

Final Report

BookWorm

BookWorm is the name of this app. It was thought of through hours of intense brainstorming by the most brilliant members of the group.

Overview

BookWorm is a book organizer app. Users will use it to record and organize their thoughts on books they've read or are reading. Taking notes, searching unknown words, and adding books to a personalized library are among the many functionalities BookWorm has to offer. We tie all these functionalities together in an aesthetic and uncomplicated way, ensuring a smooth and enjoyable user experience.

Goals

The primary goal of BookWorm is to enhance the reading experience by enabling users to record and organize their thoughts and ideas about the books they read. Recognizing that jotting down reflections during the reading process is crucial for deeper understanding and learning, our app is centered on this core functionality. This ability to capture insights not only maximizes the benefits readers derive from their books but also inspired the development of BookWorm. Built around this essential feature, the app incorporates additional functionalities that complement this process, ensuring a seamless and visually appealing user interface. These features are designed to support and enrich the user's engagement with their reading material.

Explore Page and Book Discovery

The Explore page, connected to the Google Books API, allows users to search for and add new books directly to their bookshelf. This feature facilitates the discovery and exploration of new titles, enriching the book management experience.

Book Management and Custom Filtering

Users can easily add and delete books from their virtual bookshelf. Each entry allows users to track the medium of their books—whether as physical copies, e-books, or from libraries—and their current reading status. The app includes a sophisticated filtering system that sorts the list of books by genre, read status, and other categories, making it easy for users to find and organize their collections according to their preferences.

Detailed Reading Experience and Social Interaction

The detailed view of each book allows users to record unknown words along with their definitions, personal notes, and final thoughts. Users can also rate books using a star system, enhancing the personalized experience of the app. Additionally, the app enables users to connect with book groups on Facebook, allowing them to share insights, discuss readings, and get recommendations from a community of fellow readers.

Reading Timer

The app includes a customizable timer feature, where users can set specific time goals for their reading sessions, such as reading for an hour. This feature helps users manage their reading time effectively, promoting disciplined reading habits.

Personalized User Experience

"BookWorm" offers extensive personalization options, allowing users to customize their profiles by adding their profile picture, name, and basic information. This personal touch makes the app feel more individualized and engaging.

User Interface

The app features a user-friendly interface with a clean design, as seen in the provided screenshot. It includes functionalities like a progress bar to visually track reading goals and push notifications to encourage users to reach their reading targets. So when you first launch the "BookWorm" app, you are immediately brought to the Explore page. This page is designed to facilitate easy discovery and addition of new books.

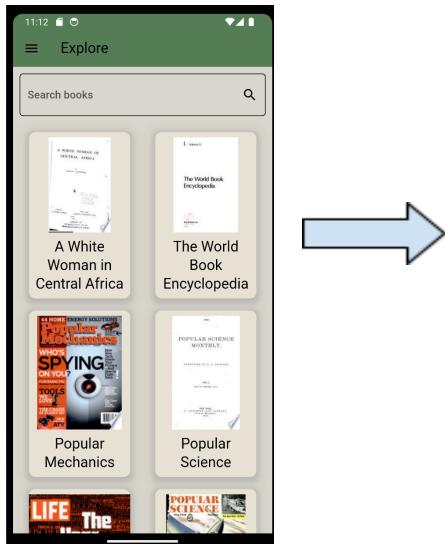


Fig. 1: Explore

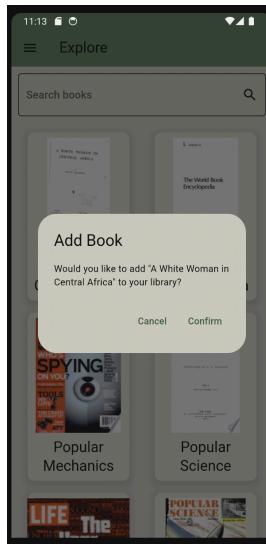


Fig. 2: Add book Confirmation

After selecting a book, you will be prompted by a confirmation screen, where you can confirm the addition of the book to your bookshelf.

Once you confirm, you can access the main menu by clicking on the top left menu bar. This menu offers various tabs such as Explore, Books, Timer, and Profile.

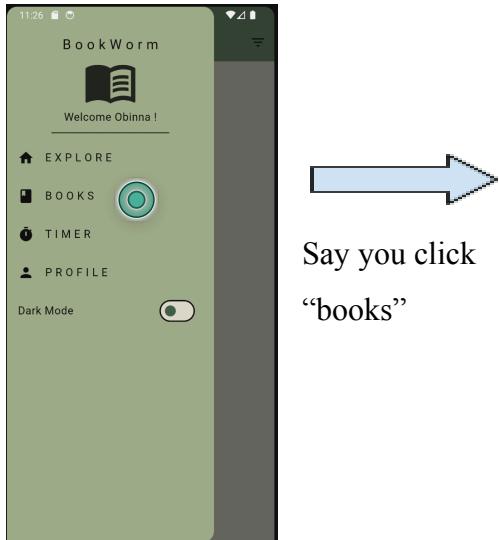


Fig. 3: Main menu



Fig. 4: Books Tab

Say you click
“books”

Next, we have Custom Filtering. You can sort it based on the genre too if you have too many book(s). Click onto the red circle on **Fig. 5**. Then, choose the genre(s) you want to sort (e.g. Juvenile Fiction).



Fig. 5: Books tab



Fig. 6: Filter tab (inside Books Page)

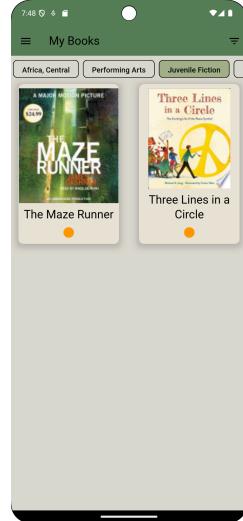


Fig. 7: Books tab (after sorting)

You will be sent to the “My Books” page which shows all books added from the Explore page. This page is where the “Book Management” comes into play when you click on a book.

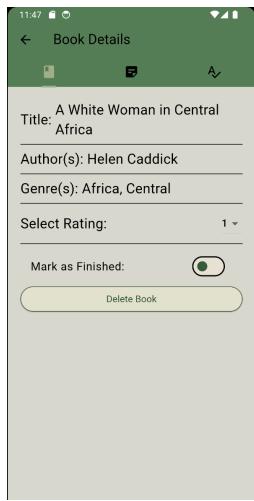


Fig. 8: Book Info

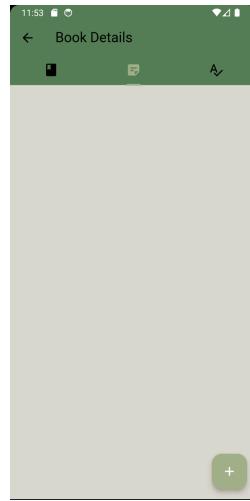


Fig. 9: Notes

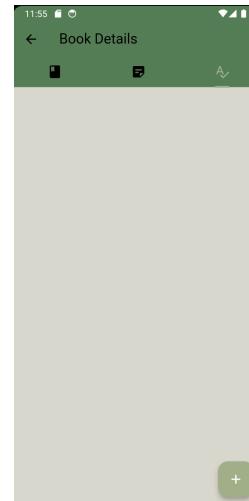


Fig. 10: Dictionary

Fig. 8: Book Info displays detailed information about a specific book, such as title, author, and genre, and allows users to rate the book out of 5 stars and mark it as finished or unfinished.

Fig. 9: Notes enable users to store and add personal notes about the book, facilitating easy tracking of thoughts and insights. **Fig. 9.1: Notes**, the **blue circle** deletes the note while the **red** one adds a new note. You can also click onto each note to see more details that you wrote.



Fig. 9.1: Book Info(Note tab)

Fig. 10: Dictionary provides a feature where users can add definitions for unfamiliar words encountered during reading, enhancing vocabulary directly within the app. **Fig. 10.1** illustrates the sample search for “juxtaposition”. Click onto a **red circle** in **Fig. 10.2** to add it into a list as you can see in **Fig. 10.3**



Fig. 10.1: Book Info (Dictionary tab)

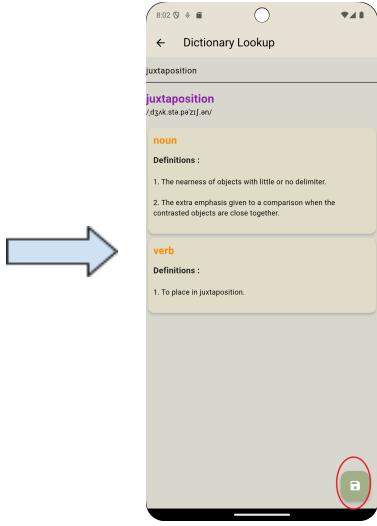


Fig. 10.2: Book Info (Dictionary tab)

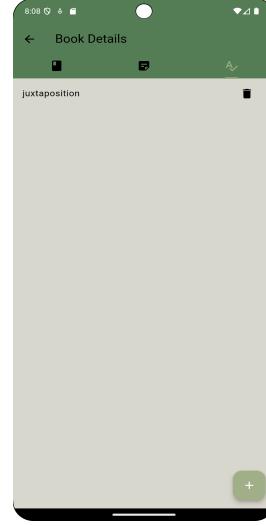


Fig. 10.3: Book Info (Dictionary tab)

Following is Timer tab, which allows you to keep track of the time spent reading books



Say you click
“Timer”

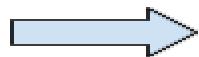
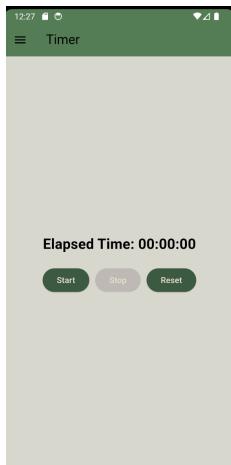


Fig 11.1: clicking “Timer”



You'll be presented with the timer page.

fig 11.2: Timer page

When the dark mode is turned on - screenshots from various pages in the app

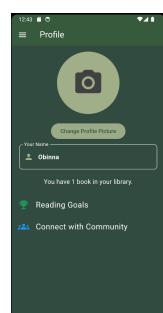
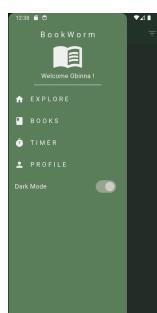
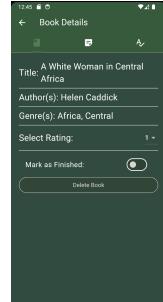
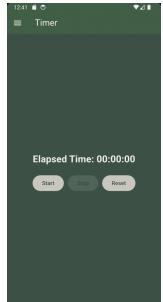


fig 12: Dark Mode setting



In the “Profile” page, the user has the option to change their profile picture, and their name, as well as track the number of books saved, and their reading goals.

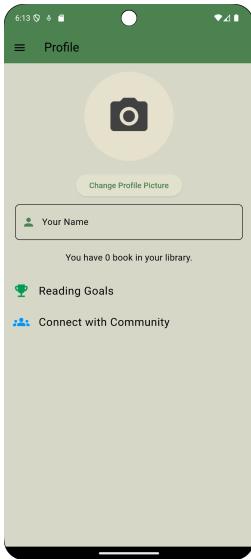


Fig. 13: Profile page

When in the “Profile” page (Fig 13), we can see the profile picture of the current user at the top of the screen with a button present that allows the user to update or change their profile image. Below this is the user’s name displayed with the option to change it by selecting the textbox holding the current username. Beneath the name, the app displays the number of books the user has in their personal library.



Fig 14: Clicking “Reading Goals”

Fig 14 displays the reading goals present in the profile page. Reading goals allows the user to enter a quantity of books that they would like to read by the end of the year. As the library tracks the completion of books, the “Progress to goal” updates to show the user’s progress in a visually

appealing manner while providing motivational feedback, which can enhance the user's reading experience and commitment to their reading goals.

Development Process

During the development of our "BookWorm" app, we adopted a hybrid approach, meeting both in-person and over Zoom, which allowed us flexible collaboration given our varying schedules. We committed to weekly check-ins to assess our progress and ensure everyone was aligned with the project's direction. Communication was primarily conducted through Discord, which served as a central hub for updates, troubleshooting, and task delegation.

We structured our work into milestones, enabling each team member to select tasks that aligned with their strengths and interests, fostering a more efficient workflow. This approach not only streamlined the development process but also enhanced team engagement and ownership of the project components.

Whenever we encountered difficulties, we emphasized open communication within the team. Sharing challenges and brainstorming solutions collectively were crucial to navigating obstacles and adjusting our strategies when initial plans proved ineffective or unsuitable. This adaptive approach helped us manage our limited time during class sessions, where we focused on developing specific features relevant to the curriculum and supplemented with minimal outside-of-class work. This setup inherently limited our progress, but was essential for integrating educational goals with practical application in a real-world project scenario.

Future Enhancements

Pending the successful implementation of initial features, stretch goals include adding free-text comments for more extensive personal reflections and possibly incorporating media such as images or clips from book adaptations to enrich the content further.

This is not in our project proposal, but if we were to expand on the project, we could implement connectivity to social media. Social media integration would allow users to post books they have

completed or are currently reading. A feature like this would create more interaction between our app and users, while marketing our application to others.

This structured approach ensures "BookWorm" not only serves as a tool for tracking and managing reading activities but also as a platform for deeper engagement and community interaction among book lovers.