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Department of Computer Science
College of Engineering, University of Nevada, Reno
CS 620 Human Computer Interaction

Midterm Exam #1

October 23, 2014

Test type: Closed-book examination

Number of questions: 7

Total points: 65

Test weight: 15% of the course grade

Time: 70 minutes

Questions:

- 1** Explain what is meant by *life-critical systems* and *sociotechnical systems*. Then, consider three usability measures (such as *time to learn*, *speed of performance*, *rate of errors by users*, *retention over time*, and *subjective satisfaction*) and discuss their significance for the above two types of systems. [10 points]
- 2** Consider the following *primary interaction styles*: *direct manipulation*, *menu selection*, *command language*, and *natural language*. For each of them indicate two advantages and two disadvantages. [10 points]
- 3** Briefly describe five of the *Eight Golden Rules* of interface design (2-4 lines each). [10 points]
- 4** Explain what is meant by *ethnographic observation*. Indicate its purpose, and briefly describe its main phases: preparation, field study, analysis, and reporting. [10 points]
- 5** Briefly explain what is meant by *direct manipulation*, give a concrete example of direct manipulation in a computer interface that you are familiar with, and briefly discuss three problems with direct manipulation. [10 points]
- 6** Explain what is meant by *virtual reality* and by *augmented reality*. For each of them, give an example of existing or potential application (describe each example in 2-4 lines). [10 points]
- 7** Consider cultural and international diversity. Give five examples of *user-interface concerns or items* for *internationalization* (such as date and time formats). [5 points]