

CS-428+828 Midterm Exam
October 22, 2018, 13:30– 14:20, CK185
D. Hepting

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 50 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 10 percent towards your final grade. The exam is marked out of 25.

Name (printed): _____

Signature: _____

Describe your position within the room: _____

Q1. (2 marks) Can you design a user's mental model of your software? Can you influence it? [Fill in circle beside best answer]:

- a) Yes, can design; yes, can influence
- c) Yes, can influence; no, cannot design
- b) Yes, can design; no, cannot influence
- d) No, cannot influence; no, cannot design

Q2. (2 marks) Give one example of a tradeoff in design.

Q3. (4 marks) What are the 4 quadrants of an empathy map? Indicate if each deals with user experience OR usability.

Quadrant 1	Quadrant 2
Quadrant 3	Quadrant 4

Q4. (2 marks) What is needed in the description of an atomic requirement?

Q5. (2 marks) Why is the marble answering machine important?

Q6. (10 marks) How do Nielsen's 10 Usability Heuristics for User Interface Design (listed below) relate to the Gulfs of Execution and Evaluation? In the space below, indicate for each heuristic whether it deals with neither gulf, both gulfs, execution, or evaluation. Also, briefly, explain why. A sample interface is pictured below. You are not required to reference it in your answer.

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



H01.
H02.
H03.
H04.
H05.
H06.
H07.
H08.
H09.
H10.

Q7. (2 marks) Describe the metaphor for the interface pictured above. What is an alternative metaphor?
