Project Phase 1 - Establish requirements (5 points)

This project task is the first of four that together take you through one iteration of the complete design process. The overall goal is to design a smartphone app helping university students to plan their daily commute to the university from home and vice-versa.

The app should support:

- Allowing students to plan their commute according to their calendars and timetables, taking into account transport mode (bus, train, ferry) and personal events

- Helping students to find the ideal route, transport mode and stops depending on the time of day, start and end locations

- Allowing students to provide real-time feedback and comments on buses, transport modes, routes and stops, so that other students can benefit from the information

Please keep all of your answers short and on-point, and write them in concise bullet points. Please read the instructions for submission at the end of this brief. In addition to your submitted report, the results of this phase will also inform the *mandatory* presentation for the project phase 2.

Tasks:

1. To further the understanding of the problem space, observe people that are taking public transport

   a. To get a representative image of commuting habits and different types of users, observe students in different contexts. (e.g. singles, couples, groups and friends, parents, time of day, location they start the commute etc.)

   b. Observe for 60 minutes (about 6 people/groups - 10 minutes each)

   c. Take notes about your observations in terms of characteristics and capabilities of the users, what are they are trying to achieve, how they do it currently, and what problems they encounter

   d. Hand in a summary of your observations along with scanned copies of original notes (about 15 sentences)

   e. You should obtain verbal consent from the people you are observing. Therefore, ask your friends, colleagues or strangers before observing them

2. Prepare interview questions to further your understanding of the behaviour you observed above

   a. Based on your observation identify relevant questions

   b. Prepare a semi-structured interview

   c. An interview should take about 15 minutes

   d. Run a pilot interview with a person who is not part of your project team, to test your interview questions and identify potential points for improvement

   e. Hand in your both your draft and final interview questions

3. Conduct interviews

   a. Interview at least 5 people with different contexts (travel alone, couple, groups etc.)

   b. An interview should take about 15 minutes

   c. Submit your raw interview notes, these can be scanned and attached to the report if hand written

    d. Summarise at least 5 key findings from all interviews (for each finding state which participant has raised this point, by adding anonymous participant numbers in brackets (e.g., P1, P4))

4. Research existing approaches

    a. Find 2 existing apps that support commute planning

    b. State what problem these solutions try to solve

    c. State if, and/or how these problems relate to the behaviour you observed.

5. Identify stakeholders

    a. State all main stakeholders

    b. Create two persona descriptions for two selected stakeholders

6. Create scenarios

    a. Create two short scenarios each involving one persona created above

7. Create a use case

    a. Create an essential use case for the task of getting home from university. Start from a student leaving a lecture

    b. Create a alternative use case for the task of getting home via an alternative route or means

8. Identify requirements

    a. Using your gathered data and your analysis, identify at least 10 requirements under the headings *functional*, *data*, *environmental*, and *user characteristics*, there should be at least one requirement from each category.

    b. Prioritise requirements according to importance for user experience and categories: *must-have*, *should-have* and *nice-to-have*

Instructions for submission:

- Only one student per group needs to upload the submission to Canvas

- You can upload your submission to Canvas multiple times ahead of the due date/time. The final submission will be marked

- Your submission should be in PDF format

- If one of your group members is not contributing to the project work, you must inform your tutor well in advance, not after the assessment deadline

- This is a creative exercise. Innovative ideas and solutions are rewarded in grading

- Please include your written responses into a single document, with your scanned research findings attached as an appendix

- You should include the following details on the cover page:

    – The names and unikeys of your group members

    – Your group name or number

    – Which tutorial you attend (i.e. R10A)

Note about ethics:

Conducting your research in an ethical manner is an important part of developing the skills needed to be an effective HCI practitioner. For this assignment you will be observing people in public environments, so it is important to protect the rights, privacy and dignity of these individuals. These guidelines apply even where research participants do not know that they are taking part in a research study.

There are several points that you must follow in order to meet these requirements:

- Do not identify individuals in your work. You should refer to your observation subjects using anonymous identifiers (e.g. P1, P2 etc), and ensure that descriptions of individuals are not so specific as to risk identification

- Do not take photographs and do not record audio or video of either your observations or interviews