

POC – Project Assignment #1

October 21, 2019

This assignment is due on **November 4 at 23:59 on OLAT**. Please be sure to include your full names and matriculation numbers.

Activity: Observing interaction

The purpose of this assignment is to analyze an interactive system based on observations of its use.

To achieve this, work **in pairs** to conduct an observation of **10 people** using an interactive system to support **cooking, dining, or food shopping related activities** to achieve a given task, and take note of how the interaction unfolds including what difficulties arise, what errors occur, what aspects of the interaction go smoothly. Examples of systems you might select are cooking apps, cooking websites, online grocery purchasing services, restaurant reviewing apps, self-checkout at grocery stores, etc. ***Please read the important tips at the bottom of this document before commencing with observations.***

Deliverable: Written report

Your written report (one report for student pair) should consist of three parts:

- **Description of system, environment, and approach (15% of the grade, maximum 1 page/500 words):** The first part should be a description of the interactive system or interface that you chose, the task you have selected, and what the task entails. Also include a brief description of how you and your partner carried out the observations, e.g., where did you conduct the observations, how did you record them, what did you look for?
- **Reporting of observations (25% of the grade, maximum 2 pages/ 1000 words):** The second part should be a straightforward reporting of your observations, i.e., a description of Person #1's interaction, a description of Person #2's interaction, etc.
- **Analysis of system and observations (60% of the grade, maximum 3 pages/1500 words):** The third part of your report should be an observation of your interface based on your observations. What aspects of the system are successful and why? What aspects are problematic and why? What types of problems or difficulties occur and why? Your analysis should draw upon relevant concepts covered in class, including (but not limited to):
 - Principles for good design (e.g., Norman's principles)
 - Information visualization
 - Interaction models
 - Types of errors (e.g. Norman's classification of slips)

You do not need to address all of these concepts; a good analysis will identify those concepts that are most relevant to the observed behaviors, and use them to draw a clear connection between the system and the behaviors you observed.

Important instructions and tips

- An observation means that you should not interact with the participant while they are interacting with the technology, but be a “fly on the wall”. You should not talk to them or help them while they are engaging with the activity. You should not ask for their opinions or feedback regarding the system, or otherwise influence their actions. You should not conduct any survey activities or interviews.
- Your analysis should be based on what you observe while the participants are engaging in the interaction, not on discussion with the participant or their opinions (i.e., observe what happens, don’t ask them what happened)
- Do not conduct or report on a statistical analysis. The goal of the exercise is to conduct a qualitative observation and analyze the observations and interface qualitatively using the concepts from the lectures.
- We recommend that you select a system or interface that allows for sufficiently complex interactions or tasks that you can draw a meaningful and insightful analysis of the system. A simple automatic door in a grocery store that is triggered by a sensor is unlikely to result in an interesting report that allows you to meaningfully apply your knowledge from class in depth.
- At the start of the observation, give the participant a task to complete (the same task for every participant), involving the interactive system you have chosen. Be careful to not pick any task that includes sensitive information (e.g., entering passwords, bank account information, or any other sensitive data) or potentially uncomfortable settings (e.g., do not ask them to post on social media as part of your task). You may ask them to verbalize their interactions, thoughts, and intentions as they are doing the task, but emphasize that you will not interact with them in any way from beginning to completion of the task.
- Tell participants that your interest and your assessment is focused on the technology and the interaction. The participants themselves are not being tested and therefore cannot do anything wrong.
- Observations should be conducted in pairs. This way you can discuss and confirm with your partner what happened in an interaction and you can analyze the interactions from the point of a shared understanding and shared set of data. You should not “split up” the observations.
- Avoid observing sensitive populations, e.g., children, people with mental disabilities, etc.
- Do not use video or audio to record people’s actions etc. You may take written or audio notes for yourself, and you may take photographs or video of the system or interface itself to use in your analysis or report.
- In producing your report, you may divide the work of writing your report between yourself and your partner as you wish, but it is highly recommended that you discuss your data and analyze your findings as a pair, coming to an agreement on what to include before writing the final report. Both of you will receive the same grade.