

Student \_\_\_\_\_

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

**Midterm Exam #1**

October 18, 2012

**Test type:** Closed-book examination  
**Number of questions:** 7  
**Total points:** 65  
**Test weight:** 14% of the course grade  
**Time:** 70 minutes

**Questions:**

- 1** Comment on the significance of achieving *cultural and international diversity* from the perspective of universal usability. Indicate at least 6 concerns or items for internationalization (e.g., date and time formats). [10 points]
- 2** Consider the following four *primary interaction styles*: direct manipulation, menu selection, form fill-in, and command language. For each of them indicate two advantages and one disadvantage. [10 points]
- 3** Indicate what Shneiderman and Plaisant (the textbook's authors) consider to be *the four pillars of successful user-interface development*. Briefly explain why each of these pillars is considered important for the user interface design process (2-4 lines each). [10 points]
- 4** Describe one of following expert review methods: *heuristic evaluation* or *cognitive walkthroughs*. [10 points]
- 5** Choose one of the following types of usability testing: *paper mockups and prototyping*, *discount usability testing*, or *remote usability testing*. Describe the chosen method and indicate its advantages and disadvantages. [10 points]
- 6** Explain what is meant by *virtual reality* and by *augmented reality*. Also, briefly comment on three technologies (e.g., visual display) important for the creation of successful virtual environments. [10 points]
- 7** Briefly describe an application (existing or potential) involving either *virtual reality* or *augmented reality*. Explain what benefits the application would bring to its users. [5 points]