

Design Review

The objective of this assignment is for you to review another group's project goals and designs. Design reviews will happen during discussion sections. The format is for groups to pair together and group one presents while group two reviews. Then group two presents while group one reviews.

Presenters

- Present project, task analysis results, and paper prototypes of design to a small group of student reviewers.
 - You will be getting critical feedback from reviewers. Your design is being reviewed, not you as a person. Remember that critical feedback can be difficult to hear, but it will help you improve your project.
- Use your paper prototypes from the previous assignment. Make six copies to give to reviewers.
 - You should present both prototypes, explaining how they work and why you chose the design elements you did (based on user needs and design principles).
- 15 minute presentation.
 - See the Design Review Topics below for content to cover in your presentation.
 - Describe what you learned in the task analysis and how you applied this to your paper prototype designs.
 - Be sure to explain design sketches in the presentation.
 - It is up to you who presents: you can choose one person, or you can all present.
- Facilitate the critique.
 - You should choose one group member to lead the critique. This person should make sure that you get the feedback you desire about your project.
 - The facilitator should make sure each reviewer has a chance to speak and then continue discussing the points that are useful to your group.
 - The facilitator's most important job is attempting to make everyone feel open about voicing their opinions and discussing ideas. This means being open to all feedback without being defensive, and making sure everyone else is talking.
- Take notes
 - You should choose one group member to take notes on the comments you receive from reviewers and the discussion that results.
- Think about how you should revise your paper prototypes and usability goals based on critique.
- Write a short description of how you would change your UI design and usability goals based on the review. If your design does not change, explain why.

Grading

- You will be graded on your project presentation and write-up of the proposed changes to be made to your design based on the review. You will likely benefit from improving your design based on critiques from student reviewers.

Reviewers

- Critique the project proposal and design in class
 - Write notes during the presentation about problems with the design, suggestions for improvement, questions about what design decision are based upon, and other critiques of the presented design, based on the Design Review Topics handout we provide (below).
 - Review the paper prototypes and consider using them as a basis for some discussion.

- Verbally discuss 2 critiques with presenters. Verbal critiques will include about 4 to 6 reviewers and will last 20 to 30 minutes.
- Complete a written critique of the project design with at least 4 critique points. Format of write-up:
 - In one section (one paragraph is OK, write more if you desire), describe the design decisions that the presenting group has made and that you like or agree with.
 - In another section, provide constructive suggestions on the 4 or more critique points that you believe they could improve in their design. Explain your reasons. In the write-up of the reason for your suggestions, name the design principle that applies to the suggestion you made.
- Turn in written critique to the instructor and to the presenters.

Grading

- You will be graded on your participation in the verbal critique in class, and on your written critiques.
- Grades will be based upon insightful comments, comments that can improve the quality of the presenters' project design, and critiques that show an understanding of the design topics we provide.
- Critiques must have a level of depth to count. For example, comments about the size of a text box or the use of a particular dialog box are superficial. Instead, as an example, issues raised about the choice of tasks the design supports and arguments that explain why some other tasks may be more appropriate, would be a critique with enough depth.
- Critiques can be questions that probe deeper into an area the design seems to neglect. If presenters offer ideas in response, you may present your question and the presenter's solution in your write-up.

Design Review Topics

Because this design review is early stage, reviews should focus on higher-level issues like the following:

1. The end user and his/her needs.
 - a. What are the user's needs?
 - b. Are these needs being met by the proposed design?
 - c. What are the user scenarios the UI is designed for? Walkthrough how each design would enable those scenarios.
 - d. What known usability / design / business issues are these paper prototypes trying to solve?
 - e. What is the intended style of the design, and is it appropriate for the target audience?
 - f. What is the intention of the style, and does it achieve the desired effect?
2. Usability heuristics (see list below): which does each design support well? (or not?)
 - a. Where in the design are the most likely places for users to have trouble? And why?
 - b. Are there reasonable design changes that might avoid these problem points?
 - c. Does each design idea take advantage of things the user might already have learned?
3. Comparison of paper prototype alternatives and possible modifications
 - a. What are the pros and cons of each design idea, relative to each other?
 - b. Are there any hybrid design ideas that are worth exploring, based on the designs in the room?
4. Task analysis and evaluation
 - a. On what issues do you need more user feedback?
 - b. What open issues might best be resolved by a usability study?

Advice for Reviewer Comments

From: <http://www.uiweb.com/issues/issue23.htm>

1. Start with clarifying questions. Clarify any assumptions about what the presented design is intended to do, or what kind of experience it is intended to create. Hopefully, this intent is derived from the overall project goals, which are already agreed upon.
2. Give suggestions and feedback that is respectful to the presenter. Be sensitive to the presenters' feelings, as they have put effort into their project proposals. Make comments about the design, not about the designer.
3. When appropriate, draw on draw on blank paper as you offer suggestions: this will help everyone follow your comments.
4. Listen before speaking. Many times in work environments, we confuse conversations, which should be exchanges of ideas, with opportunities to inflict our opinions on others. If you take a moment to listen and understand before voicing an opinion, you're open to hear something new that might challenge your old thinking. So don't just wait for other people to finish, actively try to understand what's being said, and reflect it back to the speaker.

5. Lead into explorations of alternatives. Ask questions that surface other choices the designer might not have recognized. Postpone judgments, unless there are obvious gaps between the designers intent, and the designs you are critiquing.
6. If it fits with the goals of the critique, point out situations, sequences, or elements within the design that may be problematic given what you know about your customers, the scenarios involved, or the project goals.
7. Avoid statements that refer to absolutes. Instead, make points referent to the goals of the design. Example:

bad: "You aren't solving the user's problem."

good: "I am concerned you aren't solving the user's need for reusable knowledge because your tool doesn't seem to give them easier access to information; it focuses more on easily adding information to the knowledge base."

bad: "How could anyone figure that out?"

good: "I think there's something missing between step 3 and 4. It's not clear to me what the sequence of operations is. How do you expect people to know where to click?"

8. Speak in context of your point of view. It's fine to have a personal opinion, expressing your own preferences. But don't confuse this with your perception of what your customers need or want. So make sure to specify which kind of opinion you're offering. Hopefully there is data and research to help everyone agree on the likely customer perspective on different ideas.

Usability Heuristics

By Jakob Nielsen

From: http://www.useit.com/papers/heuristic/heuristic_list.html

These are ten general principles for user interface design. They are called "heuristics" because they are more in the nature of rules of thumb than specific usability guidelines.

1. **Visibility of system status**

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

2. **Match between system and the real world**

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

3. **User control and freedom**

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

4. **Consistency and standards**

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

5. **Error prevention**

Even better than good error messages is a careful design which prevents a problem from occurring in the first place.

6. **Recognition rather than recall**

Make objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

7. **Flexibility and efficiency of use**

Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

8. **Aesthetic and minimalist design**

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

9. **Help users recognize, diagnose, and recover from errors**

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

10. **Help and documentation**

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.