



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

FACULTY OF COMPUTING
UTM Johor Bahru

PROJECT PART #1

Subject : Human-Computer Interaction (SECV2113)
Session : 2024/2025 Semester 2
Title : Project Proposal
Duration : 1 Week
Submission : This is a **TEAM ASSIGNMENT** and must be submitted
(1) Latest by 27th APR 2025
(2) Upload the report in .PDF format via UTM e-learning

From the class lectures, discussions, activities and assignment performed in the past weeks, as a team, you need to come up with a proposal you wish to pursue for the HCI project. Each team will have to design a particular interactive system/application/product (either for computer desktop/laptop or mobile/standalone or other new emerging technologies) that interests you. The project may aim to replace or update an established system, or it may aim to develop a totally innovative product with no obvious precedent. The project phases (in parts) will reflect the stages of interaction design process and submitted as project deliverables throughout the semester.

Pre-process: Analysing problem space

It is important to have a clear understanding of why and how you are going to design something, as it can save enormous amounts of time, effort and money later on the design process. Upon reaching your decision, your team should attempt to identify, understand and examine usability and user experience issues through the process of conceptualizing interaction, as described below:

Understand and conceptualize interaction. Analyse and describe a problem space. Are there any problems with an existing product or issues with its user experience? If so, what are they? If you are designing for a new user experience, how do you think your proposed design ideas support, change, or extend the current ways of doing things? Come up with possible solutions to the problems you describe above, i.e. a “better” interface/interaction/etc. that you envision and how it will address the problem. Who will use this application?

Submission 1: Project Proposal

Report should include the following:

- **Problem.** Find problems from existing systems that do not fulfil certain usability goals or user experience goals. For example, if the problem space is a waste management system, find problems regarding the system itself, e.g. sorting waste is difficult (usability problem) and annoying (user experience problem). Your solution has to be clearly linked to one (or several) of the 17 [Sustainable Development Goals](#) identified by the United Nations:

1. No Poverty

2. Zero Hunger
3. Good Health and Well-being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure
10. Reduced Inequality
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace, Justice and Strong Institutions
17. Partnerships for the Goals

- **Proposed Solution.** Propose an interactive system/application/product that can solve the problem you described. State clearly what it is (e.g. eco-waste system, health and fitness app, interactive signboard, smart chair, augmented table, etc.). Give general ideas about your proposed system/application/product that can solve the usability and user experience problems that you have described.
- **Target users.** List at least **THREE (3)** user groups who will most likely use your proposed system/application/product. Make the user groups specific (e.g. “architects” instead of “workers”). Find user groups that would REALLY benefit from using your design solution.

Reference Slides Teaching:

Topic 3a – Conceptualisation and Interaction Design

BLOG POST FORMAT:

{Title of Submission e.g. Project 1 - Project Proposal}

Problem

{Description of the problem space - describe the problem you want to solve}

{Include any supporting images that can make your description clearer.}

{Description of at least three (3) problems of the existing system, with references, and label it based on usability goals and user experience goals.}

Proposed Solution

{Name of your proposed system/application/product, and what kind of design solution it is. For example: “SmartChair” – chair with AI-based features or “easyWaste” – helping to Trash Responsibly!”}

{Description of the proposed solution to the three (3) problems. e.g., the interface that you envision, and how it will address the problem.}

Target Users

{Identify THREE (3) user groups, or target audiences, and distinguish how each group can benefit from your proposed solution}

Rubric:

Item	Minimal (1)	Moderate (2)	Good (3)	Excellent (4)	Weight	Score
Problem	Problems identified are not usability or UX problems	Weak explanation on the identified usability and UX problems	Clear explanation on the identified usability and UX problems	Explanation of the identified usability and UX problems demonstrates excellent understanding of the problem space	2	8
Illustration to problem	1 related image provided, with reference in text	2 related images provided, with reference in text	3 related images provided, with reference in text	Separate images provided to illustrate the identified problems, with clear reference in text	1	4
Proposed Solution	The high-level solution described only generally without relating to the identified usability and UX problems	The high-level solution describe how it can address partly the identified the usability and UX problems	-	The high-level solution describe how it can address all the identified the usability and UX problems	2	8
Targeted Users	The 3 target users are not distinguishable	Distinguish 3 target users and but no or weak explanation on how they can benefit from the proposed solution	-	Distinguish 3 target users and how they can benefit from the proposed solution	1	4