

CS305/828 201330  
Final Exam – D. Hepting  
December 10, 2013  
09h00-12h00, CL345

Name: \_\_\_\_\_ Student #: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Answer everything in the exam booklet. First read all questions carefully and ask me any questions within the first 15 minutes. If you are unclear about anything after that, please note your assumptions with your answer. There are **56 marks total**. Remember: quality, not quantity. Good luck.

**Part 1 (2 marks each, 32 marks – marked out of 24).** Define each of the following in the context of the class.

1. We considered this interface in class (machine located in Lab Caf). At present, 4 button presses are required and there is the possibility of spilt milk or cream. Describe a way to redesign this interface that would only require 3 button presses and may avoid all spillage.



...over please... (questions on both sides!)

2. In the TED video about the spaghetti sauce, why does Malcolm Gladwell say that there isn't 1 perfect pickle, but that there may be many perfect pickles?
3. Why should one consider the emotional aspects of interaction design?
4. How does your affective state (positive or negative) impact creative thought?
5. Why are rules for conversation important?
6. Why are face-to-face interactions more difficult for some people in this age of ubiquitous mobile technology?
7. When would you use low-fidelity and high-fidelity prototypes and why?
8. What is the cause for the spilt milk or cream discussed in Question 1?
9. How would you go about designing an interface to be used by the elderly?
10. What are the ethical considerations in using participants from the pool of computer science students at the University of Regina?
11. What should a designer do first?
12. Why is a command-based interface type still useful?
13. Why is an "early focus on users and tasks" important in a user-centered approach?
14. What is a tradeoff when gathering data by direct observation?
15. Are there different kinds of requirements? If so, briefly describe 2.
16. Why may it be important to look at both the mean and the median for a set of data?

**Part 2 (16 marks each, 32 marks).**

1. We looked at different parking pay station designs in class, each with some issues. Sketch a design for a pay station that would address the issues. Describe how someone would pay for his or her parking using your design. What tradeoffs do you see in your design?
2. Imagine a graphics program that let you include coloured shapes on your canvas. The system allows these shapes: circles, equilateral triangles, squares, regular pentagons, regular hexagons, and regular heptagons. The system allows these colours: red, blue, green, cyan, magenta, yellow. Consider and sketch 2 *different* ways to present these shape and colour options to a user. Is each better suited to a particular task?

...over please... (questions on both sides!)