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LIBRA

University of Toronto – Mississauga CCT380H5, Fall 2022, Project 1 Dr. Ramtin Lotfabadi October 21, 2022

PROBLEM SPACE

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To brainstorm ideas for my app, I thought about what apps would be useful for me personally. One of the ideas that stuck out to me was a book-related app. After thinking on it, I narrowed the idea down to an app that lets me track whatever I read in one place, like a list of books I've read and want to read. To make the app even better and efficient for me, I brainstormed additional features for it besides letting users note what books they've read. After I had decided on this idea, I looked online for any apps that might resemble my idea. I noticed that a lot of apps let users make lists of books they've read but they were limited in their functionality. And they did not solve one major problem I always had when reading. I read a variety of different types of books/stories, including graphic novels, web comics and even fan-fiction occasionally. Those apps were limited to tracking the traditional forms of reading but had minimal personalities abilities for non-traditional forms of books like the ones I read. Even though I could track those non-traditional forms in other ways, for example, Webtoon and Wattpad's own app and websites, I also wanted all the books I read in one central place. As a busy student, I don't like having to spend extra brain power to track which different places I have books/stories saved. This is the problem space and focus I decided to solve with my app.

USER NEEDS

Target Audience

Busy readers who want one central place to track all the different types of reading they do. They also want other functionalities like being able to set reading goals, track their progress on books and have one place to keep all their thoughts and ideas that come up while reading.

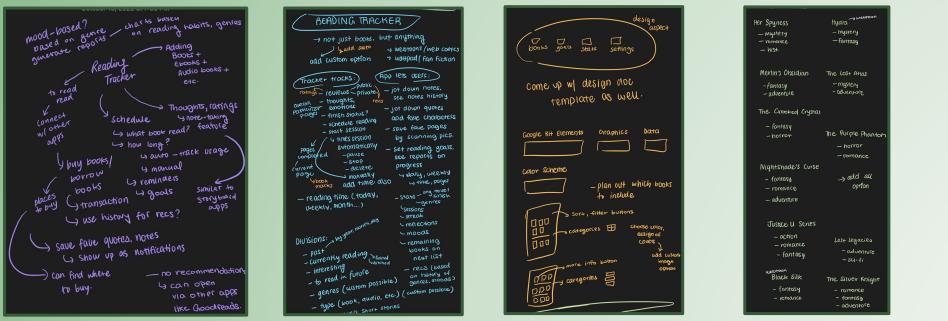
User Needs

- Need everything in one place.
 - Be able to add books and reading goals.
 - Be able to track books of different genres, types and their progress.
 - Be able to time how long they read, note their progress and make notes all in one place.
 - Bonus: Be able to see progress summaries and statistics as well.
- Simple enough to navigate quickly, complex enough to have all needed capabilities

DESIGN PROCESS

BRAINSTORMING FUNCTIONALITY

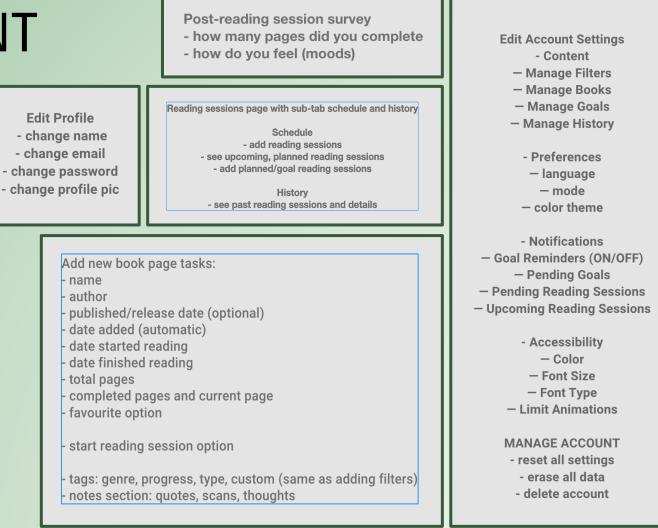
Brainstorming process started during class when Project 1 was introduced and continued up until the last day the project was due. It was done using my iPad Notes app and even on XD as simple jot names of possible functions and ideas I could add to the app.





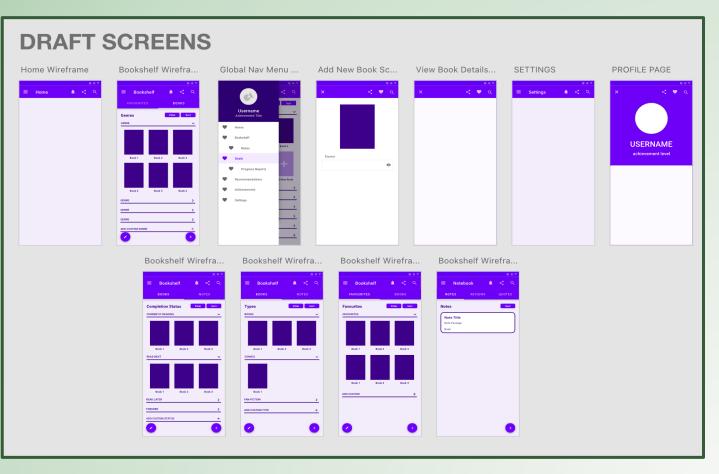
PLANNING CONTENT

Before designing some of the pages on XD, it was important for me to constantly plan what I would put on each page to keep things as straightforward and useful as possible. I mostly used XD to jot down what each page needed, before I started designing. I also needed to plan all the books, their genres and types before I started designing the Bookshelf pages.



WIREFRAMES AND MOCKUPS

In the beginning, I used draft wireframes and mockups before I designed the actual pages, but it was time-consuming, especially since I was failing to keep them as simple as possible. So, for the remaining pages, started designing them immediately, only pausing to quickly jot down their main functionalities on XD before I started.



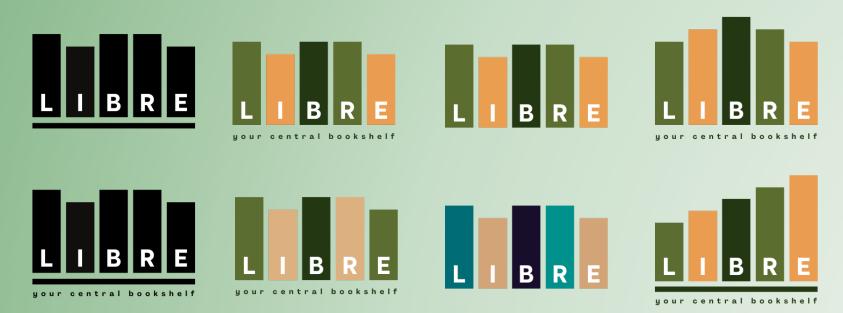
VISUAL IDENTITY

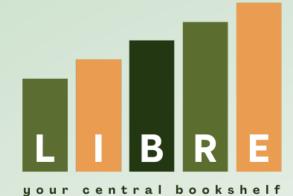
NAME

As someone who studied French for 10 years, I first started by thinking of the French word for 'book'. Mistakenly, I thought it was 'libre'. When I looked it up, I found out I was wrong: it was 'livre'. I thought calling the app 'livre' would be too literal and started thinking about what 'libre' meant in French: 'free', as in freedom and independence. Then I remembered the saying about how reading books and stories set us free from physical constraints and allow us to live vicariously through the characters and stories we read about. I thought about what reading books meant to me as a child. I used to stay home a lot outside of school and reading allowed me to learn about the world when I couldn't go out and explore it myself, which gave me a sense of freedom. And so, I decided on 'Libre' as the name for this reading list tracker app.

LOGO

For the logo, I wanted to keep it photo-realistic in the sense that Libre is a reading list tracker app. So, I went the route of designing books on a bookshelf. I also wanted to keep it simple enough to design myself.





This is the final version of the logo that I chose. I removed the bottom shelf and added the slogan for the app instead because having both looked too busy. I also rearranged the random heights of the books into incremental heights because it looked chaotic before whereas now it looks clean. The incremental heights also resemble a stairway which provides symbolism for growth and getting success/knowledge by setting consistent reading goals.

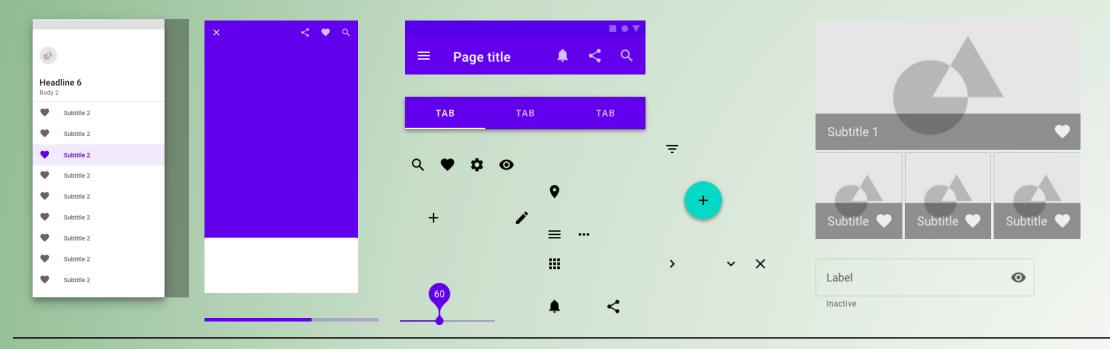
COLOR THEME



The app went through many changes in color theme, even though I started designing with a set color scheme in mind. This was because colors I thought would work together either looked bad when they were put on screen, or they ruined the contrast and were unreadable. In the end, the color scheme was only finalized after the main screens of the app were finished and I got used to which colors I wanted to use for the background, font, highlights and more. Even then, different shades and colors were used for special screens because they fit the style of that screen better.

GRAPHICS AND UI KIT ELEMENTS

All images included in the app were taken myself and graphics such as book covers and additional icons that were not part of the Google Material Kit were designed myself, most of them on Adobe XD directly: using complex combinations of the basic shapes that XD offered.



FINAL PROTOTYPE

KEY TASKS

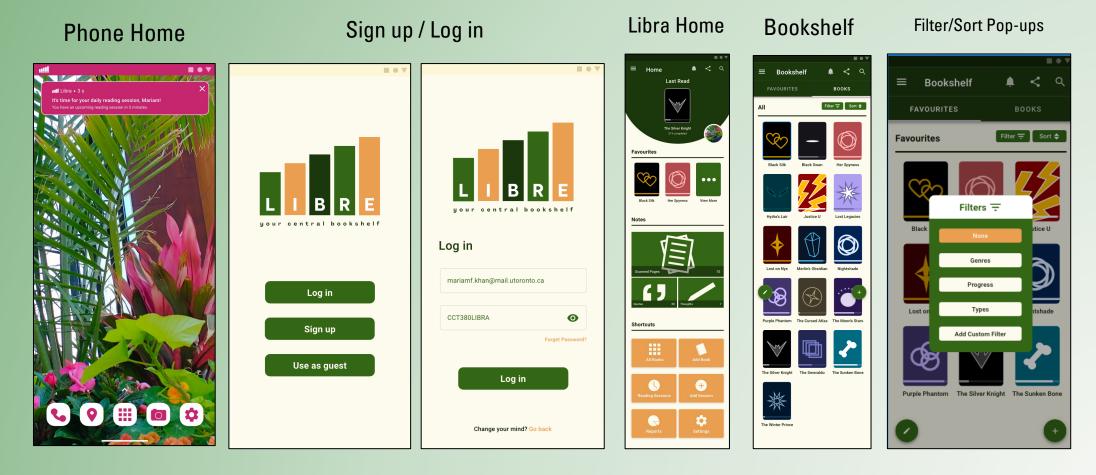
After finalizing the app's design, Libra allows users to accomplish the follow key functionalities:

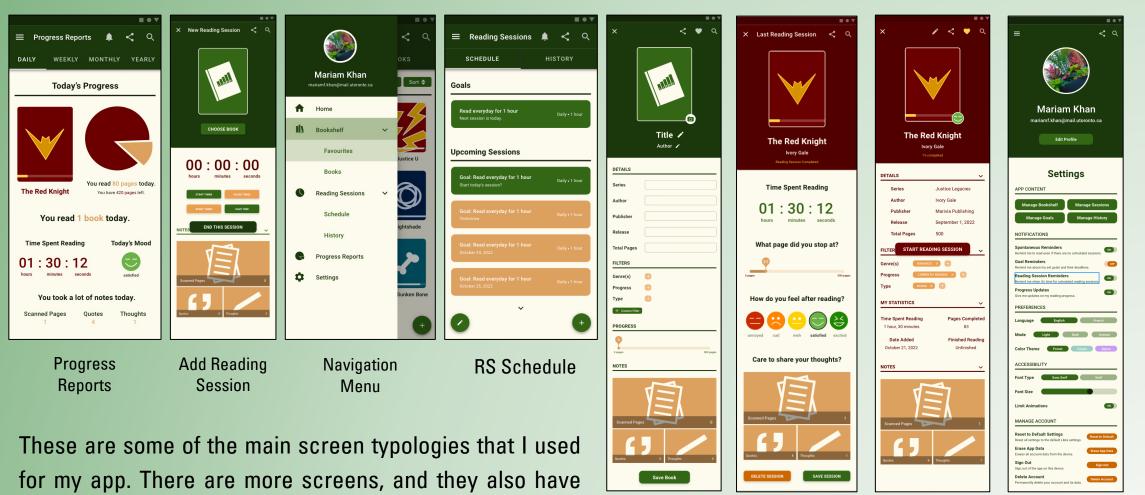
- > Register/create a new account or log into an existing account. It syncs their data with their account.
- > Sends users reminders and notifications related to reading goals and progress updates.
- Home screen shows user an overview of key functions and lets users see their last reading, favorites and notes section, as well as frequently used shortcuts.
- There is a global main navigation menu that shows user where they are all times and lets them navigate to other pages quickly and efficiently.
- User has a bookshelf where they can see their favorite books as well as all their other books. They can also filter and sort by default options (i.e., genre, progress) or create their own custom filters (i.e., type).
 - They can manually add and modify books as desired. Under the books' detail page, they can see information pertaining to that book.

KEY TASKS

- There is a Reading Session section where user can add reading goals (which automatically schedules future reading sessions) or start reading sessions manually regardless of goals. They can see their Schedule and History, including upcoming and past reading sessions.
 - Reading sessions allow users to choose an existing book from the shelf, time the session, and take notes (i.e., quotes, images, thoughts) during the session.
 - There is also a post-reading survey that asks users about their progress (how many pages they've completed), their mood and allows them to take more notes.
 - Information and notes taken during reading sessions get saved under their read book's detail page that they can access anytime by clicking on the book from the shelf.
- There is a Progress Reports section that gives users statistical overviews of their reading progress, including daily, weekly, month and yearly progress.
- There is a Settings page where users can change the default settings for the app to fit their needs better (including personalizing the theme, fonts and notification settings). They can also manage their profile and account from that page.

SCREEN TYPOLOGIES





additional variations compared to these screens.

Add Book Post-Reading Survey

ng Book Overview

Settings

FULL USER-INTERFACE OF A TRANSACTION FUNCTION

The transaction for my app is that the user gets a progress report based on their input, which is them participating in reading sessions: reading while having the app's reading session function enabled so the app can time them and then participating in the post-reading survey. I also considered adding new books as part of the transaction's input since the report also uses information related to that input.



INPUT: Add New Book

INPUT: Select Book

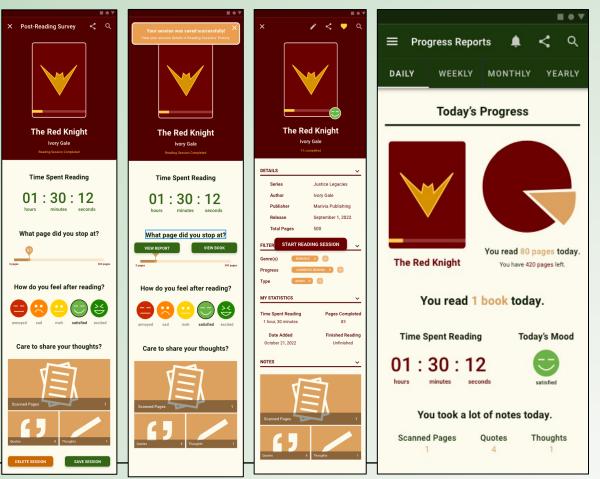
INPUT: Complete Reading Session and Survey

OUTPUT: Report

FULL USER-INTERFACE OF A FORM/REGISTRATION/SURVEY

There are two full user-interface cycles of a form/registration/survey in my app. The user registration also works for device synchronization by connecting the app to an external device such as the user's account stored on Libra's "server".





Post-Reading Session Survey

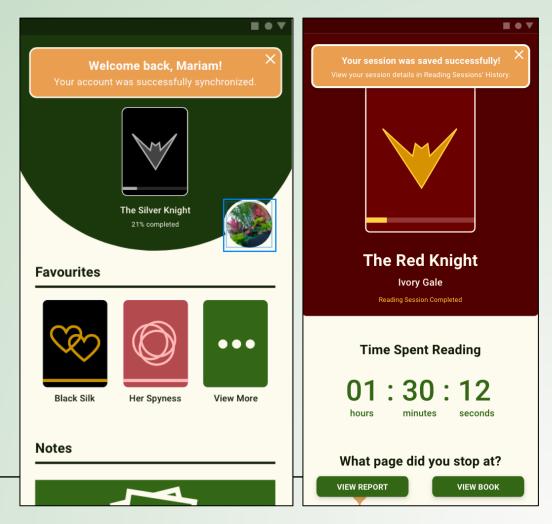
PHONE HOMEPAGE AND NOTIFICATIONS SYSTEM



The notifications show up as an overlay on top of whatever content there is on screen. For my phone homepage, I designed the page according to what my personal phone's notifications and homepage look like. The in-app notifications look a little different as they match the app's style. The notifications were designed keeping the following principles in mind:

- Make displays legible: white text against darker colors were used so that text remained legible and had good contrast.
- Principle of consistency: notification bars were placed at the top like most other apps.

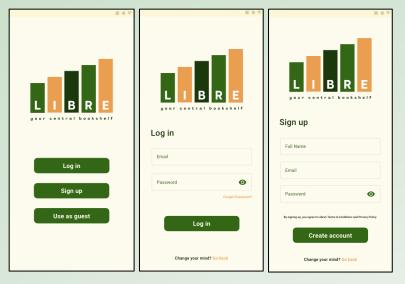
Wickens, C. D., Gordon, S. E., & Liu, Y. (2004). 13 Principles of Display Design. In *An introduction to human factors engineering* (pp. 184-193). Pearson Prentice Hall.

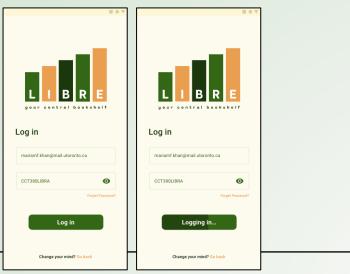


USER REGISTRATION/LOG IN PAGES

The following design guidelines were followed for these pages:

- Make displays legible: white text against darker green was used so that text remained legible.
- Discriminability: the text fields for the email and password were differentiated by asking label text that specifies what the user must enter for each; this reduces the similarity so there is less confusion and reduces the memory strain on the user.
- Principle of consistency: the sign up and log in screens look like apps' registration screens.

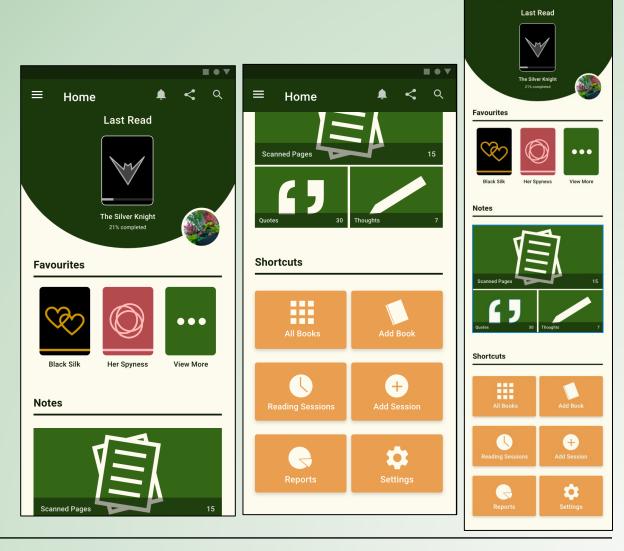




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LIBRA LANDING PAGE

> Minimizing information access cost: the most prominent feature is the top bubble that shows the user the last book they read, letting them continue off from there. This keeps a frequently accessed resource in a location where user wastes the least amount of time. The rest of this page was also designed with this principle in mind, keeping the frequently accessed features of the app on the home page, such as the favorites shelf, notes section and the shortcuts menu.



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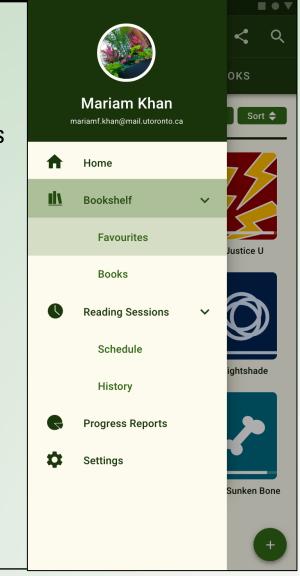
Home

Wickens, C. D., Gordon, S. E., & Liu, Y. (2004). 13 Principles of Display Design. In An introduction to human factors engineering (pp. 184-193). Pearson Prentice Hall.

NAVIGATION MENU

This screen is the most used and important page because it is the menu that users use to navigate to the rest of the app.

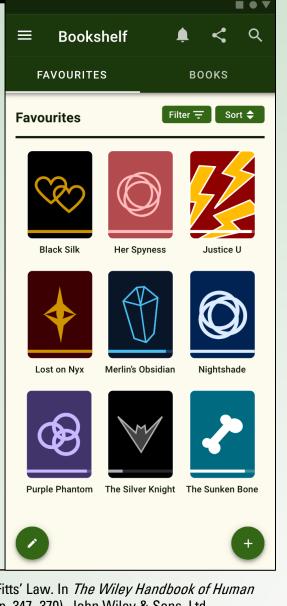
- > Make displays legible: it has good contrast and legibility of text
- > Principle of pictorial realism: the images match what the menu items lead to
- Minimizing information cost: it keeps all frequently accessed pages on the menu, including the important sub-pages. So, if the user was looking for a specific sub-page, they would not waste time looking for it by entering each page to look for it.
- Focal point (Gestalt): the page the user is currently stands out, which is important so that the user knows where they are always in the app. This also minimizes information cost.



BOOKSHELF

All the bookshelf-related pages share the same template with minimal variations.

- Fitts' Law: the Add Book and Edit Page buttons were placed at the bottom and stay fixed there even during larger Bookshelf pages so the user can easily and quickly access them.
- Make displays legible: this page has good contrast with font colors against the background color and good legibility with the book titles placed under the covers instead of on top of them.
- Replace memory with visual information: the covers are shown along with the title because it is easier to recognize books with their covers than from their titles alone. This reduces information access cost.
- Similarity (Gestalt): the book covers look like each other so users would be correct to assume clicking on them has the same function for each book: users get a book overview page.
- Proximity (Gestalt): the grouped together cover and title give users the correct assumption that the title belongs to the cover above because they are grouped close together.



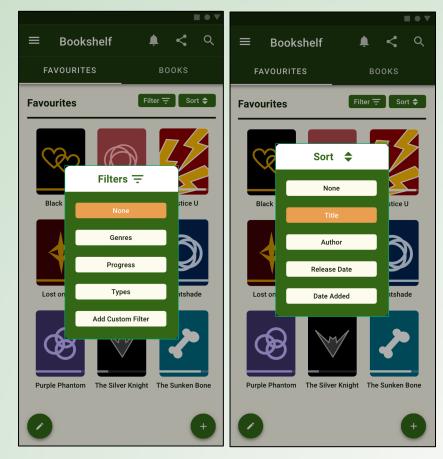
Wickens, C. D., Gordon, S. E., & Liu, Y. (2004). 13 Principles of Display Design. In *An introduction to human factors engineering* (pp. 184-193). Pearson Prentice Hall. *The Gestalt Principles.* (n.d.). Interaction Design Foundation. <u>https://www.interaction-</u> design.org/literature/topics/gestalt-principles

MacKenzie, I. S. (2018). Fitts' Law. In *The Wiley Handbook of Human Computer Interaction* (pp. 347–370). John Wiley & Sons, Ltd. https://doi.org/10.1002/9781118976005.ch17

BOOKSHELF – FILTER/SORT POP-UPS

All the filter/sort pop-up pages share the same template.

- Make displays legible: this page has good legibility and contrast with its font and background colors.
- Similarity (Gestalt): the buttons look like each other so users would be correct to assume clicking on them has the same filter/sort.
- Focal point (Gestalt): the filters/sort pop-up stands out because of the darkening of the background which emphasizes to users that this is currently active window, and they cannot do anything until they click out this window (by clicking the background or choosing a filter).



BOOKSHELF – ADD BOOK SUB-PAGES

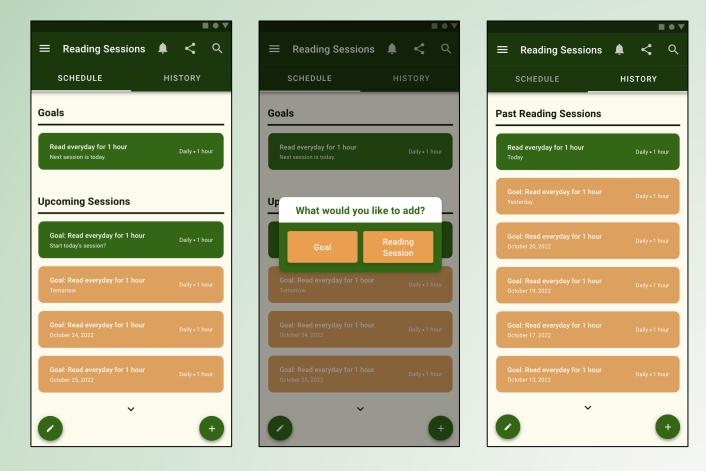
- Make displays legible: text is legible because of good contrast with background and text colors.
- Similarity causes confusion: the Notes section had three similar-looking labelled buttons, and to differentiate between their functionalities, icons were added.
- Principle of pictorial realism: the icons added to the Notes' buttons are realistic representations of their boxes because those symbols have been associated with those functions.



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READING SESSIONS

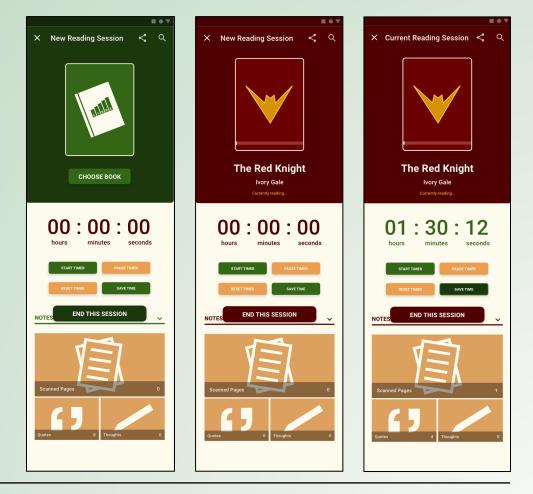
- > Make displays legible: text is legible
- Similarity (Gestalt): the session boxes are similar enough that users could correctly assume clicking on them has the same function: visiting the selected Session's overview pages.
- Minimize information cost: the most important and frequently accessed information that users would need would be which goals they have and the closest upcoming sessions, which are at the top of the screen.
- Focal point (Gestalt): for the pop-up screen, the background is darkened so the emphasis is on the pop-up asking for user action.



READING SESSIONS – CREATING SESSIONS

> Make displays legible: text is legible

- Similarity causes confusion: instead of leaving the timer's related buttons (start, pause, reset and save) the same color, I changed the color of Pause and Reset to yellow, which signifies a warning and differentiates those buttons from the others that look the same, so the user takes more care when pressing these buttons, especially Reset Timer.
- Minimize information cost: all information that will be frequently needed during the reading session is on the page: for example, the timer and its buttons as well as the Notes section, so the user can pause the time and take notes quickly while the session is ongoing.



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READING SESSIONS – POST-READING SURVEY

- Some of the principles from the previous page were used for the same reasons as before: make displays legible, similarity causes confusion, and minimize information cost.
- Principle of pictorial realism/consistency: the graphics used for the different moods are photorealistic since they accurately represent the mood they stand for.
- Redundancy gain: the meaning of the different moods is expressed in three different ways: color, facial expression and a written label, which ensures that the meaning of the different moods is accurately translated to the user.

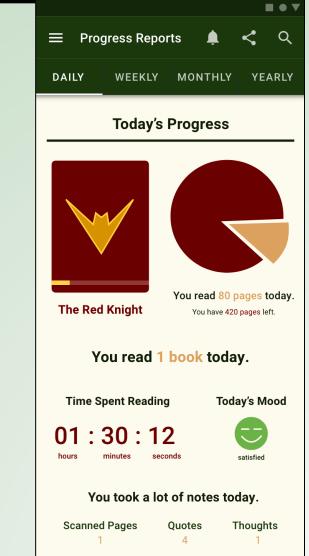




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PROGRESS REPORTS

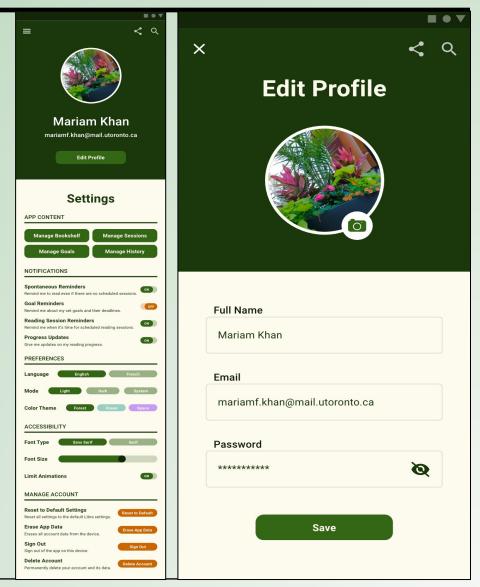
- > Make displays legible: text is legible.
- Proximity compatibility principle: the pie graph and the text underneath telling the user how many pages they've completed and how many there are to go are both connected pieces of information, so they are placed closer together.
- Replace memory with visual information: instead of needing the user to remember which book they read today or any other details of the session, the report remembers it for the user. This is particularly important when a user is looking back at this specific day's report after days or months because by that time, they will have forgotten which books they read.



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SETTINGS & SUB-PAGES

- > Make displays legible: text is legible.
- Minimize information cost: all the most needed information is located near the top, including profile management and app content settings. All the settings are always visible on this page which also reduces the amount of time a user will take looking for what they need.
- Proximity (Gestalt): all the related settings are grouped together under related headings, which makes it easier for the user to find what they need (reducing information cost as well).
- Focal point (Gestalt): the buttons in Manage Account visually stand out because they are dark yellow, which was done intentionally to warn users that these are risky buttons: using them would have permanent effects on their app and data.



The Gestalt Principles. (n.d.). Interaction Design Foundation. <u>https://www.interaction-design.org/literature/topics/gestalt-principles</u>