

User Interface Design

Tutorial #3

March 13, 2007

Quiz

User classes List at least two different user classes of a conventional coin-operated soda machine.

MVC pattern 1 Name the parts of the MVC pattern and give the primary responsibility of each part.

View Hierarchy List three ways that the view hierarchy is used in a GUI toolkit.

Human Working Memory Which of the following are related to working memory?
(check all that apply)

- Elaborative rehearsal
- Maintenance rehearsal
- Perceptual fusion
- Open-loop motor control
- Chunking

Perception 1 Color blindness is caused by a problem in the

- Lens.
- Retina.
- Iris.
- Aqueous humor.

Choose one:

Perception 2 Explain why red-on-blue text is hard to read.

Project: Task Analysis

Start the design of your term project by doing the following:

User analysis. Identify the characteristics of your user population. If you have multiple user classes, identify each one.

Task analysis. Determine the tasks of the problem you've chosen, analyze their characteristics, and answer the general questions about tasks. Think about other questions you should ask that might be relevant to your particular domain. You should find and analyze at least 6 tasks. If you can't find that many tasks in your problem, try drilling down to more specific tasks, and consider exceptional and emergency tasks. If you still can't, then the problem may be too small to serve as a good project.

To gather information for the user and task analysis, you should interview 3 representative users who face your problem (at least 1 from each user class, if you have multiple user classes). If possible, observe them dealing with the problem in their real work environment. When you write up your analysis, don't provide a narrative of these sessions. Instead, offer your conclusions, and justify them when you can by referring to observations. For example, "grocery shoppers may be distracted by children; one mother was repeatedly harassed by her son to buy some candy." Also, don't identify the users you interviewed by name, unless you get their permission to do so.

What to do

In your project group, write a report (around 4 pages), which includes the following parts:

Title. Give your project a title, if you haven't already.

Problem. Briefly restate your problem.

Users. Describe each of your user classes.

Tasks. Describe the 6 (or more) tasks you have identified. Every task should have a goal, preconditions, subtasks (if any), and exceptions (what can go wrong). Also include a paragraph describing other relevant features of the task, such as time constraints or frequency of use.

The tasks analysis will be part of your final project report, so if you start doing it now, you don't need to do everything at the end of the semester.