Supervision 1 - HCI 2017/2018

1. Visual representation

Think of one human-computer interface you have used and which you think was well designed *and* one interface you used which you think was poorly designed. For *each* of these two interfaces:

- Sketch the interface.
- Explain the nature of the information structure that the user creates and interacts with when using the site/application.
- Describe the aspects that make it an enjoyable/efficient (or an unenjoyable/inefficient) interaction experience by focusing on the aspects of the **visual language** (marks, symbols, regions, surfaces). For each aspect, explain the nature of the correspondence between the visual appearance and its meaning or purpose within the interaction design.

Redesign the second interface in order to address its poorly designed aspects. Provide a sketch of your design and comment on how the deficiencies you noted above are specifically addressed.

2. Controlled experiment

"Swype is better than normal text entry."

This kind of statement is common in industry, and it's up to you to evaluate it. You will need to design an experiment, carry it out, and analyse the results over our two HCI supervisions. You're advised to do this work in collaboration with your supervision partners.

For the first supervision you will need to submit your experiment plan and be prepared to talk about any revisions. It is likely that you will need to think about exactly what you're going to test (the above statement is rather unscientific), how you're going to do it, recruit participants, what are the ethical implications of your experiment, etc. If you have any doubts or questions, you must contact me. Do not run the experiment yet, we will first discuss your experimental plan during the first supervision.

(You're welcome to replace 'Swype' with some other form of predictive text system.)

3. Cognitive Dimensions of Notations

Perform a Cognitive Dimensions of Notations analysis on a flight booking website. You can choose either the website of an airline company that allows users to also book travel (e.g. britishairways.com, flysas.com, [klm.com](klm.com),), or a flight aggregator website (e.g. expedia.co.uk, google.co.uk/flights).

Describe a typical activity in which the user interacts with the information structure presented by the site. Discuss which dimensions in the CDN framework are particularly relevant and explain what effect each of these has on the user's experience. As a guidance, select around 3 dimensions to go into detail about.

Propose a way in which the visual design of the site above might be modified, that would have an effect on one of the Cognitive Dimensions of one of the activities described above. Consider any trade-offs that might result by discussing whether the proposed modification changes other Cognitive Dimensions for that activity.