

## CS160 Practice Final #3

Prepared by Matthew Kam for discussion sections. Some parts were adapted from this semester's lecture quizzes.

1. Distinguish between slips and mistakes.
2. Briefly explain these types of errors and how they could be fixed:
  - a. Mode error
  - b. Description error
  - c. Capture error

Do these errors result from slips or mistakes?

3. Users occasionally make errors on websites because they do not understand what happens when certain hyperlinks are clicked on. Name a design pattern that could be used to minimize user error in this situation, and explain how it could be applied.

4. Recall the vision-based interface that Tom Cruise used in *Minority Report*. Briefly explain the following system responses to errors, how the interface could behave in the case of each response, and the pros and cons of each response:

- a. Gag
- b. Warn
- c. Do Nothing
- d. Self-Correct
- e. Teach Me
- f. Let's talk about it

5. Evaluate the above six system responses using Nielsen's ten heuristics, where applicable:

- a. Visibility of system status
- b. Match between system and the real world
- c. User control and freedom
- d. Consistency and standards
- e. Error prevention
- f. Recognition over recall
- g. Flexibility and efficiency of use
- h. Aesthetic and minimalist design
- i. Help users recognize, diagnose, and recover from errors
- j. Help and documentation

6. In terms of Grudin's "Eight Challenges for CSCW", why would Warn usually be a more appropriate system response than Gag?

7. Distinguish between these types of help:

- a. Quick reference
  - b. Task-specific help
  - c. Full explanation
  - d. Tutorial
8. Name a common task found in the use of word processors, and discuss how minimalist instruction could be applied to train a first-time word processor user to perform this task.
9. How is Carroll's training wheels approach similar to online tutorials. How are they different?
10. Give two strengths and weaknesses of adaptive help systems. Name a computer system in which adaptive help is not applicable.
11. Quantification, stereotypes, overlays and task modeling are four knowledge representation methods for adaptive help systems. Briefly discuss how they work, and their relative pros and cons.