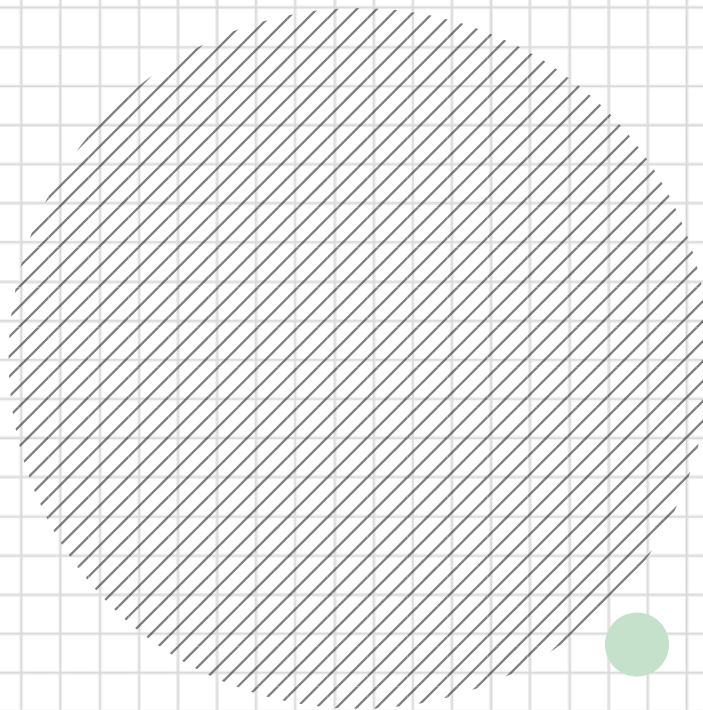# HEURISTIC EVALUATION
Coursera Discussion Board

USER EXPERIENCE RESEARCH REPORT

Executive Summary

This report will document the heuristics evaluation of the Coursera Discussion Board. Heuristics evaluation is a cost-effective and efficient micro-usability test designed by Jakob Nielsen. It is an inspection method in which a set of screens are selected upon which Nielsen's 10 heuristics are applied. Jakob Nielsen's 10 Heuristics act as a set of guidelines by which help build towards a good interface system. They cover topics such as:

1. Visibility of system status,
2. Match between the system and the real world,
3. User control and freedom,
4. Consistency and standards,
5. Error prevention,
6. Recognition rather than recall,
7. Flexibility and efficiency of use,
8. Aesthetic and minimalist design,
9. Error recognition, diagnosis and recovery
10. Help in documentation

Evaluators individually analyse each of the 10 heuristics against the screens and note violations. Each finding is assigned a severity rating on a four-point rating scale; followed by a recommendation. Then, the evaluators meet to share findings and create a concise, collaborative report. This report will be of a solo evaluation done by me on the Discussion Board of Coursera's Website.

Findings and Recommendations:

Finding 1: User is allowed to upload wrong file types with the insert image icon in the 'reply' prompt. Once uploaded, nothing shows up and no error message is displayed. **Recommendation:** Only allow acceptable file types, check if the file meets the requirement, and if not, ask for a new file selection.

Finding 2: When users type in Link descriptions while uploading a link, it does not appear in the text box. **Recommendation:** Link Descriptions should be displayed in the text body.

Finding 3: While making a new post, the cross button on the top right corner and the cancel button in the bottom right corner appear to do the same thing. The user is unaware that the former options allows them to save a draft of the post whereas the latter deletes any attempt made at one. The function of the buttons is unclear. **Recommendation:** Instead of the cancel button, provide on that says 'Save Draft '.

Finding 4: When a picture is uploaded, In the case that it takes more than 1 second, no indicator of time is shown. **Recommendation:** Add appropriate indicator.

Finding 5: If the user needs to make a new thread, they must first navigate themselves to the 'All threads' section to find the option. **Recommendation:** Make the option of making a new thread readily available on the home page of the discussions board.

Finding 6: Ability to add faulty links in posts. There should be a provision to test links or the ability to access the link from the text box. **Recommendation:** Include a function to test the link, or make the link clickable so that the user can visit it just be sure.

Finding 7: In text boxes, an empty space is registered as a character and a post is allowed to be made with just that. **Recommendation:** A space shouldn't be accepted as first character.

Finding 8: User is made to scroll to navigate through majority of the content on 'Week Forums' subsection. **Recommendation:** This could be more strategically placed besides other subsections so as to make it more accessible.

Finding 9: In the 'Link to Post' section, the user needs to manually select the text and copy the link. The button that prompts the function is moot. It is more of an instruction than a function. **Recommendation:** Add 'Copy Link' button that lets user do so.

Finding 10: The search bar does not remember the user's history and does not provide prompts. **Recommendation:** Introduce auto-complete feature for the search tool.

Introduction

Coursera is an online learning platform that offers a range of products such as courses, opportunity to learn guide projects, specialization courses and degrees. Every course is taught by top instructors from world-class universities and companies. It makes education accessible and allows the user to learn anytime and anywhere. Once enrolled, user gains access to on-demand video lectures, homework exercises, and community discussion forums. Through heuristics evaluation, the discussion forums will undergo a micro-usability test. Issues will be identified, ranked and reported. A few of the questions tackled will be:

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

Methodology

Scope of the Evaluation and Procedure Employed:
The scope of evaluation is the Discussion Forum on Coursera. During the interaction with it, points where the interface fails to comply with the heuristics are noted. A brief description is made along with a note of which heuristic(s) are violated. Some visual references are provided in the form screenshots in a streamlined report.
1.Sections of the Discussion Forum were tested to cover all relevant interfaces.
2.Tests were run on: Formatting options (add link, insert image, code)
3.Valid and invalid entries for insert options were tried.
4.Common shortcuts were tested
5.Findings were recorded in Excel sheet
6.Issues were given a grade against the 4-point scale for gauging its severity.

Heuristics Used:
 For this evaluation, we used the heuristics developed by Jakob Nielsen (1994) in the chapter "Heuristic Evaluation" in Usability Inspection Methods.
1. Visibility of system status,
2. Match between the system and the real world,
3. User control and freedom,
4. Consistency and standards,
5. Error prevention,
6. Recognition rather than recall,
7. Flexibility and efficiency of use,
8. Aesthetic and minimalist design,
9. Error recognition, diagnosis and recovery
10. Help in documentation

4 Point ratings scale of severity:
1 represents a cosmetic problem with no real usability impact,
2 represents a minor usability problem that should be fixed if there is time
3 represents a major usability issue that is important to fix
4 represents a usability catastrophe and is imperative to fix

Findings and Recommendations:

Summary Results:
Through the evaluation, it was found that there are issues in the system that violated the heuristics. The ones that were violated were: Visibility of System Status, Error Prevention, User control and Freedom, Consistency and Standards, Recognition over Recall, and Aesthetic and Minimal Design.
Key Findings:
Fin**ding 1:** Ability to upload wrong file types.
Severity: 3/4
Heuristic Violated: *Error Prevention*
User is allowed to upload wrong file types with the insert image icon in the 'reply' prompt. Once uploaded, nothing shows up and no error message is displayed.
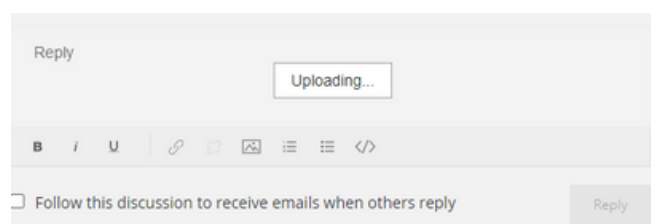

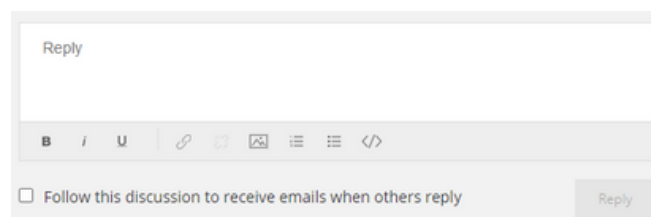Fig 1. Incorrect file type being uploaded

Fig 2. No error message displayed once action is completed

Recommendation: Only allow acceptable file types, check if the file meets the requirement, and if not, ask for a new file selection.

Finding 2: Link descriptions function is moot.
Severity: 3/4
Heuristic Violated: *Visibility of System Status*
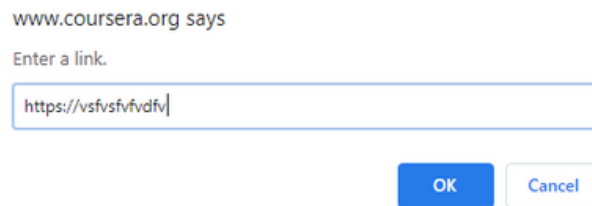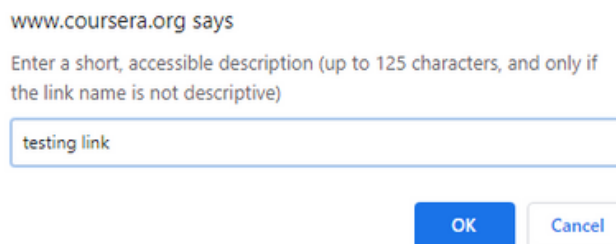When users type in Link descriptions while uploading a link, it does not appear in the text box.

www.coursera.org says

Enter a link.

https://vsfvsfvfvdfv

OK   Cancel

Fig 3. Asked to enter link

www.coursera.org says

Enter a short, accessible description (up to 125 characters, and only if the link name is not descriptive)

testing link

OK   Cancel

Fig 4. Asked to enter description

https://vsfvsfvfvdfv

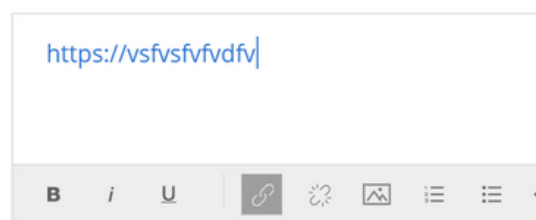B   *i*   U   🔗   🔗   🖼   ≔   ☰   ⟨

Fig 5. Link Description has not appeared.

   Recommendation: Link Descriptions should be displayed in the text body.

Finding 3: Misguided use of 'X' and 'Cancel' buttons.
Severity: 3/4
Heuristic Violated: *Visibility of System Status, Error Prevention, User control and Freedom*
While making a new post, the cross button on the top right corner and the cancel button in the bottom right corner appear to do the same thing at first. The user is unaware that the former options allows them to save a draft of the post whereas the latter deletes any attempt made at one. The function of the buttons is unclear.   ⊗
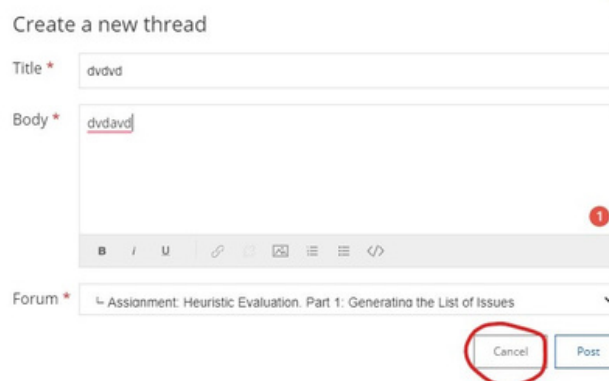
Create a new thread

Title *   dvdvd

Body *   dvdavd

                                                                    ❶

          B   *i*   U   🔗   🖼   ≔   ☰   </>

Forum *   ∟ Assignment: Heuristic Evaluation. Part 1: Generating the List of Issues   ⌄

                                                        Cancel   Post

Fig 6.

 R**ecommendation:** Instead of the cancel button, provide on that says 'Save Draft '.

Finding 4: Loss of waiting time indicator in picture uploading section.
Severity: 2/4
Heuristic Violated: *Visibility of System Status*
When a picture is uploaded, In the case that it takes more than 1 second, no indicator of time is shown.
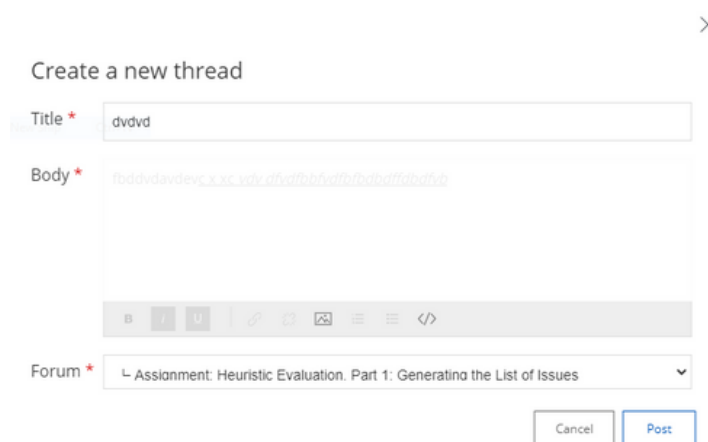

Fig 7. No Feedback given while uploading

Recommendation: Add appropriate indicator.

Finding 5: Visibility and accessibility issue with 'All Threads' button
Severity: 2/4
Heuristic Violated: *Visibility of System Status*
If the user needs to make a new thread, they must first navigate themselves to the 'All threads' section to find the option.
Recommendation: Make the option of making a new thread readily available on the home page of the discussions board.

Finding 6: Ability to add faulty links in posts
Severity: 2/4
Heuristic Violated: *Visibility of System Status, Error Prevention*
The user is not able to check is the link posted is correct and functioning. It causes errors to be made and makes the experience inefficient.

Recommendation: Include a function to test the link, or make the link clickable so that the user can visit it just be sure.

Finding 7: Ability to make a post with empty characters.
Severity: 2/4
Heuristic Violated: *Visibility of System Status*
In text boxes, an empty space is registered as a character and a post is allowed to be made with just that.
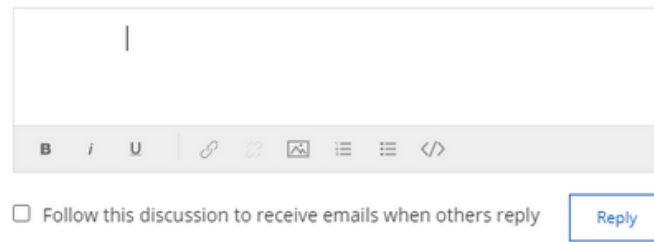

Fig 8. Empty characters entered.

Fig 9. Post with Empty characters made.

Recommendation: A space shouldn't be accepted as first character.

Finding 8: Poor accessibility to 'Week Forums' section.
Severity: 2/4
Heuristic Violated: *Visibility of System Status*
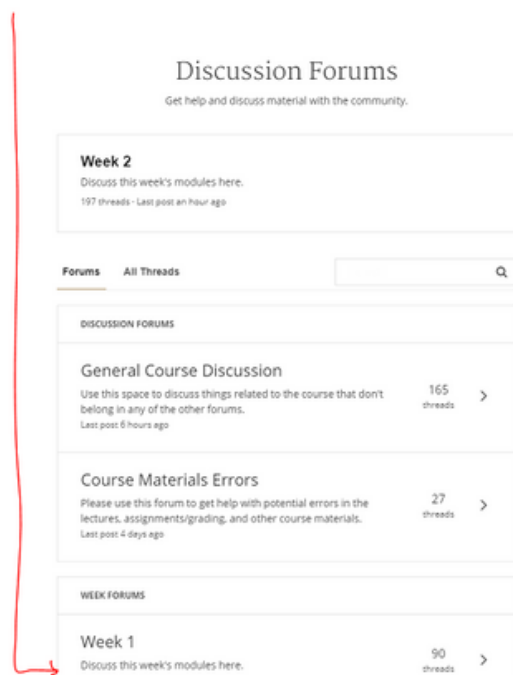User is made to scroll to navigate through majority of the content on 'Week Forums' subsection.

Fig 10.

 Recommendation: This could be more strategically placed besides other subsections so as to make it more accessible.

Finding 9: User made to manually copy link.
Severity: 2/4
Heuristic Violated: *Visibility of System Status, Consistency of Standards*
In the 'Link to Post' section, the user needs to manually select the text and copy the link. The button that prompts the function is moot. It is more of an instruction than a function.

Share Post

https://www.coursera.or
Copy the url for the post

Fig 11.'Copy the url' is a statement rather than a function.

Finding 10: No auto-complete feature in Search box
Severity: 2/4
Heuristic Violated: *Recognition over Recall*
The search bar does not remember the user's history and does not provide prompts. Thereby making the user's interaction with the system slower and less efficient.
Recommendation: Introduce auto-complete feature for the search tool.

Discussion

The violations produced are not catastrophic but do require attention. These findings are based on a solo evaluator and the presence of 3 or 5 more will yield in more discovery; thereby being more effective. More heuristic evaluations along with user testing is recommended to cover all potential gaps.

Conclusion

It is recommended that he following matters be looked into:

• Only allow acceptable file types, check if the file meets the requirement, and if not, ask for a new file selection.
• Link Descriptions should be displayed in the text body.
• Instead of the cancel button, provide on that says 'Save Draft 'option while creating a new thread.
• Add appropriate wait indicator while uploading images
• Make the option of making a new thread readily available on the home page of the discussions board.
• Include a function to test the link, or make the link clickable so that the user can visit it just be sure.
• A space shouldn't be accepted as first character.
• Strategically place 'Week Forums' to make it more accessible.
• Add 'Copy Link' button that lets user do so in the 'Link to Post' section
• Introduce auto-complete feature for the search tool.

Implementing these changes should significantly enhance the learning experience of the user and lead to a better educational outcome.

THANK YOU