Final Exam

CS305 201230 • D. H. Hepting December 11, 2012 • 9:00-12:00

Answer everything in the exam booklet. I won't answer any questions during the exam, just state your assumptions with your answer. There are 50 marks on the exam, so you have over 3 minutes for each mark. Remember: quality, not quantity. Good luck.

Part 1: 2 marks each x 15 questions = 30 marks. (Write only 1-2 sentences per mark to clearly explain your answer.)

- 1. How would you make use of Fitts' Law when designing an interface?
- 2. What is a trade-off when dealing with metaphors?
- 3. What must one do to achieve a goal using an interface?
- 4. What is an example of formative evaluation?
- 5. In what situations can grounded theory be an effective approach?
- 6. How can we minimize the gulf of evaluation?
- 7. What is emotional design?
- 8. What can card sorting tell us?
- 9. Do new interface technologies fundamentally change the goal of interaction design?
- 10. What is an example of analytical evaluation, other than GOMS KLM?
- 11. Can we ensure that a user has the correct mental model?
- 12. What is the difference between vertical and horizontal prototypes?
- 13. Why is it important to test your design with other people, early and often?
- 14. Why study conversations?
- 15. What is the relationship between user experience and usability?

Part 2: 20marks.

The Leader Post wants its carriers be accurate and timely with their deliveries, but they also want to make the job more attractive for carriers because they have difficulty in recruiting new ones and retaining those they have. They are thinking that providing each carrier with a smart phone may help their cause. Subscribers either get the paper 6 days a week (excluding Sunday) or 3 days a week (Friday, Saturday, Monday). Papers are to be delivered by 7am. To start, each carrier receives a map of their area and a route list with all the subscribers listed but this can be updated daily to show which houses have stopped delivery due to vacation, which new houses have been added to the route, etc.

- Sometimes a carrier is asked to fill in on a different route in case of sickness or emergency.
- Sometimes, subscribers complain about papers not being delivered on time (sometimes even though the paper has been delivered on time).

In 2 stages, design an application that meets the needs of the carriers, the subscribers, and the Leader Post: brainstorm metaphors and technology to create a preliminary sketch of the interface and description of the supporting system (5 marks), then, after analysis and reflection (5 marks), create an improved version [sketch/description] (5 marks). What are your assumptions? Are there any conflicts between the requirements of each stakeholder group? How could a system provide an accurate time of delivery (if required) to subscribers and managers? What other things might be possible with the technology (that you might observe after your preliminary design)? (5 marks)