## **02JSKOV - HUMAN COMPUTER INTERACTION**

# LAB 4 - HEURISTIC EVALUATION

This lab concludes the work needed for Milestone 2 (M2), by asking you to conduct a heuristic evaluation of another team's paper prototypes (and receive an evaluation of your prototypes). As always, the lab should be completed as a group. Please, read the **entire** document in advance, before starting the lab. Results of these activities will be submitted as part of M2. The milestone needs to be submitted by November 14, 2019 in the M2 folder on the GitHub repository assigned to your group, by following the <u>Markdown</u> template available in the course website.

## A. ORGANIZATION

To successfully complete this lab, split your group: two team members will act as **evaluators** for another team's project (see "B" below), while the other two will support the evaluation of your project (see "C" below). Those last two members should know the flow of your paper prototype ahead of the evaluation and be able to quickly find and move the pieces of your prototype to simulate the experience of using a "real" application.

In particular, they should choose a specific role:

- **Facilitator**: this group member will greet the evaluator, explain how the session works, and provide the evaluator with a brief introduction to both prototypes. Once the evaluation session starts, the facilitator will observe and take notes/pictures of what happens.
- Computer: this member will act as the "computer" (Wizard-of-Oz) that manipulates the pieces of the prototype. For instance, when the evaluator presses a button on the paper prototype, the computer will change the pieces to show what the application should do next, as a consequence of that action. Here, you can find an example: <a href="https://www.youtube.com/watch?v=GrV2SZuRPv0">https://www.youtube.com/watch?v=GrV2SZuRPv0</a>.

Since two team members act as evaluators for another project and two work as facilitator/computer, the activities reported in this lab can be easily performed in parallel.

To get started, find another group to meet with during the lab hours (or after, if you do not finish) and ask them for their group/project name and their project description.

#### B. Perform a Heuristic Evaluation

Meet with the selected team and have the two evaluators "use" their two paper prototypes (i.e., each evaluator will see both paper prototypes, separately). Evaluators can see the paper prototypes in the order they prefer, writing down as many usability problems as they observe (e.g., by using the materials provided by the selected team). Paper prototype must be referred to as "Prototype #1" and "Prototype #2". The goal here is to help the other group, and to report possible problems to improve their project... so do not try to be "nice" by not reporting some issues.

Use <u>Nielsen's ten heuristics</u> as a guide for the evaluation and specify which heuristic(s) each problem is related to. If the evaluator comes across problems that are not strictly related to any particular heuristics, mark that "no heuristics" apply. Use <u>Nielsen's Severity Ratings for Usability Problems</u> to add a rating for each problem identified in your evaluation.

In addition to noting and writing usability problems in each prototype, the evaluator must also provide a comparative feedback, i.e., to compare the two prototypes against one another and mark whether some problems are found in both prototypes or not. If a problem exists in only a prototype, write down which one (Prototype #1 or #2). The evaluators should highlight enough similarities and differences between the two paper prototypes so that the group receiving the feedback may understand the advantages and disadvantages of each prototype, and know which one they should probably keep (and implement in code, later on).

Each evaluator is expected to spend about **20-30 minutes** to perform the evaluation of both prototypes.

### C. RECEIVE THE HEURISTIC EVALUATION

Obviously, your team should receive feedback in one heuristic evaluation session from the two evaluators of another group, who is doing the previous step (B). For this lab (and for M2), two evaluations for both prototypes are *required*: if you can find more than two evaluators for your paper prototypes, please do that.

Have a copy of Nielsen's heuristics and severity ratings ready for each evaluator, and provide them with a template to fill out while conducting the evaluation, including both a space for noting usability problems and for reporting the comparative feedback. An online spreadsheet (<u>sample template</u>, as a Google Sheet), shared with your team and the evaluators, could be the best way to ease the communication and collect the results.

After receiving all the evaluations, write down a list of potential changes that your group plans to implement. Justify each change by explaining which piece of feedback generates the particular change. Finally, describe whether you are going to continue with Prototype #1, Prototype #2, or by combining features from both (if it makes sense).