CS 428/828 Final Exam : D. Hepting
December 20, 2017, 09:00– 12:00, CK 185

This is a closed book exam. You must maintain the confidentiality of your examination; do not provide any opportunity for others to copy any of your work. Electronic devices are NOT permitted during the exam. Please turn off and put away all cell phones and other electronic devices during the exam period.

ANSWER ALL QUESTIONS. All answers must be written on this exam in the space provided. You have 180 minutes to complete the exam. Please plan your answers, favour quality over quantity, do not exceed the space provided, and do your best to write legibly. QUESTIONS ARE ON BOTH SIDES OF THE PAPER.

This exam contributes 25 percent towards your final grade. Q1-Q12: 2 marks each (24 marks total); Q13 and Q18: 20 marks each. There are 24+20+20 = 64 marks on the exam.

Name (printed): _____

Student Number: ___ ___ ___ ___ --- ___--- ___ ___ ---___ ___

Signature: _____

℔ ℔ ℔

Q1. How can a designer correct (through re-design) an error made consistently by users of a software?

Q2 What is the difference (in terms of ease) between asking for the last 4 digits of your phone number and the last 4 digits of your Student Number?

Q3. Is there a best place to begin solving a design problem?

Q4. Explain an aspect of this course that you learned through your project work

Q5. If an interface had a large gulf of execution, what might you notice about a user's plans and goals?

Q6. How would you go about designing an interface to be used by a specific, well-defined group of users?

Q7. What strategies would you use to decrease a gulf of evaluation?

Q8. What is the value in creating high-fidelity prototypes and testing with them?

Q9. What is the relationship between usability and user experience?

Q10. What is the difference between WHAT needs to be designed and HOW it is designed?

Q11. What is a mental model and can a designer create one for a user?

Q12. Can metaphors be helpful in exploring new design alternatives? If so, how?

Q13. Analyze the pictured (separate page) interface in terms of the Nielsen's 10 Usability Heuristics for User Interface Design (listed below):

1) Visibility of system status; 2) Match between system and the real world; 3) User control and freedom; 4) Consistency and standards; 5) Error prevention; 6) Recognition rather than recall; 7) Flexibility and efficiency of use; 8) Aesthetic and minimalist design; 9) Help users recognize, diagnose, and recover from errors; 10) Help and documentation

Q14. We have used URcourses (moodle) this semester, primarily. Consider Nielsen's Heuristics again as inspiration for proposing a redesign of a feature of URcourses. Write a problem scenario that illustrates an issue with this existing feature. Do a claims analysis of your problem scenario. Create a design that builds upon the opportunities for design that you identified. Describe or sketch your design. Identify the choices you made in your design and whatever tradeoffs you see.