

# Introduction

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The following document addresses all the flaws in our project identified by the heuristic evaluation and sets out our ideas for improvement.

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## Problem I: Missing feedback after actions (e.g. “Buy”, “Save settings”)

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Visibility of system status

**Description:**

After a user performs important actions (such as saving profile or privacy settings or purchasing a book), there is no clear feedback like confirmation messages, loading indicators, or success notifications.

**Severity:**

3

**Suggested Solution:**

Add explicit feedback messages such as “Your changes have been saved.” or “Purchase successful – book added to your library,” ideally with a loader or spinner during processing.

**Location:**

Profile / Settings page; Purchase flow

### Critical Reflection

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They are spot on. That's a key issue with our prototype: it makes it harder to use and the feedback needs to be clearer.

### Problem was not fixed in the final code

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## Problem II: Unclear wording / labels do not match user mental model

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Match between system & real world

**Description:**

Some labels and navigation options are vague or use jargon. The homepage uses a long, uninterrupted text list (e.g. “My Books library & reading history For You algorithm & friend picks...”) that is hard to understand and poorly separated.

**Severity:**

2

**Suggested Solution:**

Simplify menu wording, split options into clear, distinct categories, and use natural language such as “My Library”, “For You – Recommendations”, “Friends’ Activity”, “Curated Shelves”, or “Store”.

**Location:**

Homepage navigation menu

### Critical Reflection

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Again, this is a valid criticism. Our buttons are too crowded, especially on the front page.

### Problem was fixed in the final code

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## Problem III: No “undo” / “cancel” or way to revert mistakes

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** User control & freedom

**Description:**

Users cannot undo or cancel actions. Mistaken clicks (like entering the purchase flow or changing a privacy setting) cannot be reverted easily because no "Cancel", "Go back", or "Undo" options are present.

**Severity:**

2

**Suggested Solution:**

Add cancel/back options, require confirmation before purchases, and allow users to step back before finalizing actions.

**Location:**

Checkout & Settings flows

## Critical Reflection

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We would partly agree. We have a working back button on each side, but we would also agree that it does not fit the design well enough. Some undo options need to be added, especially before finalising actions.

## Problem was partly fixed in the final code

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## Problem IV: Inconsistent layout / styling in navigation/menu labels

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Consistency & standards

**Description:**

The homepage navigation appears as one continuous line of text without clear clickability or distinction between sections, making the menu difficult to understand.

**Severity:**

2

**Suggested Solution:**

Redesign the navigation using standard UI patterns such as a top bar or sidebar with clearly defined clickable elements and separation between main sections.

**Location:**

Homepage

## Critical Reflection

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We partly agree: The UI patterns, such as the top bar, are clearly organised in our view, but we understand that some consistency is lacking in areas such as: Text size and clickability.

## Problem was fixed in the final code

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## Problem V: Potential for user errors in purchase / no error prevention

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Error prevention

**Description:**

The purchase flow lacks a confirmation dialog, making accidental purchases more likely. Also, features like price filters (e.g. "under 15€") mentioned in the scenario are not visibly implemented.

**Severity:**

3

**Suggested Solution:**

Add confirmation dialogs before purchases and implement clearly visible filtering options for the "For You" section.

**Location:**

Store / For You / Checkout

## Critical Reflection

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We agree. Accidental purchases can make or break a company.

## Problem was not fixed in the final code

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### Problem VI: High memory load – options and actions not always visible

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#### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Recognition rather than recall

**Description:**

Important sections like friends' ratings, reading list, or profile settings are not always visible. The minimal menu forces users to remember where things are instead of recognizing visible options.

**Severity:**

2

**Suggested Solution:**

Create persistent navigation, use clear labels, and ensure essential sections like Library, Reading List, and Notifications are always easily accessible.

**Location:**

Throughout the app

## Critical Reflection

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We agree. We think that the minimalist approach, especially with regard to colours, reveals its major flaws, and this needs to be addressed.

## Problem was fixed in the final code

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### Problem VII: No shortcuts or efficient navigation for frequent actions

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#### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Flexibility and efficiency of use

**Description:**

There are no shortcuts for frequent actions like opening the library, reading history, or friends' activity. Navigation is linear and slow for returning users.

**Severity:**

2

**Suggested Solution:**

Add shortcuts like a persistent bottom or top navigation bar, quick links to commonly used sections, and possibly a recently visited list.

**Location:**

Global navigation

## Critical Reflection

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The minimalist approach strikes again. We agree completely.

## Problem was fixed in the final code

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### Problem VIII: Layout and design too minimal / layout ambiguity

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#### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Aesthetic and minimalist design (problematic minimalism)

**Description:**

Some pages, especially the homepage, are overly minimal. Sections like Continue Reading, Featured, and Trending lack proper visual separation, making the layout unclear.

**Severity:**

1

**Suggested Solution:**

Improve visual hierarchy through spacing, card-based sections, and clearer distinction of clickable areas.

**Location:**

Homepage / content pages

## Critical Reflection

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We agree that the homepage needs to be redesigned. We are happy, though, that the For You page was not criticised, as it was a pain to implement.

## Problem was fixed in the final code

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## Problem IX: No help, guidance or documentation

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Help & documentation

**Description:**

There is no help or guidance for tasks such as buying books, managing privacy settings, or understanding roles like curators. This can confuse new users.

**Severity:**

2

**Suggested Solution:**

Provide contextual help options, tooltips, explanations for key concepts, and a help section for common questions.

**Location:**

Settings page; Store; For You; general UI

## Critical Reflection

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That is a really good approach! We agree!

## Problem was not fixed in the final code

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## Problem X: Ambiguous navigation flow – users may get lost

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Combination (visibility, consistency, recognition)

**Description:**

The navigation structure is unclear and uses non-standard layouts. Users may lose track of where they are or how to navigate back or forward due to minimal feedback.

**Severity:**

3

**Suggested Solution:**

Redesign navigation with clearer menus, breadcrumb indicators, highlighted current location, and consistent back or home buttons.

**Location:**

Entire site

## Critical Reflection

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That is also a smart approach, we agree completely!

## Problem was fixed in the final code

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## Problem XI: Page animation is really strange and long

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Aesthetic and minimalist design (problematic minimalism)

**Description:** Page animations look strange and take too much time, disrupting the flow of interaction.

**Severity:**  
2

**Suggested Solution:**  
Reduce animation complexity and duration to ensure smoother navigation and faster transitions.

**Location:**  
Book page

## Critical Reflection

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As "Book Page" does not specify which page it is, we'll assume they mean the 'For You' page, as it is the only one with "special" animations. However, we completely disagree! The 'For You' page is not a place where things are meant to be fast paced at all.

## Problem was not fixed in the final code

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## Problem XII: Pages must be turned AND scrolled

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** User control & freedom

**Description:** When reading a book, users must turn pages, but each page does not fit the screen, requiring scrolling as well. This creates an awkward hybrid interaction.

**Severity:**  
4

**Suggested Solution:**  
Allow users to choose between two modes: traditional page-turning with full-page display, or continuous scrolling. Ensure each turned page fits the screen fully.

**Location:**  
Book page

## Critical Reflection

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We agree that this is embarrassing and shouldn't happen.

## Problem was fixed in the final code

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## Problem XIII: No page numbers, only percentages

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Match between system & real world

**Description:** Book reading progress shows only percentages instead of page numbers, which does not match user expectations for traditional reading.

**Severity:**  
2

**Suggested Solution:**

Add page numbers while optionally keeping percentages.

**Location:**

Book page

## Critical Reflection

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We don't know how we could have forgotten this essential feature for book readers.

## Problem was fixed in the final code

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## Problem XIV: Page-turning buttons are too small

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** User control & freedom

**Description:** Buttons for turning book pages are very small, uncomfortable to use, and do not support touch gestures.

**Severity:**

3

**Suggested Solution:**

Redesign page-turn controls, enlarge buttons, and enable touch/swipe gestures.

**Location:**

Book page

## Critical Reflection

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We agree completely. This is an important part of making the product easy to use.

## Problem was fixed in the final code

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## Problem XV: NavBar inconsistencies and poor small-screen behavior

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:**

User Control and Freedom; Consistency and Standards; Flexibility and Efficiency of Use; Aesthetic and Minimalist Design

**Description:**

The navbar uses inconsistent emojis/SVG styles, misaligned elements, poor small-screen layout, and includes a back arrow that is unnecessary on some pages.

**Severity:**

4

**Suggested Solution:**

Redesign the navbar fully, use consistent style, replace emojis with SVG icons, and apply a mobile-first approach.

**Location:**

Navbar on top of all pages

## Critical Reflection

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That is true, there is nothing more to add. It needs to be fixed.

## Problem was fixed in the final code

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# Problem XVI: Poor UI on small devices

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## Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:**

User Control and Freedom; Consistency and Standards; Flexibility and Efficiency of Use; Aesthetic and Minimalist Design

**Description:**

The design appears not optimized for mobile devices: poor hierarchy, incorrect element sizing, and overall poor layout.

**Severity:**

4

**Suggested Solution:**

Apply proper responsive scaling and redesign layouts for mobile use.

**Location:**

All pages

## Critical Reflection

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We agree that we didn't fix the mobile responsiveness completely, even though we know it is important. This was due to a lack of time, as our main focus was to create a working prototype. But we agree.

## Problem was fixed in the final code

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# Problem XVII: Zoomed-out scaling issues

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## Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:**

User Control and Freedom; Consistency and Standards; Flexibility and Efficiency of Use; Aesthetic and Minimalist Design

**Description:**

Scaling does not work properly; when zooming out or on larger screens, the UI breaks or appears poorly adjusted.

**Severity:**

2

**Suggested Solution:**

Apply consistent scaling and responsive behaviour for different screen sizes.

**Location:**

All pages

## Critical Reflection

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We don't agree. We can't see where the problem is.

## Problem was not fixed in the final code

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# Problem XVIII: Book reading progress is not saved

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## Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:** Error prevention

**Description:**

Reading progress inside a book is not saved, risking user frustration and repeated navigation.

**Severity:**

1

**Suggested Solution:**

Save reading progress automatically.

**Location:**  
my\_books/book\_detail

## Critical Reflection

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That is a very good input, we agree!

## Problem was not fixed in the final code

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## Problem XIX: Huge whitespace

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:**  
User Control and Freedom; Consistency and Standards; Flexibility and Efficiency of Use; Aesthetic and Minimalist Design

**Description:**  
Excessive empty space wastes screen real estate and reduces clarity.

**Severity:**  
2

**Suggested Solution:**  
Remove unnecessary whitespace and improve layout density.

**Location:**  
app\_code/store

## Critical Reflection

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We love the white space, but we agree that it could be improved!

## Problem was fixed in the final code

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## Problem XX: Search & Filters take too much space on small screens

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### Heuristic Evaluation (Feedback from Group 15)

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**Heuristic violated:**  
User Control and Freedom; Consistency and Standards; Flexibility and Efficiency of Use; Aesthetic and Minimalist Design

**Description:**  
On smaller devices, search and filter elements take up excessive space and hurt usability.

**Severity:**  
2

**Suggested Solution:**  
Make search and filter sections collapsible (fold/unfold) using compact SVG icons.

**Location:**  
app\_code/store

## Critical Reflection

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Yes, we completely agree! That needs to be fixed.

## Problem was partly fixed in the final code

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Problem	Do we agree?	Fixed?
I: Missing feedback after actions	Yes	No, while trying to implement better feedback, the code broke down many times
II: Unclear wording / labels	Yes	Yes
III: No "undo" / "cancel"	Partly	Partly, we added a better (and prettier) back button
IV: Inconsistent layout / navigation labels	Partly	Yes
V: User errors in purchase	Yes	Yes
VI: High memory load	Yes	No
VII: No shortcuts / inefficient navigation	Yes	Yes
VIII: Layout too minimal	Yes	Yes
IX: No help or guidance	Yes	No
X: Ambiguous navigation flow	Yes	Yes
XI: Page animation too long/strange	No	No, we feel that there is not need to
XII: Page turning + scrolling	Yes	Yes
XIII: No page numbers	Yes	Yes
XIV: Page-turn buttons too small	Yes	Yes
XV: NavBar inconsistencies	Yes	Yes
XVI: Poor UI on small devices	Yes	Yes
XVII: Zoomed-out scaling issues	No	No, we feel that there is not need to
XVIII: Reading progress not saved	Yes	No, the logic to implement that is a little to complicated to make a good implementation for the frontend. "reader.js" saves the progress in the local storage, but "book_detail.js" does not not anything about that. We tried for some time, but it did not work.
XIX: Huge whitespace	Partly	Yes
XX: Search & Filters too big on small screens	Yes	Partly

# Things, that we also want to add

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## The Annotation function

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- The annotation function was part of our paper prototype, and we would have loved to add it. Unfortunately, coding that function was not on our priority list, but we wanted to ensure that we had something good and functioning.