

Supervision 2 - HCI 2016/2017

Task 1. Cognitive Dimensions of Notations

(Lecture 6 in lecture notes)

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,), or a flight aggregator website (e.g. expedia.co.uk, google.co.uk/flights).

Select two typical activities in which the user interacts with the information structure presented by the site. Discuss which Cognitive Dimensions are particularly relevant for each activity respectively and explain what effect each of these has on the user's experience. As a guidance, pick around three Cognitive Dimension to go into detail about.

Task 2. (More) Cognitive Dimensions of Notations

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 and discuss whether the proposed modification changes other Cognitive Dimensions for that activity.

Task 3. Empirical evaluation

(Lecture 7 and 8 in Lecture notes), (Rogers, Preece & Sharp 2011, Ch 2.2-4)

Describe how you would carry out an investigation to evaluate the effects predicted in Task 2. Design an experiment and plan the analysis of the results. Your study could apply hypothesis-testing statistical methods, qualitative analysis of think-aloud protocols, questionnaire methods, or other techniques.

As a guidance, your experimental design should contain at least the following: the experimental procedure/protocol, participant recruitment, experimental tasks, how you will address the threats to internal and external validity of your experiment, what data will be gathered and how it will be analysed.

How would you classify this method using the distinctions between qualitative / quantitative, empirical / analytic, and summative / formative methods?

Task 4. Exam question

2016 Paper 7 Question 9: <http://www.cl.cam.ac.uk/teaching/exams/pastpapers/y2016p7q9.pdf>