

Project Assignment 3: Analytical Evaluation
CS 4390-5390 Human-Computer Interaction
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Due: 1:30 p.m., October 7, 2009

Do:

1. Heuristic evaluation

- a) Individually, in class on September 30, watch the demonstrations of the prototypes and note all the potential problems of use that you perceive for both interfaces demonstrated.
- b) Write up your own notes, characterizing the problems of use using the following matrix:

		Probability	
		High	Low
Severity	High		
	Low		

Then, classify each problem into Nielsen's ten usability guidelines.

- c) As a group, combine the individual results; you will probably have to recharacterize and reclassify some of the problems. Analyze the differences among the individual evaluations in terms of number of problems found, the probability and severity of the problems, and their usability classifications. Suggest changes to the interface that would address the top ten problems you found.

Important: Complete your heuristic evaluation before starting your cognitive walkthrough.

2. Cognitive Walkthrough

- a) Update your HTA to reflect what your system is intended to do.
- b) Specify a representative task for your system, and complete the cover sheet of the cognitive walkthrough for that task.
- c) Choose a part of the task and complete four task-step analyses. The steps should be steps that would occur in sequence while performing the task; the steps can be at different levels of the HTA.
- d) Prepare a summary of the results, describing the problems you found, the reasons for the problems, suggested solutions, and the reasons why the suggested solutions would solve the problem.

Turn in a report containing the following sections:

1. The group's combined results for the heuristic evaluation.
2. The group's analysis of the differences among the individual evaluations and suggested changes to the interface. Discuss briefly for each change why it would solve the problem.
3. Your updated HTA.
4. The cover and step sheets from your cognitive walkthrough.
5. The group's summary analysis of the cognitive walkthrough.
6. A brief report comparing your experiences with heuristic evaluation and the cognitive walkthrough. This report should be clear about the dimensions you're using for the comparison (e.g., ease of use, finds serious problems, etc.)
7. A brief description of which team member did what part of the assignment.
8. A statement signed by all members of the group that all members of the group contributed their fair share of the effort on the assignment.

Create a link from your group's Web page to your project report. The other groups will be relying on your heuristic evaluation as they refine their prototypes.

Cognitive Walkthrough: Cover Sheet

Evaluator:

Date:

Who will be the users of the system?

What task(s) will be analyzed?

What is the correct action sequence for each task?

How is the interface defined?

Cognitive Walkthrough: Step Sheet

Evaluator:

Date:

Task:

Step:

1. Will the users be trying to produce whatever effect the action has?
2. Will users see the control (button, menu, switch, etc.) for the action?
3. Once users find the control, will they recognize that it produces the effect they want?
4. After the action is taken, will users understand the feedback they get, so they can go on to the next action with confidence?