab the entire file.

Please **also upload .jam and .fig files (and/or any other relevant files)** to support your work.

The report and video must be zipped together and electronically submitted by the project manager only to Blackboard by 23:59 Monday 25 April 2022 (Last day of Tuition Free week). This date has been extended due to 7th March public holiday tutes being pushed to Tuition Free week.

6.2 Five-minute video

A five-minute group video demonstration of your high-fidelity clickable prototype. Up to two members of your team should speak in the video. You may use recording software such as OBS studio. We will still try to click-through the interface ourselves, but the video will help ensure we see the complete functionality of the prototype. Failing to submit the video will result in a mark of "0" for this section.

6.3 Individual peer review of team members

This is a group assignment. Students in the same team will receive the same mark. Adjustments may be made based on peer-review. Peer review via Google Form (Link TBA) are also to be submitted by individual students by the Assignment 1 due date.

Record keeping is essential to prove the quality and quantity of individual team member work. You may like to use **toggl** to track time spent on the project. Save all your documents to MS Teams or a shared Google Drive. You may like to track changes in your document e.g. "Review > Tracking" mode in Word. Include the link for your MS Teams or Google Drive folders in your Assignment 1 report. Collect any other evidence that helps identify team member contributions e.g. meeting minutes.

** End of Assignment 1 Brief **