Heuristic Evaluation Method

There were 5 evaluators involved in the heuristic evaluations for the Boardify website. Our procedure for heuristic evaluations involved various steps that we believe works best in evaluating and getting good coverage of the website. Some of our tasks include imitating the user by trying to complete certain goals and then applying said tasks to each heuristic. We also took into account the various edge cases that our website has and did rigorous testing to see if the website will produce errors and violate any heuristics. We also took into account the various paths the user can take while navigating our website while doing the heuristic evaluation. Some of our tasks were designed specifically for a single heuristic in order to properly evaluate and get useful feedback.

Evaluation Report

0 Stars Review/Empty Reviews

The issue involves the presence of 0-star reviews or entirely empty reviews on the platform, which violates the error prevention heuristic with a severity level of S3.Having 0-star reviews or completely empty reviews can mislead users and undermine the credibility of the review system. Users might question the reliability of the ratings, as 0-star reviews provide no constructive feedback, and empty reviews offer no insights into the user's experience. This inconsistency and

lack of meaningful content can create confusion and reduce the overall trustworthiness of the review section.

To address this issue, implement validation checks to ensure that users submit reviews with a valid rating and some textual content. If a user attempts to submit a review without providing a star rating or leaving the review text empty, display clear error messages prompting them to include both elements. This way, the review system maintains consistency, providing users with valuable and reliable information to inform their decisions.

No Exit Button After Search, S3 (Major Usability Problem)

The issue involves the absence of an exit button or any indicators to help users return to the main board game list after conducting a search using the search bar. This violates the heuristic "User Control and Freedom," and we have assigned it a severity rating of S3. The lack of an exit button or clear indicators prevents users from easily navigating back to the main page after a search, resulting in a major usability problem. Users may feel frustrated and face difficulty in returning to the original state of the website, negatively impacting their experience. The design lacks the necessary user control and freedom, hindering users from going back a step in their process. To address this major usability problem (S3), our recommendation is to introduce a "Back to Board Game List" button on the search results page. This addition would provide users with a clear and accessible exit option, allowing them to easily navigate back to the main board game list. By implementing this solution, users gain the necessary control and freedom to manage their navigation, contributing to a more positive and user-friendly experience on the platform.
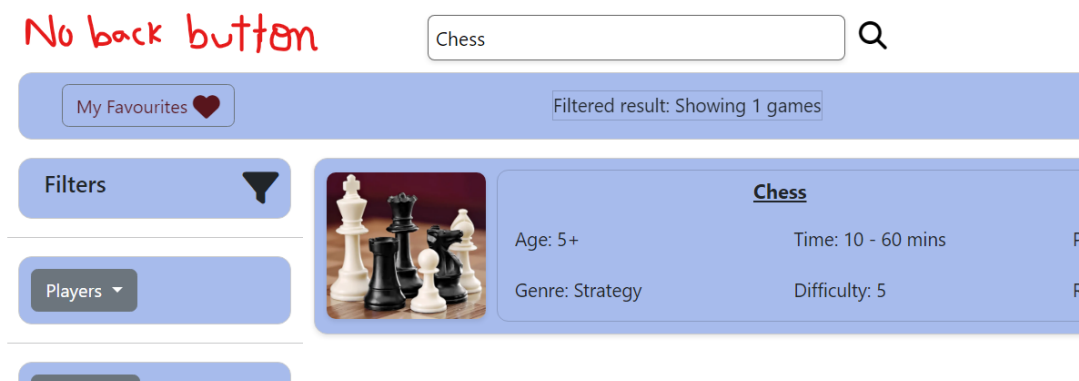
Custom Player Count Issue

There is an issue with the custom player count option in the players filter, where the system currently permits non-numeric input. This violates the error prevention heuristic with a severity level of S2.

Allowing non-numeric input for the custom player count can lead to confusion and errors, as the system expects numerical values for this filter. Users may unintentionally input text or other non-numeric characters, resulting in unexpected behavior and inaccurate filtering outcomes.

To address this issue, implement input validation for the custom player count field to only accept numeric values. This ensures that users provide valid input, aligning with their expectations and preventing potential errors. Additionally, provide clear error messages or prompts to guide users when they attempt to input non-numeric values. This enhancement aligns with the error prevention heuristic, improving the overall usability of the custom player count feature.

Visibility of system status issue: No indications after ratings/reviews have been made.

When a user leaves a review under a game tab, the new review is appended to the bottom of the review section. Without any notification mechanism, the user would not know if their review is posted successfully unless they scroll to the bottom and check.

Frustrated users might press the add review button multiple times which results in multiple of the same review being added.

To fix this issue, we think it is a good idea to add new reviews from the top, so the new review added will be visible by the user immediately after pressing on the Add Review button. On top of that, a notification pop-up could be shown to users so they would know their review has been added.

We think this is a S2 minor issue since this doesn't affect the main functionality of the page.
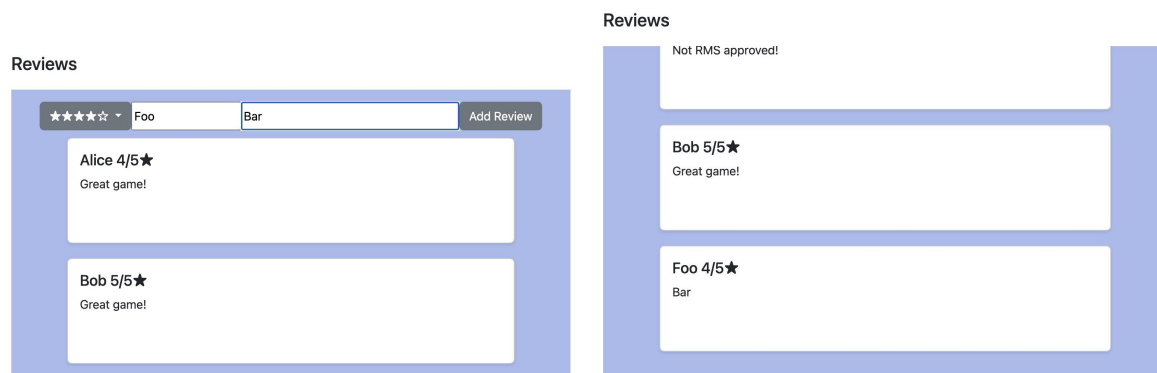
Search Bar (Empty Search)
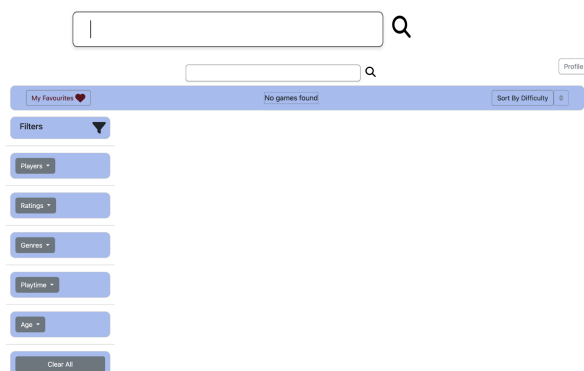
The issue pertains to the ability to submit an empty search query in the search bar on the platform. This Error prevention violation is categorized with a severity level of S2.

Allowing users to submit an empty search query can lead to suboptimal search results and potentially confuse users. The lack of constraint may result in users encountering unexpected outcomes, impacting the overall effectiveness and user satisfaction with the search functionality.

To address this issue, implement input validation for the search bar to prevent users from submitting empty queries. When a user attempts to submit a search without entering any text, provide a clear and informative error message, guiding them to enter a valid search term. By enforcing this validation, users will be prompted to input meaningful search terms, contributing
to a more reliable and user-friendly search experience. This enhancement aligns with the error prevention heuristic, ensuring that users receive accurate and relevant search results.

Not enough sort options

While the system allows users to sort and order the list of board games with difficulty by ascending or descending order, it might not cover all use cases for most users. Some users might desire additional sorting criterias for more specific games, such as Ratings, Release date, Playtime or Price.

We think it is a good idea to add multiple sorting mechanisms that can work together where users can set multiple criterias for finer controls which in turn can let them find their desired game more efficiently.

We are rating this a S2 minor issue.

Sort By Difficulty ⇕

Inconsistency in display between board game card and popup window

In the design of the card, there are many features that are shown, such as the age group, difficulty, and time of the board game, along with a few other features. In order to see more information about the board game, the user must click on the information tab at the top right of the card. The issue is when the user is in the new popup window, the information displayed earlier is no longer shown, and in order to see the information again, the user must exit out of the window to see the information. This violates recognition rather than recall, as the user's memory load is not minimized, and the user must remember information from one part of the interface to the other part which

makes the memory load worse, then having the information available to the user on the new window. In order to fix this problem, the design should have the same information implemented into the new window where the extra information is displayed, that way the memory load will be minimized, and users will not have to remember information from
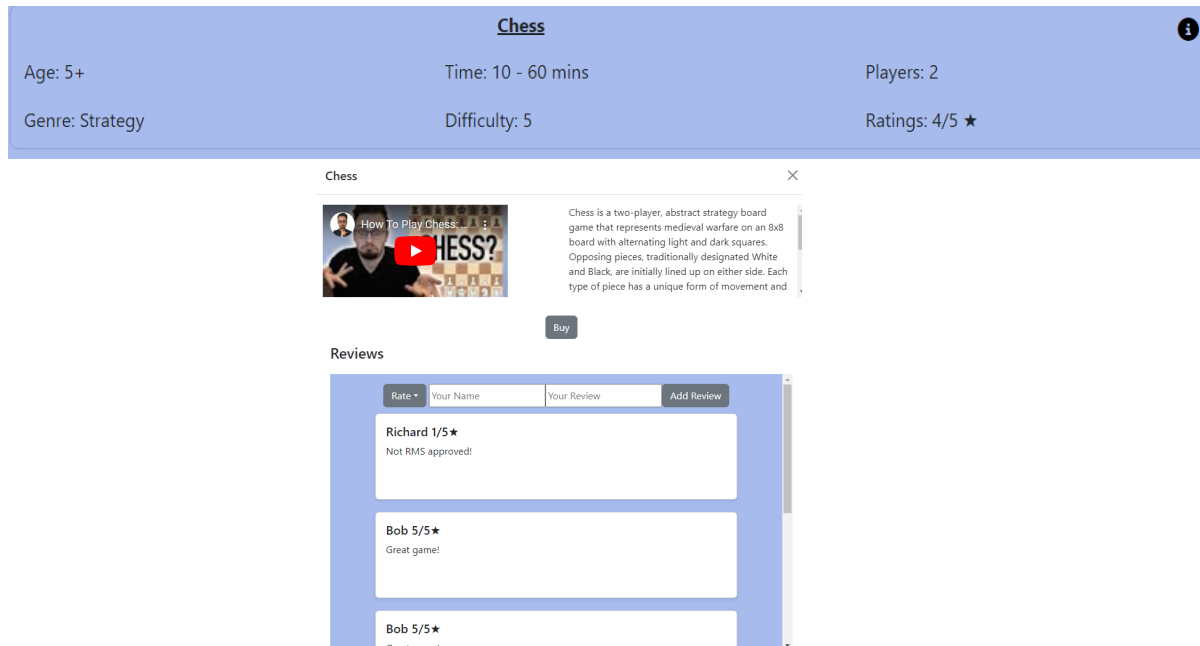
one part of the interface to the other part. Since this information is important, and most likely the user will want to know it, it is important to have the information always available for the user and allow the information to be visible at all times. The severity rating for this issue is S2, as it is a minor problem, and is not a high priority to fix.

Summary -

We proudly recommend our website, which has been meticulously crafted based on a foundation of usability principles. The simple and efficient layout caters to both novice and experienced users, offering a superior experience compared to existing platforms. We learned from the shortcomings of other websites, ensuring our platform addresses issues that were previously mishandled. Some things that worked for us was that we were able to successfully implement and fix issues that were discovered during the feedback from our interviews. The feedback that we received was helpful in improving

the design of our system, which helped come to the final prototype that we have now. Despite our system's success, unforeseen challenges like unexpected bugs arose. Some issues couldn't be resolved within the timeframe, but these experiences were valuable lessons. In conclusion, our system stands as a testament to our dedication to creating a user-centric, functional, and superior alternative to existing solutions. The journey, complete with learning opportunities and challenges, has equipped us with valuable skills for future endeavors in web design.

Raw Notes

- Aswin ------

MS4 Heuristics Rough Work – Aswin

· Visibility of system status

Every action performed by the user has feedback and a special status bar is present to notify the user of the current status of the system.

Severity: S0, don't agree this is a problem

· Match between system and real world:

The UI language in the system appears to be simple and easy to understand. User's design controls follow real world conventions.

Severity: S0, don't agree this is a problem

· User control and Freedom:

After a user has searched for a board game using the search bar, there is no button or any other indication showing how the user will get back to the original state which is the whole board game list.

Severity: S3, Major Usability Problem

- Consistency and Standards:

    Actions conducted have similarity from one another and visual treatments like organizations of attributes and buttons are consistent throughout the design.

    Severity: S0, don't agree this is a problem

- Help users recognize, diagnose, recover from errors:

    System always provides feedback for any action committed. Hence it provides users ways to diagnose if any mishaps happen, and the status bar provides users system status for every action. Users are able to recover from errors(like selecting the wrong filter option etc.) with features such as deselecting individual filter choices and having a clear all button to reset the filter box.

    Severity: S0, don't agree this is a problem

- Error Prevention:

    In the players option tab, users have the ability to enter letters inside the Custom Player box which expects a number input. Even though the system can handle this input and display "No games found", it does not let the user know that they should be entering a numerical input and instead it initiates a search on the non-numerical input without stopping the user from .

    Severity: S2, Minor usability problem

· Recognition rather than recall –

In this case, the user does not really have to recall since the website minimizes memory load by making elements, actions, and options visible to the user. Information required to use the system is easily visible and retrievable. However, there is a slight issue where if we click the info button for each board game, we get to see the description, how to play the game and reviews about the game, but if the user wants to check again the number of players the board game supports, they will have to exit this board game card and check it. I feel that this might be an issue.

Severity: S2, Minor usability problem

· Flexibility and efficiency of use-

There appears to be no form of accelerators present that would help experienced users complete their tasks in a more efficient way compared to novice users. Both user groups will have to use the same tools and techniques to navigate the system.

Severity: S2, Minor usability problem

· Aesthetic and Minimalist design –

The website follows a very aesthetic and minimalist design as the main page does not contain information that is irrelevant or rarely needed. For example, the board game tile only contains information that is tied to the filter box and any other information (like game description, how to play and reviews) are only accessible if the user requests to see it.

Severity: S0, don't agree this is a problem

· Help and documentation –

The website does not require any additional explanation to be able to use. All components are easy and straightforward to use.

Severity: S0, don't agree this is a problem

Kin Tat

Visibility of system status:

In the review section of games. no indication is given to users after a review is added. Since new reviews are appended to the bottom of the review list, users will have to scroll all the way to the bottom to check if their review has been successfully added.

Might be better to insert new reviews to the top so it is clear to the user that their review has been created, or have a notification popup every time a review is made.

S2, Minor

Match between system and real world:

Terminology and icons in the website are commonly used. Numbers and icons should be understandable by most users that have already used the internet before. Nothing's wrong in this regard.

User Control and Freedom:

There are cancel buttons to reset each filter individually as well as the reset all button that lets the user go back some steps if they've made mistakes. One thing that's missing is a separate reset button for searching, the user needs to either clear the search box or use the reset all button which isn't located anywhere near the search bar.

Might be a good idea to have an individual reset button inside the search box.

S2, Minor

Consistency and Standards:

The sort button doesn't change according to sort ordering. It always points up like it is ascending even though the order is reversed.

S1, Cosmetic

Error Prevention:

Nothing prevents users from posting a 0 stars review, and there is no confirmation for users before making a review.

Player count input box doesn't prevent non numeric values from being entered.

S3, Major

Recognition Rather Than Recall:

Information shown on the main page (player count, time, difficulty etc.) aren't shown inside the info page of a game, it increases memory load for users.

S3, Major

Flexibility and Efficiency of Use:

Not applicable. No accelerator needed.

Aesthetic and Minimalist Design:

All information on the site is relevant and not redundant/cutter.

Help and Documentation:

The design is simple, no documentation nor manual is needed.

<u>Diljot</u>

1. Efficient Sorting :

   - Observation: While the system allows users to sort and order the list of board games, the available options might not cover all user preferences. Some users might desire additional sorting criteria, such as Difficulty, release date or sort by price.
   - Severity: S2, Minor Usability Problem
   - Recommendation: Enhance the sorting and ordering options to accommodate a broader range of user preferences, ensuring that users can quickly find the information they need.

2. Consistency in Interaction Patterns:

   - Observation: While navigating through the system, it's noticed that the interaction patterns vary slightly between different sections. For instance, the process of adding a game to the liked list differs from adding a review.
   - Severity: S2, Minor Usability Problem
   - Recommendation: Ensure a consistent interaction pattern across different features to reduce cognitive load on users. This can involve standardizing button placements and actions.

3. Aesthetic and Minimalist Design:

   - Observation: The website follows a minimalistic design approach, presenting relevant information without clutter. It effectively avoids unnecessary elements on the main page.
   - Severity: S0, don't agree this is a problem
   - Explanation: The minimalistic design contributes positively to user experience by focusing on essential information and decluttering the interface.

Filip -

1. Visibility of system status. The design clearly informs users about what is going on with the tab at the top of the screen that clearly displays how many games are being displayed. When a filter is applied, the bar changes and lets the user know through appropriate feedback that a filter is applied, and communicate its state. Some recommendations could be for the design to let the user know what specific filters were applied, as it would help the user know and keep them informed about what exactly is going on. (provide pictures of the bar) Severity rating 1

2. The website uses words phrases and concepts that are familiar to all users and the information that is displayed is in an orderly fashion that can be scrolled through in a natural and logical order, as it follows real - world conventions, severity rating 0

3. User control and freedom. Users clearly have marked exits to leave unwanted actions from various different actions on the site. If clicked on an information card they can easily exit it at the top and it is clearly marked and discoverable. For filters, they can easily uncheck the box they want or undo / clear all which is clearly visible at the bottom of the filters. Severity rating 0.

4. Error prevention. Design uses constraints like not allowing the user to type in the filter box unless custom is checked. If an invalid item is typed in then no results will show. Severity rating 0

5. Consistency and standards. Users do not have to wonder about different words, situations meaning something else and the values and attributes are all consistent and standard to a design. Severity 0.

6. Recognition rather than recall. There are labels that are not present in the information tab of a board game, but present if you go back and look on the default card. Because of this, the user's memory load is not minimized. Severity 2

7. Flexibility and efficiency of use. There are no shortcuts hidden from novice users and no keyboard shortcuts, which makes it not functionally personalized for individual users. Severity 2.

8. Aesthetic and minimalist design. Page follows a aesthetic and minimalist design, nothing distracting and unnecessary on the website, Severity 0

9. Helps users recognize, diagnose, and recover from errors. Status bar at the top of the page provides user clarity about what is going on at all times and if filters and applied, so the user is able to know clearly what error might have occurred. If the error is having the sort button clicked, they may unclick, or if filter buttons are pressed, they can clear. If there was a box that said what exact filters were applied it would help the approach better Severity 1

10. Help and documentation. Design does not need any help and documentation, severity 0.

Heuristic Evaluation - Abhay

Visibility of system status:
- You can always see what's going on with the system by checking the status bar. It tells you if your favorite items are showing, if you've applied any filters, or if you're looking at the full list. It's like a little update center, making it easy for you to understand what's happening and find what you need.
- Severity rating S-0

Match between system and real world:
- The website uses simple symbols and terminology that are easy to recognize. So, users shouldn't have any trouble understanding what's what. It's like using familiar signs that guide you, making the website straightforward and user-friendly. This way, everyone can easily find their way around and get things done without any confusion.
- Severity rating S-0

User control and Freedom:
- Users have control over individual filters on the website, deciding which ones to apply and change whenever needed. It's like having a personal remote control for filters! If users no longer want a specific filter, they can simply click a button to make it disappear. This flexibility empowers users to customize their experience, effortlessly finding what they need on the website.
- Severity rating S-0

Consistency and Standards:
- The main screen consistent with all the actions that can be performed over games such as search, filter, my favorites list
- Severity rating: S-0

Help users recognize, diagnose, recover from errors:
- Website always provides feedback on which action is being performed though the status and if something usual happens , user can always take a look at the filter section to update individual filters.
- Severity rating: S-0

Error Prevention:
- Users can currently enter spaces or leave the search box empty without any restrictions. This means that the system accepts these inputs, even though they might not lead to meaningful search results
- Severity rating S-3

Recognition rather than recall:
- My favorites, filters and sorting buttons are always visible so user does not need to recall the actions to perform the tasks.
- Severity rating S-0

Aesthetic and minimalist design:
- The main page and each game card provide only essential information without any extra details, keeping things simple and easy to navigate.
- Severity rating S-0

Help and Documentation:
- There is no documentation needed for user to use this website
- Severity rating S-0

Flexibility and efficiency of use:
- There are no such shortcuts available for advanced users to use as compared to novice users, both have same set of tools and actions available at all times.
- Severity rating: S-0