
02JSKOV - HUMAN COMPUTER INTERACTION

LAB2 - NEEDFINDING

With **needfinding**, we were interested in observing and understanding how people do things, to learn their goals and practices, and to generate (meaningful) design insights. This lab, that bootstraps the work needed for Milestone 1, aims at better describing your project and to define specific user needs, through observation and interviews of 3 users. You can use the Lab 2 hours to start working on Milestone 1 and complete it in the following days. The milestone needs to be submitted by October 23, 2019 on the GitHub repository assigned to your group, by following the [Markdown template](#) available in the course website.

PREPARATION

The goal here is to **observe** people in your target population while they perform some activities strongly related to your project idea. Such observation activities should be performed in their natural setting, to find out some potential needs that your web-based application will fulfill. Importantly, the observation of your target users may or may not include any digital device. Observing how people behave with “analog” tools, often, can inspire ideas also for the digital world.

In particular, your activities will be 1) *observing* and 2) *interviewing* some of your target users in their environment, with their tools and devices, and while they do their usual tasks (linked to your project idea). While it is better to perform these actions *in situ*, you can also perform your observations over video chats (e.g., Skype), for instance if you have mobility limitations or the activities you would like to observe are infrequent.

To get started, **make a list of types of people in your target population that you want to interview, and some activities you would like to observe** to come up with some needs that your web application can help solve. Do not just think about your *immediate* target users, but also think about other stakeholders and about the characteristics of your users.

As an example, this [IDEO design team](#) was asked to redesign a cart for grocery shopping. The IDEO team did not only interview everyday customers, but also involved *lead users* (e.g., professional shoppers) and other *extreme stakeholders* such as grocery store managers. Lead and/or extreme users, as well as marginalized ones, often help to come up with better solutions and to create more inclusive design.

Then, **pick one main activity** to observe. You have to observe the *same* activity across all your selected target users. The activity you choose can be as specific as you need to develop a meaningful list of needs. It is typically easier to find useful and meaningful needs when the activity is specific. For instance, if you simply observe a bunch of people walking around Politecnico, that is too broad. Notice that you must *observe people performing activities*, not asking them what they want or need. As you learned during the lectures, this is because people are usually bad at simply telling you what they really need. That is the core of the needfinding process: it should start with you observing people doing real activities and noticing issues and possible areas of improvement.

OBSERVATION AND INTERVIEW

Now, **select three people to observe** from the list of type of people you made before while they perform the activity you chose before. Avoid observing/interviewing your own team members and choose people who are not similar to yourself (in some way).

Get their permission to participate in this activity and coordinate with your participants to select a time (and a place, if it is the case) that will be rich for observations.

Before starting the observation, tell the participants to perform the activity as realistically as possible, while communicating with you only if appropriate and needed. Take notes of what happens and use still pictures (e.g., photos taken with your phone) or sketches to document the activity. Photos or sketches are used to highlight specific issues, design opportunities, etc. Those may include accidental slips, mistakes (users have the “wrong” mental model) or awkward interactions that take too many steps. Accompany each photo with a note that explains what you observed and describes the issue or the opportunity.

After each observation, interview the three participants about what you observed. You can prepare some pre-defined questions, suitable for the activity at hand and if you are interested in exploring some specific topic or issue. Try to understand why people are doing things in the way they do by asking questions like “Are there existing solutions that people aren’t using? Why or why not?”. The interview should be audio-recorded, and you should take note of the questions asked (including the ones that stem during the conversation) and the main points in the answers.

Overall, it should take you around 3 hours to make all three observations and interviews.

USER NEEDS AND PROJECT DESCRIPTION

Stemming from your observations and findings, brainstorm a list of specific user needs, opportunities for designing a web application in the context of your idea. Write down all the user needs that are based on your observation. Then, narrow them down to around 3-4 of the most insightful ones. Each of these 3-4 needs should be substantive enough to become the main goal of your web-based application. You are not looking for technical solutions or specific features, yet. An example might be “Sometimes, when Mark wants to cook dinner for him and his friend, there is not enough diverse food in the fridge. Mark needs a way to plan what to buy based on how many friends he meets for dinner and on what he cooked the days before.” It is helpful to use the phrases “needs a way to” or “needs to be able to” in your list of user needs.

Finally, starting from the short list you created, **write a short paragraph** that describes how your project would *address one (or two) deep user needs*, by including your personal take on suitable *strategies* to adopt, again without offering any specific and concrete solutions. Finally, consolidate your work according to the [Milestone 1 template](#).