

CS-428+828 Final Exam
December 14, 2022, 9:00 – 12:00, ED 388
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 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 20 percent towards your final grade.

Name (printed): _____

Student Number: _____ --- _____ --- _____

Signature: _____

Q1. (2 marks) What is a mental model and can a designer create one for a user?

Q2. (2 marks) Explain the purpose of an interface metaphor.

Q3. (2 marks) Why do designers make tradeoffs?

Q4. (2 marks) Why is empathy important for a designer?

Q5. (4 marks) Explain an aspect of this course that you learned through your project work

Q6. (2 marks) In terms of the gulfs between the user and the computer, what is the purpose of information design and interaction design?

Q7. (2 marks) Is it the responsibility of a designer to only build what their client requests?

Q8. (4 marks) What were the benefits of testing your low-fidelity prototype?

Q9. (4 marks) How does Gladwell's TED talk apply to design?

Q10. (2 marks) What is similar between qualitative and analytical evaluation?

Q11. (2 marks) What guidance does Fitts' Law give us?

Q12. (2 marks) What is different between analytical and empirical evaluation?

Q13. (2 marks) What ethical issue may arise when testing an interface with undergraduate Computer Science students while your intended users are senior citizens?

Three empty rectangular boxes for writing the answer to Q13.

Q14. (2 marks) What are a positive and a negative for a designer using the GOMS Keystroke-Level Model to evaluate an interface?

Three empty rectangular boxes for writing the answer to Q14.

Q15. (2 marks) How are personas important in interface design?

Three empty rectangular boxes for writing the answer to Q15.

Q16. (2 marks) Why is there 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?

Three empty rectangular boxes for writing the answer to Q16.

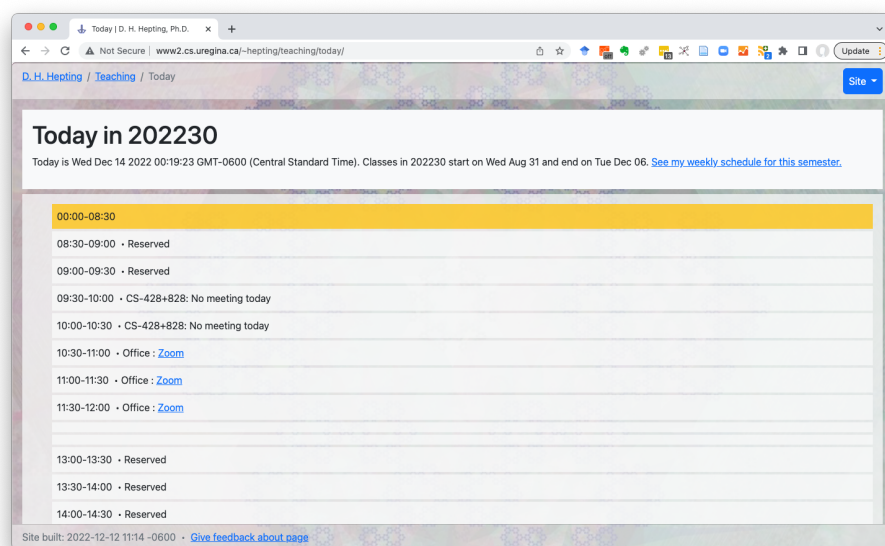
Q17. (3 marks) Match the following terms with their definitions by writing the letter associated with term into the box preceding the matching definition.

Terms: A. empathy; B. telepathy; C. sympathy; D. apathy

- Definitions:
- Feelings of pity and sorrow for someone else's misfortune.
 - Lack of interest, enthusiasm, or concern.
 - The ability to understand and share the feelings of another.

Q18. (1 mark) How did we come up with a “1⁵/₈ 1⁵/₈”?

One empty rectangular box for writing the answer to Q18.



Q19. (6 marks) The screenshot on the preceding page is today's date from <http://www2.cs.uregina.ca/~hepting/teaching/today/>. Is the information useful? If not, how would you improve the design?

(room to sketch)

Q20. (6 marks) Present an updated design of the marble answering machine for the web (where the interface will be all done in software). Sketches are encouraged.

(room to sketch)

(room to sketch)