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Department of Computer Science
College of Engineering
University of Nevada, Reno

CS 791m Human-Computer Interaction

Midterm Test #2

November 12, 2003

Test type: Closed-book examination
Number of questions: 12
Total points: 33
Test weight in course grade: 14%
Time: 70 minutes
Notes:

- For questions **1 to 7** indicate the correct answer (only one) on the answer sheets provided by the instructor. Each of the questions **1 to 7** has a one point value for a group total of 7 points.
- Questions **8 to 12** require that you elaborate your answers. You must also write these answers on the sheets provided by the instructor. The total value of questions **8 to 12** is 26 points.

Questions:

1 Which of the following is not a type of requirements?
a. Data requirements
b. Environmental requirements
c. Life-cycle requirements
d. Functional requirements [1 point]

2 Which of the following is a form of low-fidelity prototyping?
a. Wizard of Oz
b. Abstraction mapping
c. Affordance prototyping
d. Sub-system prototyping [1 point]

3 Product evaluation is useful because:
a. The time to market is significantly reduced
b. Problems are fixed before the product is shipped
c. The developers can concentrate on real problems
d. All of the above [1 point]

4 Which of the following is not an evaluation technique?
a. Asking users their opinions
b. Testing users' performance
c. Modeling users' task performance
d. Predicting users' interactions [1 point]

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5 Which of the following technique is not used in "quick and dirty" evaluation:

a. Asking users
b. Asking experts
c. User testing
d. Observing users [1 point]

6 Which of the following is not a good guideline for physical design?

a. Allow reversal of actions
b. Increase short-term memory load
c. Offer informative feedback
d. Enable expert users to use shortcuts [1 point]

7 Hierarchical task analysis (HTA) is about:

a. Evaluating the time needed by a user to complete a task
b. Breaking a task into subtasks and grouping subtasks in plans
c. Finding errors in the way a user performs a task
d. None of the above [1 point]

8 Indicate three *data gathering techniques* used during establishing requirements. Describe each of them in terms of what are they good for, their advantages, and their disadvantages.

[5 points]

9 Explain what is meant by *low fidelity prototyping* and what is meant by *high-fidelity prototyping*. Describe *three types of low-fidelity prototyping* (one of the four types presented in the book is *storyboarding*).

[6 points]

10 Write four recommendations for interface design. Consider menu design, icon design, and screen design. An example of such recommendation is "in pull-down menus the most commonly used functions should be at the top".

[4 points]

11 Describe one of the following evaluation paradigms: (a) *usability testing* or (b) *field studies*. [4 points]

12 Consider the project that you develop in this course (CS791m HCI) and use parts of the DECIDE framework to plan an evaluation of your project in terms of: **D**etermine the *goals* of the evaluation, **E**xplore specific *questions* to be answered, **C**hoose the *evaluation paradigm* and *techniques* to answer the questions, and **I**dentify *practical issues* of evaluation. Provide details for each of these parts and explain your choices.

[7 points]