Curtin University

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

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

2022 Worksheet 03: Requirements and Functionality

Team project manager to submit your group report with filename format: W03 – X1 – Requirements.pdf where X1 is your team number.

Due: upload what you achieve by your next tute – it is a project status update and will be signed off. (Remember you can use this material towards Assignment 1). Although you can only submit once, you can revisit and revise the work you have done here up until you deliver Assignment 1.

1 Team Details

Team number / name: **Tute day / time:**

Project no. / name: **Tutor:**

Student	Name	Number	Role*
1			Project Manager
2			
3			
4			
5			
6			

*Roles: Project Manager (Compulsory) / Graphic Designer / Psychologist / Data Analyst / Usability Engineer / Document Controller.

2 Functionality and Requirements

Design Thinking, ideation and brainstorming examples were shown in lecture. Research some Design Thinking techniques and methodologies to answer the following questions as a group. Write up you answers as a short report. Keep your responses high quality. Assume you are writing to win a bid, tender or start-up funding. Treat these as first attempts and keep iterating.

1. **Design Thinking (Part 3)**

IN-CLASS ACTIVITY:

Use FigJam and document in Word (or other design package):

a. **Start brainstorming the functionality your prototype will have:** This involves ideating solutions to the "How might we …" problem statement you developed last week. This includes decisions regarding functionality, UI/UX design choices, user flow (login, security, user personalisation) etc.

b. **Requirements:** Given the limited in-class time, define two key functional requirements for your system. (You will return to complete requirements and hierarchical task analysis in Sections 2 and 3 below).

c. **Start designing your wireframe:** If you are happy with your ideation of solutions so far, you can begin designing your wireframe using pen and paper sketch (or tablet or online design tool). This will need several rounds of iteration and improvement. Therefore, it is best to start now!

d. **Competitor analysis** – are there learnings you can take from best-in-world solutions that may not be related to your app? In lecture 1 we talked about Strava, but there are many more e.g. Uber, Deliveroo etc.

2. Requirements

Using knowledge from your earlier study in Introduction to Software Engineering (ISAD 1000), define several of your system's key**:**

a. Functional Requirements
   i. User requirements
   ii. System requirements

b. Non-Functional Requirements (**usability**, performance, reliability, security)

3. Hierarchical Task Analysis

Develop a Hierarchical Task Analysis of several key activities in your app (see Lecture 04).

4. UI/UX glossary and weblinks

Continue building a glossary of useful terms and weblinks that you can add to Assignment 1. You can also add your definitions and links to our HCI community page under the glossary/weblinks tabs: https://tinyurl.com/y2cmz9c9