

CIS 443/543 User Interfaces

Fall 2009

Exercise #3 Team Coordination System

Due: Tuesday, November 17 at 10:00am, Room 200 Deschutes

The purpose of this exercise is to design a collaborative system for coordinating your final projects in CS classes. A prototype of your system will be tested with real users. This exercise will be done in five teams of three to four persons each. See list at end of assignment for team membership.

PART ONE: Requirements Analysis and Prototype Design

Problem Statement:

Imagine an on-line collaborative system that you can use to coordinate your development team for your final project. Together with your group, you are to design such a system. Your system must satisfy the following requirements and constraints:

- System will run on a stand-alone web server.
- Users can interact with each other in real-time.
- Users can coordinate schedules.
- Users can store documents.
- Users can store executable programs
- Users can have a discussion board.

In addition to the above list of minimum requirements, feel free to add other functionality and usability requirements to your system. Remember to do user studies. Pay particular attention to the design challenges: it is a social interaction site as well as an information resource site. As always, be sure to identify who the users of your system are and what their abilities are.

PART TWO: User Evaluation of your prototype

Procedure:

This part of the exercise will give you practice in testing your prototype design with real users. Develop a mockup of your system UI as a storyboard on printed sheets of paper. Each page will represent a unique state of the user interface. In response to control actions by the user, you will display the next correct interface state. This is called the “Wizard of Oz” method.

Choose pairs of users to test your system. (You must test at least one pair.) Explain the basic functionality of the system to them and then ask them to perform the tasks. Choose three core tasks to test. (Example: User must arrange an on-line meeting to discuss the results of the latest software test.) Make the tasks goal oriented; don't tell them *how* to do the task. Print out the three tasks on a piece of paper for the user to use as instructions. You will videotape these sessions. You can use our usability testing lab in Deschutes if you like. Let me know in advance!

During the evaluation session, the users will:

- 1) *Explore the software.* This is a walk-up and use system. No user's manuals are available. What are the learning problems due to design? Other problems?

- 2) *Do real-life tasks.* The learner will be given three tasks to do. The team members take notes. How much time does it take to do each task? What are the usability problems due to design?
- 3) *Critique the system: Evaluation & Explanation.* At the end of the session, the team members should ask the users several questions. These are usually a follow-up to sections 1-2 above. What problems did the user experience and why? Did they find the system acceptable and would they like to have something like this to use?

DELIVERABLES

1) Report

Part One: Write a 3-4 page description of the system, include information about the user group, the functional requirements, the usability requirements, and the prototype design. Include sketches of the user interface and a storyboard of how to perform the three tested tasks.

Part Two: Write a 2-3 page description of the usability evaluation of the prototype answering the questions above in Part Two. Did you meet your usability requirements?

2) Studio Design Presentation (Design Crit)

Your team should prepare a 10 minute presentation of your interactive system for the class. Expect to engage in a lively class discussion about your design for another 5 minutes after your presentation. One designated person will make the presentation. NO POWERPOINT slides!

Your 10 minute presentation should cover:

1. User studies that you did. (1 min: 1 list)
2. Functional and usability requirements you developed. (2 min: 2 lists)
3. Walkthrough prototype UI storyboard with one/two task. (5 min: several pictures)
4. Discuss problems you encountered from the usability evaluation. (2 min; 1 list)

You can prepare large poster-size sheets of paper, or sketch on the whiteboard to show aspects of your system. Spend time pointing out the details of the UI design to us and explaining why you chose them. DO NOT create slick Powerpoint slides!

3) Hardcopy of the presentation to hand in to the instructor for grading purposes in addition to the report.

EVALUATION

Your team will be evaluated based on:

- Overall effort
- Quality of design
- How well your design addresses usability issues
- Description of system users
- Classroom presentation
- Written report
- Design crit participation (you will be evaluated individually for this)

Here is the list of team members for Exercise #3.

Please note that the Exercise is posted on the website under "Assignments".

Please contact as needed.

Team 1 (Grads):

Akolkar, Sohan (Presenter)

Augustine, Charles

Mundra, Daniel

Sottile, Karen

Team 2 (Grads):

Brittell, Megen (Presenter)

Batzel, Peter

Coleman, Parker

Lebech, David

Muthuswamy, Kals

Team 3 (UnderGrads):

Bothun, Josh (Presenter)

Auker, Stephen

Gilmore, Thomas

Team 4 (UnderGrads):

Guzman Espada, Valeria (Presenter)

Berglund, Eric

Elliot, David

Yaganeh, Josh

Team 5 (UnderGrads):

Ramey, Daniel (Presenter)

Vessey, Kyle

Wolfe, Nate