

Assignment 5: Evaluation Techniques

Due: Tuesday, May 1st 11:59pm

The goal of this assignment is to give you more practice with several of the HCI evaluation methods we have learned in class.

You will complete this assignment in pairs. Exceptions require prior instructor permission.

Part A: Heuristic Evaluation

In this part of the assignment, you will conduct a heuristic evaluation on either your own project/product/prototype or an existing website of your choosing.

A heuristic evaluation is performed by evaluating the design against a list of 10 usability principles. You can find the list of 10 usability principles that you should use for this assignment in the lecture notes.

1. [1 point] Please provide a one paragraph high-level problem statement and description of your product/ project or the website you chose to evaluate. Give us some information so that we understand the context of your work.
2. [10 points] Perform the heuristic evaluation by going through the product/ prototype/ website and finding usability problems that violate one or more of the ten usability principles. Each partner should SEPARATELY complete one pass of the heuristic evaluation on their own, so that your team ends up with multiple separate passes that each found different usability problems.

FOR EACH TEAM MEMBER:

Make a table of the usability problems you found with rows that show:

- (a) a brief description of each problem you found,
- (b) the specific usability principle(s) violated, and
- (c) a severity rating for the problem.
- (d) include a screenshot of the problem (if appropriate)

You should end up with two tables of usability problems: one created by each teammate.

3. [6 points] Get together with your teammate and discuss/compare/contrast the usability problems each of you found.
 - (a) What problems did both of you find?
 - (b) What problems did one teammate miss?
 - (c) Discuss whether you agreed about the severity rating that each of you assigned to problems.
 - (d) Make a new table that combines and consolidates your individual tables into one final table. Include your final severity ratings and rank the problems according to how important you think they are (i.e., most important to fix ---> least important to fix).
 - (e) Write up a 1-2 paragraph rationale of how your team got to your final table. What did you discuss? What was the outcome you agreed on? How did you prioritize the usability problems?

Part B: A/B Testing

In this part of the assignment, you will design an A/B test to evaluate one aspect of either your own project/product/prototype or an existing website/app of your choosing.

4. [1 point] Provide a one paragraph high-level problem statement and description of your product/prototype/website/app you chose. Give us some information so that we understand the context of your work.
5. [2 points] Identify one aspect or feature of the product/prototype/website/app that you would like to test/evaluate/improve through an A/B test. Describe the feature you choose and explain why it is well-suited to testing through an A/B experiment.
6. [4 points] Create two different alternative designs for the feature you chose to test (or, one can be the existing design and one a new design you created). Create digital mockups of these two designs using any digital prototyping tool you choose. Include screenshots/images of the two different designs you plan to test.
7. [1 point] Describe how the two designs you created test the feature you chose to evaluate.
8. [2 points] Describe how you would run the A/B test. Who would be the users? What platform would you choose? How many people would you have take the experiment?
9. [2 points] Describe what you would expect your results to show and why. What is your hypothesis? Which design do you anticipate being better? How much better do you think it is?

NOTE: You do not need to actually run the A/B test. But, you may get bonus points if you do.

[1 point] One point will be allocated to grade the overall quality of your technical writing.

What to submit

Please submit a pdf report with specific answers to the questions 1-9 above. Include photos or screenshots where appropriate. **Keep the same structure I have used in the assignment description.** You will be graded using this structure. Points will be deducted if you fail to use the correct structure!

Submit one report per team on Blackboard.