

Heuristic Evaluation

Structure of the individual report

Part I: Your Name

Leila Alizadeh – s329141

Part II: Project Description

The project is an educational platform designed to support students with Specific Learning Disorders (SLD). It offers personalized study groups, challenges, material sharing, and progress tracking to enhance learning, collaboration, and overall academic performance.

Part III: Evaluation Execution

The heuristic evaluation was conducted during lab session where I collaborated with the group to understand their desktop prototype. The group provided explanations of their app's topic, structure, and user tasks, which I recorded and documented for each page. Using these insights, along with Nielsen's 10 heuristics as a framework, I thoroughly assessed the interface to identify usability issues. The information provided was comprehensive and sufficient, enabling a detailed and effective evaluation.

Part IV: List of Violations

Report the heuristics' violations you identified.

1. H3 User control and freedom

Where: Navigation system across the app

What: There is no way for users to return to the Home page from other pages.

Why: Users need a clear and consistent way to navigate back to the Home page to access key features like notifications or their groups' list. The absence of this option limits navigation flexibility and forces users to rely on workarounds such as reloading the app or backtracking multiple steps.

Severity: 4

2. H2 Match Between System and the Real World

Where: Search input at the toolbar

What: The placeholder text "Search a new group" in the search input field is misleading. Users may not know the names of existing groups to type in the search bar, making it unclear how to find groups.

Why: The phrase "Search a new group" assumes users know specific group names beforehand, which is not the case for first-time users or those exploring available options.

Severity: 3

3. H4 Consistency and Standards

Where: Search input at the toolbar

What: The search group input field is poorly positioned in the toolbar, making it less noticeable and inconsistent with user expectations.

Why: Users expect search functions for specific content like groups near the group list or on a dedicated "Search" page. Its current placement reduces visibility, usability, and disrupts workflow.

Severity: 3

4. H2 Match Between System and the Real World

Where: "Home" page

What: The home page lacks a clear "Group List" button or link, forcing users to navigate through other actions to find available groups.

Why: A prominent "Group List" button would help new or unfamiliar users easily locate and explore groups, reducing navigation friction and improving discoverability.

Severity: 3

5. H4 Consistency and Standards

Where: The plus icon on "Home" page

What: The plus icon on the home page is ambiguous, leaving it unclear if it's for joining or creating a group.

Why: Without context or labeling, users may misinterpret its purpose, leading to confusion or missed actions.

Severity: 4

6. H2 Match Between System and the Real World

Where: "Home" page

What: Users may not realize that group cards are interactive, causing confusion about how to access group details or actions.

Why: Without visual cues or instructions, the interactive nature of group cards is unclear. Users expect clickable elements to have affordances like hover effects or icons. The lack of such feedback can prevent users from exploring or joining groups effectively.

Severity: 3

7. H7 Flexibility and Efficiency of Use

Where: User's groups list on the "Home" page

What: The groups list on the Home page lacks filtering or sorting options.

Why: Without these features, navigating and managing multiple groups becomes inefficient, requiring users to scroll manually to find specific groups.

Severity: 3

8. H3 User control and freedom

Where: "Home" page

What: Users cannot edit the groups they have created or leave groups they have joined.

Why: Users need to manage their groups such as modify group details or leave a group.

Severity: 3

9. H1 Visibility of system status

Where: "Notifications" in "Home" page

What: Users cannot see notifications on other pages; they must navigate back to the Home page to view them.

Why: Important notifications should be visible throughout the app, so users stay informed in real time, no matter what page they're on. Without this, users may miss updates and face interruptions.

Severity: 3

10. H3 User control and freedom

Where: "Search" page

What: There is no visible button for users to join groups

Why: Users need a clear way to join groups they're interested in. Without a "Join Group" button, it's unclear how to become a member, causing frustration and possibly leading users to give up.

Severity: 4

11. H2 Match Between System and the Real World

Where: "Search" page

What: The app uses study-oriented terminology like "Challenge", "Group" and "Material" which align well with its context. However, the phrase "Suggested for You" might confuse less tech-savvy users.

Why: The term "Suggested for You" might not be clear to all users. While some may understand it, others might find it confusing, unsure of how the suggestions are generated or what they signify.

Severity: 2

12. H5 Error Prevention

Where: "Create a Group" page

What: If users accidentally click on the "Create" button without filling out all required fields, they are not prompted with a warning to complete all fields before submission.

Why: Users may submit incomplete forms, leading to errors or frustration. Without prevention errors, users could waste time submitting a group without all the necessary information.

Severity: 2

13. H3 User control and freedom

Where: "Create a Group" page

What: The "Level" and "SLD" fields on the "Create a Group" page currently use checkboxes, which suggest that users can select multiple choices. However, these fields should only allow one choice for each.

Why: Using checkboxes for single-choice fields can confuse users, as checkboxes are typically associated with multiple selections. Users might mistakenly select more than one option, which could lead to incorrect or unexpected behavior.

Severity: 3

14. H1 Visibility of system status

Where: "What are you looking for?"

What: When the user clicks on an item in the menu, the text is removed from the icon, and the corresponding page loads, but there is no title displayed to indicate which page the user is on.

Why: Users may feel lost without a visible page title to confirm their location in the app. This makes it hard to understand the context or know if they're on the right page, hurting navigation clarity and the overall experience.

Severity: 3

15. H3 User control and freedom

Where: "Chat" page

What: There is no visible button to send a message

Why: Users need a simple way to send messages in the chat. Without a "Send" button, they may not know how to communicate. This reduces user control and undermines the chat's purpose.

Severity: 3

16. H3 User control and freedom

Where: "Materials" page

What: Users cannot edit or delete the materials they have created.

Why: Users need to be able to edit or delete their uploaded materials. Without this option, they may feel frustrated or limited.

Severity: 3

17. H3 User control and freedom

Where: "Challenges" page

What: Users cannot edit or delete the challenges they have created

Why: Users need the ability to manage their challenges, like editing or deleting them if they no longer want to participate or if the challenge is no longer relevant. Without these options, users feel limited and may become frustrated if they make a mistake or change their mind.

Severity: 3

18. H1 Visibility of system status

Where: "Challenges" page

What: There is no clear indication of the progress or status of the challenges, such as whether a challenge is completed, in progress, or not started.

Why: Users need to easily understand their current progress in each challenge to know what they've accomplished and what is left to do. Without this information, users may feel uncertain about their progress and whether they are on track.

Severity: 3

19. H1 Visibility of system status

Where: "Challenge's questions" page

What: Users currently cannot see their answers or review their responses to the challenge questions once they've submitted them.

Why: Users need to review their answers, track their progress, and reflect on their performance to improve and learn. The absence of this feature creates an incomplete experience, especially if users want to review what they've done or adjust.

Severity: 3

20. H3 User control and freedom

Where: "Challenge's questions" page

What: There is no way to return to the list of challenges from the challenge's question page

Why: Users need the ability to navigate back to the challenge list to review other challenges or select a different one. Without this option, users may feel stuck on the question page and be forced to restart their navigation, which disrupts the user flow and reduces flexibility.

Severity: 3

21. H1 Visibility of system status

Where: "Challenge's questions" page

What: There is no page or information explaining how the questions will be corrected or assessed

Why: Users need clarity about how their answers will be evaluated, whether it's automatic grading, peer review, or instructor feedback. The absence of this information leaves users uncertain about the process.

Severity: 3

22. H1 Visibility of system status

Where: Throughout the app

What: There is no information explaining the role of AI in the app or how it is used to enhance the user experience

Why: Users need clarity about how AI is used in the app, including how their data is processed and how features like automated grading or suggestions work. Without this transparency, users may feel uncomfortable or confused, which can reduce their trust in the app.

Severity: 3

23. H1 Visibility of system status

Where: Pages where new items are created such as groups, challenges and materials

What: There is no confirmation message or feedback after creating something new, such as a group, challenge, or material.

Why: Users need immediate feedback to confirm that their action was successful. Without a success message or notification, users may be unsure if the item was created, leading to confusion or repeated actions. This lack of feedback affects the user's confidence in the system.

Severity: 3

24. H4 Consistency and Standards

Where: "Challenge's questions" page

What: Checkboxes are used for selecting answers, even when the question type may not involve multiple selections.

Why: Checkboxes typically imply multiple-choice selection. Using them for single-answer questions can create confusion and inconsistency. This violates the standard practice for form controls and may mislead users into thinking they can select multiple answers.

Severity: 3

25. H3 User control and freedom

Where: All pages with a Cancel button such as "Create a Group" and "New Challenge"

What: The purpose of the Cancel button is unclear. users do not know if it clears the page, discards the input, or navigates back to the other page.

Why: Users need consistency and clarity in the functionality of the Cancel button to prevent confusion or unintended actions. Ambiguity can lead to mistakes or hesitation, negatively impacting the user experience.

Severity: 3

26. H1 Visibility of system status

Where: All pages with a Cancel button such as "Create a Group" and "New Challenge"

What: When users click the Cancel button, there is no confirmation message

Why: Users may accidentally click the Cancel button, expecting a confirmation dialog or undo option. Without confirmation, they risk losing all their progress, which can be frustrating and discouraging.

Severity: 4

27. H4 Consistency and Standards

Where: "Create a Group" page and "New Challenge" page

What: There is inconsistency between the "Generate" and "Create" buttons in terms of design, terminology, and functionality.

Why: Users may be confused about the purpose of each button. For example, "Create" might be used to finalize an action such as creating a group, but "Generate" could refer to creating a challenge. The inconsistency in labeling and placement can disrupt the user experience and lead to uncertainty.

Severity: 2

28. H7 Flexibility and Efficiency of Use

Where: "Challenges" page

What: There is no option for users to quickly filter or sort challenges based on certain criteria, such as difficulty or due date.

Why: users with specific goals might find it inefficient to navigate through long lists of challenges without sorting or filtering options.

Severity: 3

29. H5 Error Prevention

Where: "New Challenge" page

What: If users accidentally click on the "Generate" button without filling out all required fields, they are not prompted with a warning to complete all fields before submission.

Why: Users may submit incomplete forms, leading to errors or frustration. Without prevention errors, users could waste time submitting a challenge without all the necessary information.

Severity: 2

Part V: Summary and Recommendations

Report in the table below the total number of identified violations.

Heuristic	# violations
H1: Visibility of system status	8
H2: Match between system and the real world	4
H3: User control and freedom	9
H4: Consistency and standards	4
H5: Error prevention	2
H6: Recognition rather than recall	0
H7: Flexibility and efficiency of use	2
H8: Aesthetic and minimalist design	0
H9: Help users recognize, diagnose, and recover from errors	0
H10: Help and documentation	0
HN: Non-heuristic issue	0

Finally, write 2-3 paragraphs covering general impressions and any recommendation you have for improving the interface.

The app has several usability issues that could make it difficult for users to navigate and complete tasks efficiently. One major problem is the lack of clear navigation options, such as a way to easily return to the Home page or access important sections like groups and challenges. This forces users to backtrack or reload the app, which is frustrating. Additionally, key elements like group cards and buttons are not always intuitive, and users might not know how to interact with them. There's also a lack of feedback when actions are completed, like when a group or challenge is created, leaving users unsure if their actions were successful.

A lot of these issues stem from basic design principles, such as visibility of system status, user control and freedom, and matching the system to users' expectations. For example, the wording and design of buttons and icons can be confusing, especially for new users or those less familiar with the app. Another notable concern is the lack of transparency around the use of AI in the app. Users aren't informed about how AI is being applied to enhance their experience, which can lead to confusion and mistrust, especially regarding data privacy and how features like automated grading or recommendations work.

To improve the app, the navigation should be made clearer by adding easy ways to return to the Home page and access key sections like groups or challenges. Search features and buttons should be placed in more obvious, expected areas, so users know exactly where to find them. Group cards and other interactive elements should be more clearly designed to show they are clickable, perhaps with visual cues like hover effects. Additionally, the app should provide feedback when users create something new, like a group or challenge, to confirm the action was successful. Buttons like the "Cancel" button need clearer labels or confirmation messages to avoid confusion.

In terms of the AI issue, the app should provide clear explanations about how AI is used and what role it plays in the user's experience. Whether it's automating tasks like grading or providing recommendations, users should understand how their data is being processed and how AI impacts the app's functionality. This transparency would build trust and prevent users from feeling uncomfortable or confused. Finally, adding options to filter and sort lists of groups or challenges would make it easier for users to find what they need quickly, especially if they have a lot of groups or tasks to manage. These changes would make the app more intuitive, efficient, and user-friendly.