# User needs and task analysis

*Assignment 1*

## 1   Overview

This assignment is aimed at the developing an idea of the course project. The design should be based on consideration of real users and their needs. User activities should be explored, the improvement

## 2   The outline of the main part

The main part of the 1st assignment consists of the following sections:

- Stakeholders' categories
- <Primary and secondary users' group> needs *(repeat for each primary and secondary group)*
    - Characteristics of user group
    - Activities and contexts
        - Scenario 1. *<Title>*
            - Current scenario
            - Problems and opportunities
            - Improved interaction scenario
        - Scenario 2. <Title> …
    - Needs and goals
    - Usability objectives
- Task analysis
- Design inspirations

## 3   Explanations

### 3.1   Stakeholder analysis

Specify the specific activity which will be supported by your design project:

- Who is directly involved to the chosen activity? (Primary users)
- Who is occasionally involved? Maybe somebody is involved via somebody else?  (Secondary users)
- Maybe somebody will receive the output of your system? (Indirect, tertiary users)
- You will make purchase decision? Maybe people use competitor's tools now and you are going to provide them the better solution? (Tertiary users)

Answer to these questions in terms of primary, secondary (if exist) and tertiary users. For each group provide the goals in the project.

### 3.2   Activities and contexts

Watching how people do things is a great way to learn their goals and values, and come up with design insight. This is called needfinding. This assignment helps you train your eyes and ears to come up with design ideas. Your goal is to uncover user needs, breakdowns, clever hacks, and opportunities for improvement.

Begin by selecting a specific activity to observe. Describe **at least 3** observations of current user activities. The goal is to observe the successes, breakdowns, and latent opportunities that occur when computers are used, not used, or could be used to support your chosen activity. Ask them to participate in this assignment and get permission from them. Be sure you coordinate with your participants to select a time that will be rich for observations. Tell the participants to perform the task as realistically as possible, while communicating to you as appropriate. Utilize the strategies we talked about in lecture to help you. During the observation, in addition to taking notes, use digital photographs to document activities but do not use a video camera. After the observations, spend 10 to 15 minutes interviewing your participants about the activity you observed. It should take you approximately two hours to make all three observations if you have planned carefully. It will take longer if you haven't.

### 3.3 User needs/goals

After observing people, go over your findings and use them to brainstorm a list specific user needs: opportunities for design innovation that would enable computers to better support the activity you observed. Brainstorming is a group activity and should be fun! All ideas are good ones at this stage, and **you should generate at least 15 of them**: go for volume.

You are not looking for solutions yet: **focus on user needs and goals only**. An example of a need might be "Sometimes, when Scott takes the train home, there is no room for his bike and he has to wait for the next one. Scott needs a way to plan what train to take based on how much room is available in the bike car".

It is helpful to use to phrases "needs a way to" or "needs to be able to" as you list your user needs.

### 3.4 Inspiring interface examples

Inspiration can be existing applications, artifacts, products, or services that relate to your concept. Pick out your five favorite inspirations. For each one, give a brief explanation (1-2 sentences) of why you chose that design (What did you take away from it? What did you learn from it? In other words, why did it inspire you?)

### 3.5 Evaluation criteria

*Table 1. Assessment criteria*

| Assessment criteria | Max | Assigned |
|---|---|---|
| **Presentation and documentation** | **10** | **10** |
| Presentation contains essential assignment aspects | 1 | 1 |
| Presenters tell abouot the jobs but do not read the document text | 1 | 1 |
| Mail letter contains short project title, assignment title, attached document | 0,5 | 0,5 |
| Title page contains university and faculty title | 0,5 | 0,5 |
| Title page contains names and surnames of team members | 1 | 1 |
| Anotation contains short assignment summary and mails and contributions of team members | 1 | 1 |
| Assignment is done in group | 1 | 1 |
| Table of contents | 1 | 1 |
| Work structure | 1 | 1 |
| Section numbering | 1 | 1 |
| Images and table has captions that are referenced in the document text | 1 | 1 |
| **The essence** | **10** | **10** |
| For stakeholders' categories project goals are described | 1 | 1 |
| User characteristics | 1 | 1 |
| Analysis of activities and contexts is relevant | 1 | 1 |
| The number of user goals is at least 15. | 1 | 1 |
| User goals do not repeat | 1 | 1 |
| Usability goals contain criteria and measures | 1 | 1 |
| Task analysis contains steps, input and output. | 1 | 1 |
| The number of inspiring ideas is at least 15, they do not repeat | 1 | 1 |
| Ideas are are relevant and clearly explained | 1 | 1 |
| Appendices. | 1 | 1 |
| **Delays** | 2 | 0 |