

User Experience Research Report: Heuristic Evaluation

Created By: Kimberly Swinton

Word count: 1879

Coursera's Discussion Board

Executive Summary

This report will document my heuristics evaluation of Coursera's User Experience Research and Design's course, Introduction to User Experience Principles and Processes. It will focus on the heuristics evaluation for Coursera's Discussion Board's User Interface. The Heuristics Evaluation (Nielsen and Molich, 1990; Nielsen 1994) is a usability engineering method for finding the usability problems in a user interface design so that they can be attended to as part of an iterative design process. Heuristic evaluation involves having a small set of evaluators examine the interface and judge its compliance with recognized usability principles (the "heuristics").

Findings and Recommendations

Finding 1. When the cancel button is clicked in the prompt, the prompt changes to a more detailed description. However the prompt doesn't give a clear message to the user whether or not they're sure about canceling.

Recommendation: Give a clearer, more detailed error prevention message when the cancel button is clicked.

Finding 2. Doesn't have an option for saving as a draft nor a warning notification before pressing the Cancel button and clicking out of the model for creating a new post.

Recommendation: Create an error prevention message for clicking out of the model and for when a user clicks the cancel button.

Finding 3. This is located in the Discussion Forum's main/home page. Week 3 is featured as the forum to go to in the header, but it is unclear why.

Recommendation: If there is a featured forum, make it clear that it is a featured forum and give an explanation why.

Finding 4. The subscribe button is misleading and there isn't enough detail about what the user is subscribing to before the button is pressed.

Recommendation: The user should understand what they are subscribing to and how they will receive updates before clicking the subscribe button. In small font underneath the button explain what the user is subscribing to.

Finding 5. There isn't a word count for the title input and the body input.

Recommendation: Add a word count so the user knows their constraints.

Introduction

Coursera is an American massive open online course provider founded in 2012 by Stanford University's computer science professors Andrew Ng and Daphne Koller. Coursera works with universities and other organizations to offer online courses, certifications, and degrees in a variety of subjects. - *Wikipedia*. The course that I am currently enrolled in is a Specialization program specializing in User Experience Research and Design offered by the University of Michigan via Coursera. The courses consist of videos, quizzes, peer to peer graded assignments, and much more.

Heuristics evaluation will give more clarity on what Coursera will need to improve throughout their discussion board feature on it's website. Improving this discussion board will allow users to be more productive with the posts that are posted by others and the posts that the user themselves posted. The user experience is put on the forefront when the heuristics evaluation is used to evaluate by enabling students' usability with ease. Here's a list of questions to get a better understanding of what the heuristics evaluation will be solving.

- What heuristics are being violated?
- How are they violated and with what severity?
- What recommendation can I give for each violation?
- What heuristics are being adhered to?

Heuristic evaluations are cheap, fast and easy to use. It is basically a method that can help identify usability issues in a user interface. I hope to identify some critical issues and provide some useful recommendations. I also would like to share some good findings where Coursera is doing well.

Methods

Scope of the Evaluation

The instructions for part 1 of this assignment was to evaluate Coursera's Discussion board. The scope of this Evaluation will include How do users interact with the functionality of the discussion board.

Heuristics Used

For this evaluation, I used the heuristics developed by Jakob Nielsen (1994) in the chapter "Heuristic Evaluation" in Usability Inspection Methods. Additional titles were added to the heuristics for clarification from "6 Tips for a Great Flex UX: Part 5" (Neil, n.d.):

1. FEEDBACK: Visibility of system status
2. METAPHOR: Match between system and the real world
3. NAVIGATION: User control and freedom
4. CONSISTENCY: Consistency and standards
5. PREVENTION: Error prevention

6. MEMORY: Recognition rather than recall
7. EFFICIENCY: Flexibility and efficiency of use
8. DESIGN: Aesthetic and minimalist design
9. RECOVERY: Help users recognize, diagnose, and recover from errors
10. HELP: Help and documentation

The Beginning of Heuristic Evaluations

To begin the evaluation of Coursera's discussion board. This involved looking at that particular section of the site to determine where there were issues. The issues were then categorized by the heuristic from the list above that was violated and the severity of the violation.

Severity was judged based on a four point grading scale taken from Nielsen's "Heuristic Evaluation" chapter, Table 2.3 (1994):

1. = cosmetic problem: no real usability impact
2. = minor usability problem; fix if there is time
3. = major usability problem; important to fix
4. = usability catastrophe; imperative to fix

Findings and Recommendations

Summary Results

Through my own heuristic evaluation, I was able to find five heuristic violations on my own. I'm sure there were more violations that I could've spotted, however it is impossible for one person to spot every single violation on their own. Usually heuristic evaluations are done as a team because of that fact. With that being said, the violations that I encountered are as follows: #2: Match Between System and Real World (Uses normal words and concepts familiar with the user.), #3: - User Control and Freedom (Having the control to undo a mistake or having an emergency exit), #5: Error Prevention (Error messages for users that prevents mistakes) #9: Error Recovery (Help users recover and diagnose from errors by providing clear messages).

Key Findings

Finding 1: There isn't a clear warning message about canceling when the cancel button is clicked on

Severity: 3

Heuristic Violated: #2: Match Between System and Real World, #3: - User Control and Freedom, #5: Error Prevention, #9: Error Recovery

In the add a link feature, when the cancel button is pressed in the prompt, the prompt changes to a more detailed description. However the prompt doesn't give a clear message to the user whether or not they're sure about canceling. The text shown in the image should've been the text that the user initially sees when the prompt is activated. This violates several heuristics, the system should speak the users' language, with words, phrases, and concepts familiar to the user. The second heuristic violated is #3: - User Control and Freedom because this feature

doesn't allow the user to undo their mistake. The third violation #5: Error Prevention because the user doesn't know the character constraints initially.

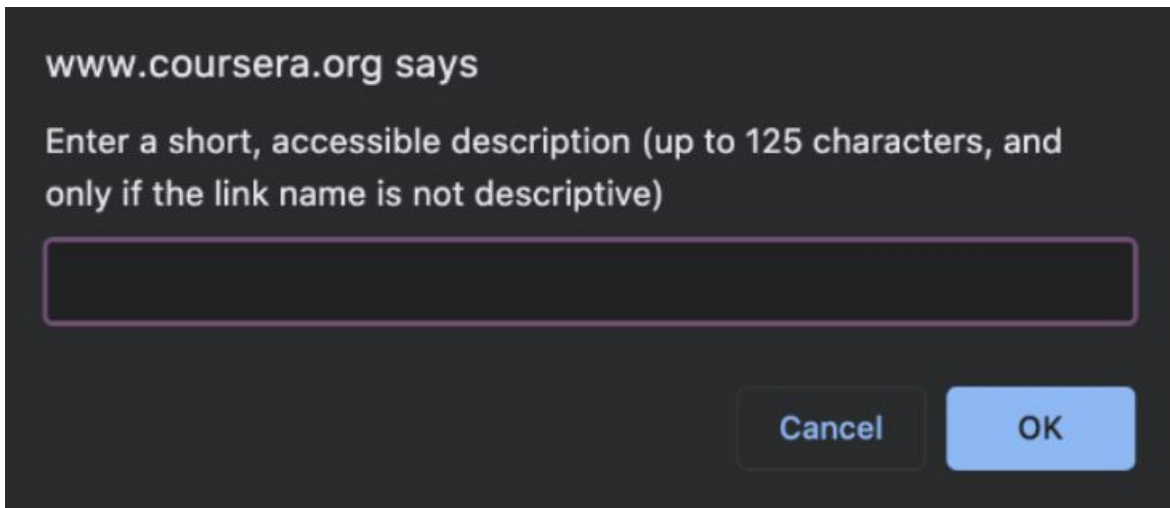


Fig: Cancel warning message isn't clear

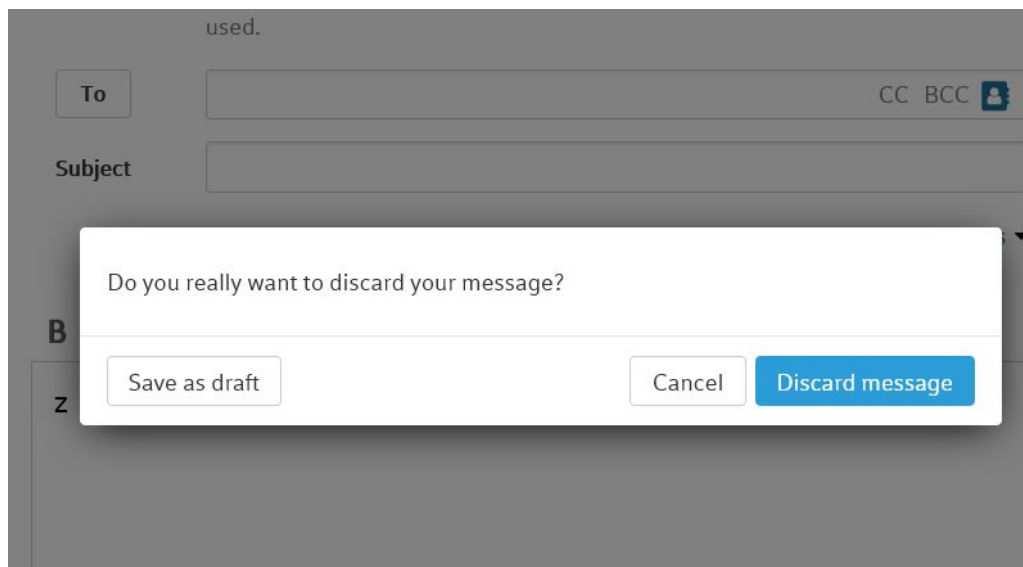


Fig: Click discard and you'll get a prompt with the option to save as draft. From Xfinity's discussion board.

Recommendation: Give a clearer more detailed error prevention message when the cancel button is clicked. Create an error prevention for clicking out of the modal and for when a user clicks the cancel button.

Finding 2: There is no warning to the user when clicking out to the modal for the create new thread feature.

Severity: 3

Heuristic Violated: #5 Error Prevention

Mistakes can and will happen. If and when a user mistakenly clicks outside of the modal while in the middle of typing a post that mistake in particular cannot be undone and all of their work is gone. The heuristic violated is #5 Error Prevention since there isn't an option for saving as a draft nor a warning notification before pressing the Cancel button and clicking out of the model for creating a new post.

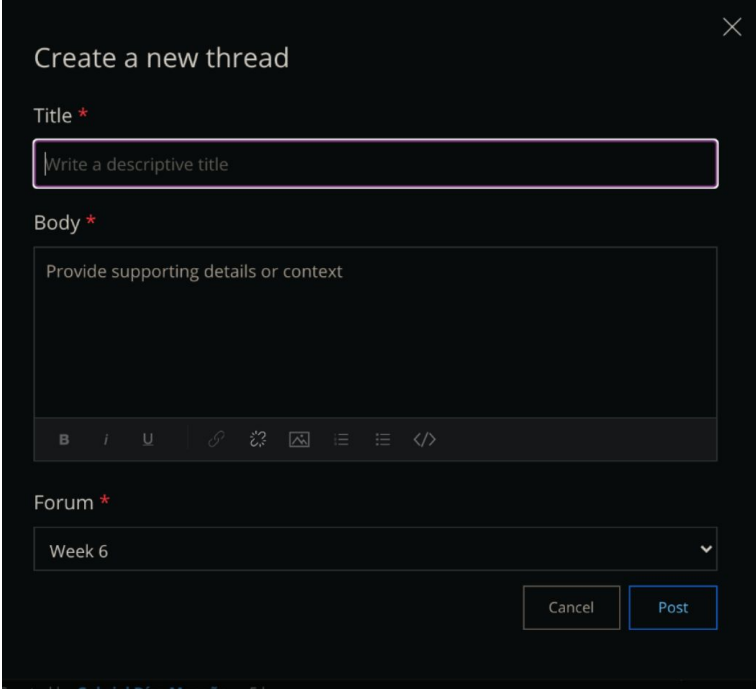


Fig: Create a new thread modal

Recommendation: Creating a warning prompt if and when a user clicks outside of the modal.

Finding 3: Week 3 is featured in the forum's header, but it is unclear why.

Severity: 2

Heuristic Violated: #2: Match Between System and Real World

Located in the discussion forum's home page, "Week 3" is shown in the header, but there's no explanation as to why it is there. The violated heuristic is #2: Match Between System and Real World because 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.

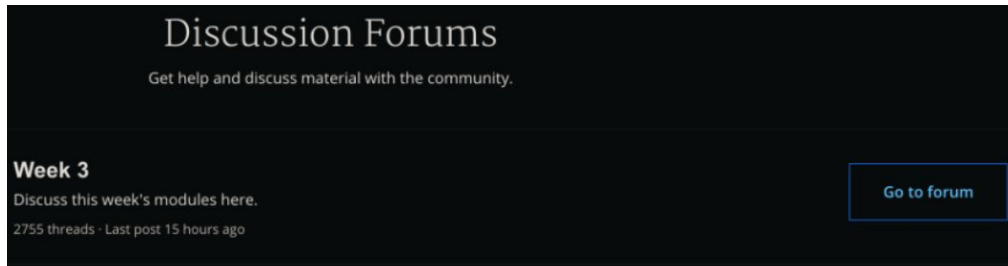


Fig: UX Course's Discussion Forum home page

Recommendation: Have a more detailed explanation for the user as to why the suggested forum is there in the header.

Finding 4: Misleading subscribe button

Severity: 2

Heuristic Violated: #2: Match Between System and Real World

The Subscribe button is lacking descriptive detail about what the user is subscribing to. After clicking on the subscribe button is when the user finds out what they're subscribing to. Where the button is placed, in the pages layout the button is placed by text that has nothing to do with the subscription.

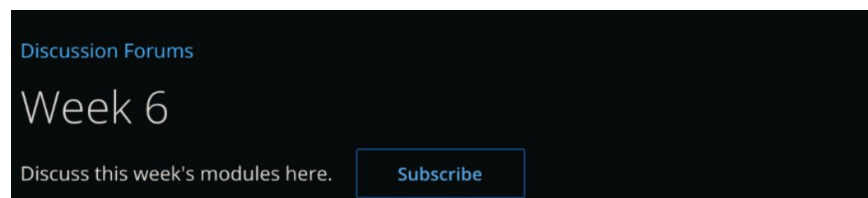


Fig: Week 6 discussion board

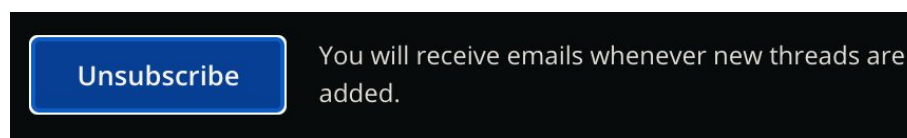


Fig: After the subscribe button is clicked on

Recommendation: Have a more detailed explanation for the subscribe button and place the button underneath "Week 6" Title.

Finding 5: No character count in the title and body textboxes.

Severity: 2

Heuristic Violated: #1: Visibility of System Statuses and #5 Error Prevention

Character count helps users know how much text they can enter when there is a limit on the number of characters. When users are likely to provide more detail than is needed, and you want to force them to use fewer words. The violated heuristics are Visibility of System Statuses because the user doesn't know the actions available and Error Prevention because character count can also be categorized as an error message. If the user exceeds over the desired amount an error message can be presented.

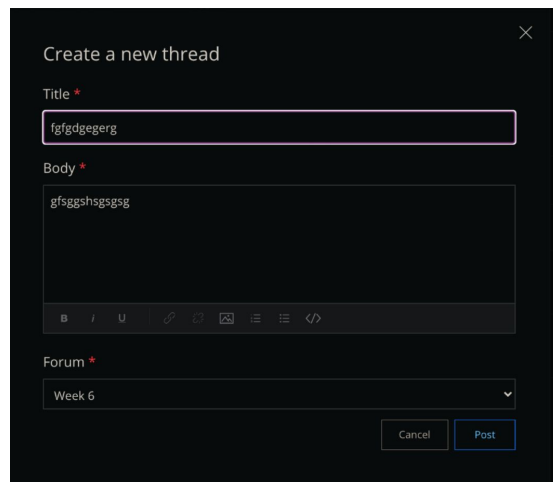


Fig: Coursera's discussion board's Create a new thread modal

Recommendation: Providing a visual character counter would be ideal for the user as shown in the image below.

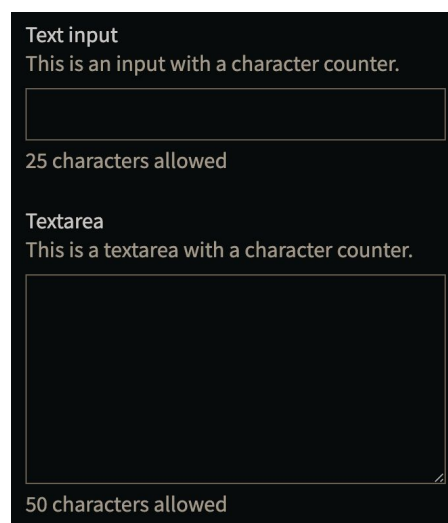


Fig: Image is from designsystem.digital.gov showing how to display character count

Conclusion

The heuristic evaluation of the Coursera's discussion board site has revealed that there were some issues in the design that are important to be fixed to enhance the user's experience. Some of the issues that violated heuristics were issues that had been determined in previous evaluations of the site. Of the issues of primary importance that we determined, the following changes should be made for the next versions of the courses:

1. Give a clearer, more detailed error prevention message when the cancel button is clicked. Create an error prevention for clicking out of the modal and for when a user clicks the cancel button.
2. Creating a warning prompt if and when a user clicks outside of the modal.
3. Have a more detailed explanation for the user as to why the suggested forum is there in the header.
4. Have a more detailed explanation for the subscribe button and place the button underneath "Week 6" Title.
5. Providing a visual character counter would be ideal for the user as shown in the image below.

Implementing these changes should significantly enhance the learning experience of the user.

References

Nielsen, J. (1994). Heuristic Evaluation. In J. Nielsen. & R. L. Mack (Eds.) Usability Inspection Methods. New York, NY: John Wiley & Sons