**CMSC434: Introduction to Human-Computer Interaction (Fall 2008)**  
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**Midterm I – 60 minutes, 100 points; closed book, closed notes**

**Part 1: Short Questions** (16 pts)
Circle TRUE or FALSE:

(2 pts) 1. As users rarely stay at a beginner level for long, the best strategy is to design the UI for experts; This way, novices can just use the essential features until they become comfortable with the interface.  
(TRUE / FALSE)

(2 pts) 2. While a measure of subjective user satisfaction is not always available, it is always a sufficient indicator of the success of a UI.  
(TRUE / FALSE)

(2 pts) 3. In a UI designed strictly for experts who must pass a lengthy training course on using the interface before being hired, it is safe to forgo error prevention in order to reduce costs.  
(TRUE / FALSE)

(2 pts) 4. It is appropriate to use the GOMS model to estimate how many seconds it should take an expert user to use the mouse to highlight a paragraph in Microsoft Word and delete it by pressing the DEL key.  
(TRUE / FALSE)

(2 pts) 5. In the LUCID methodology, some of the rationale behind involving all stakeholders early in the design process is to achieve agreement, to facilitate participatory design, and to reduce barriers to organizational change.  
(TRUE / FALSE)

(2 pts) 6. Techniques such as ethnographic observation are of little use when users are available for an interview about their needs.  
(TRUE / FALSE)

(2 pts) 7. Heuristic evaluation, consistency inspection, and cognitive walkthrough are various techniques that may be used in an expert review.  
(TRUE / FALSE)

(2 pts) 8. A usability test session in which the participant failed to complete every assigned task may still be useful.  
(TRUE / FALSE)

**Part 2: Eight Golden Rules** (24 pts)
Consider a modern email interface such as Microsoft Outlook, Google Gmail, Mozilla Thunderbird, etc. Based on your experience, indicate three golden rules that are violated by these interfaces.

- For each rule you choose, state the rule, explain it, and provide a concrete example of how it is violated. Keep your answer short.
Part 3: Design & Evaluation (60 pts)

Having visited several rental properties, you could not help but notice that perfectly usable household items are discarded or left in the street whenever people move. A lucky passerby may pick them up, but otherwise they will get turned into trash as soon as garbage gets collected. You feel this is wasteful and environmentally unfriendly.

You would like to create a free website in which people could advertise items which they are intending to leave on the street. A posting will have to include a description of the items (free text), street address (plus city-state-zip) for pickup, start availability date and time of day. The advertisers may be kind enough to provide a picture of the items they are giving away (so allow for a single photo upload), however it is very unlikely that they will go to the trouble of listing each item in a separate posting.

An important requirement of the website is that advertisers would like to keep – their anonymity, the lack of direct interaction with those who pick up the items, and the low effort in advertising the items.

(30 pts) 1. Design and draw two displays for the website:
   a) the form filled in by the advertiser. Describe your design decisions in a few sentences.
   b) the interface used by searchers. Show the query, the search results just below, and one specific post opened by searchers further below. Describe the search options and results.

(30 pts) 2. Design a usability study to evaluate your new website as used by searchers.
   a) Explain the test setup (who will be your participants? which test protocol you will use? what you hope to measure? etc.)

   b) Describe two tasks you will give to your participants. For each task, be sure to make it clear what is the success criterion and what the task tests.

   c) Show two post-test survey questions, and explain what they measure.

Good luck! ☺☺ ☺☺