

HCI - Assignment n.2

Design and prototyping of an application using a human-centered approach

Deliverable n. 1: Requirement Analysis

Project Title: BookFlix, a platform to exchange, donate and buy books.

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Lab Class: P1

Introduction

BookFlix, a platform to exchange, donate and buy books

- In a world where access to literature remains a challenge despite the presence of large book-selling platforms like Amazon, several factors such as affordability and availability continue to limit access. Consequently, the creation of a platform dedicated to exchanging, donating, and purchasing books has emerged as a compelling solution to address these persistent gaps.
- By providing this platform where individuals can share literature, we aim to democratize access to books and promote literacy.
- Moreover, this project recognized the environment impact of book production and consumption. By facilitating the exchange and reuse of books, we contribute to reducing waste and promote sustainability.

Project Objectives

BookFlix, a platform to exchange, donate and buy books

- Increase access to books for individuals who may not have the means to acquire them. Users can acquire books at reduced costs through exchange or donations, making literature more affordable and accessible.
- A thriving online community centered around literature, fostering discussions, recommendations, and collaborations among members.
- Reductions in book waste and environmental impact through the promotion of book reuse and exchange.
- Improved literacy rates and reading habits among users, leading to personal and educational growth.



Personas

BookFlix, a platform to exchange, donate and buy books

Persona: Eduarda Peixoto

- **Age:** 22
- **Gender:** F
- **Job:** Languages and Business Relations Student
- **Background:** Passionate about reading and enjoys various genres, from thrillers to fiction. Despite her love for books, Eduarda often finds it challenging to afford all the titles she wishes to read, especially on a student budget
- **Goals:**
 - Access to a wide range of books to support her studies and personal interests
 - A cost-effective way to expand her book collection without breaking the bank



Personas

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Persona: Paula Quintela

- **Age:** 62
- **Gender:** F
- **Job:** Portuguese Teacher
- **Background:** Has a deep passion for literature and education. She spends her days teaching students the beauty of the Portuguese language and its rich literary heritage. Paula firmly believes in the power of books to inspire and educate.
- **Goals:**
 - Access to a diverse selection of Portuguese literature to enrich her teaching curriculum and inspire her students
 - Wants to donate her extensive collection of books at home, which she feels are merely taking up space



Scenarios

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Scenario 1: Eduarda's Book Hunt

Context: Eduarda Peixoto, a 22-year-old languages and business relations student, is searching for affordable books to support her studies and personal interests.

User Interaction:

- Eduarda opens the BookFlix app on her smartphone.
- She logs into her account and browses through the available books using the search feature in the exchanging section.
- She finds a title she's interested in and views the details, including the condition of the book and the exchange preferences of the owner.
- Eduarda decides to request an exchange and sends a message to the owner to arrange the details.
- After confirming the exchange, she arranges a meetup with the owner to swap books.

Scenario 2: Paula's Book Donation

Context: Paula Quintela, a 62-year-old Portuguese teacher, wants to donate her extensive collection of books to free up space at home and contribute to the BookFlix community.

User Interaction:

- Paula accesses the BookFlix app on her tablet.
- She logs into her account and navigates to the "Donate" section.
- Paula adds her books to the donation list, providing details such as title, author, genre, and condition.
- She uploads photos of the books to showcase their condition.
- Paula submits the donation listing and receives notifications when users express interest in her books.

Tasks

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Scenario 1: Eduarda's Book Hunt

Main Tasks:

1. Browsing for Books: Eduarda searches for books relevant to her interests and studies.
2. Selecting a Book: She chooses a book to exchange based on her preferences and the condition of the book.
3. Initiating an Exchange: Eduarda contacts the owner to arrange the details of the exchange.
4. Completing the Exchange: She meets with the owner to swap books and finalizes the transaction.

Relevant Issues:

- Mobile Usage: The application should be mobile-friendly as Eduarda may access it primarily from her smartphone.
- Affordability: Eduarda seeks affordable options due to her student budget.
- Availability: She may have limited time between classes and other commitments.

Improvements with the Application:

- Task Automation: The application streamlines the process of finding and arranging book exchanges compared to traditional methods like visiting physical bookstores or relying on word-of-mouth.
- Trust and Security: The cautions system ensures trust between users, addressing concerns about the condition of exchanged books or potential scams.
- Accessibility: The mobile app allows Eduarda to browse and engage in book exchanges conveniently, even with her busy schedule.

Tasks

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Scenario 2: Paula's Book Donation

Main Tasks:

1. Listing Books for Donation: Paula adds her books to the donation list, including relevant details such as title, author, and condition.
2. Completing the Donation: The store ensures the smooth transfer of books to the recipients and receives acknowledgment of the donation.

Relevant Issues:

- Space Constraints: Paula aims to free up space at home by donating her extensive book collection.
- Time Constraints: She may have limited time between her teaching responsibilities to manage the donation process.

Improvements with the Application:

- Organization: The app provides a centralized platform for listing and managing book donations, making it easier for Paula to keep track of her contributions.
- Communication: Messaging features allow Paula to coordinate with interested users efficiently, eliminating the need for back-and-forth emails or phone calls.

Functional Requirements

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1. User Authentication and Profiles:

- Users should be able to create accounts and set up profiles with relevant information such as interests, preferred genres, and contact details.

2. Book Listings and Search:

- The application should allow users to browse and search for available books based on various criteria, including title, author, genre, and location.

3. Exchange and Donation System:

- Users should be able to list books for exchange or donation, providing details such as book condition, availability, and preferred exchange methods.
- The system should facilitate communication between users to arrange book exchanges or donations securely.

4. Marketplace for Buying Books:

- The app should feature a marketplace where users can buy books from other users at reduced costs, with options to filter by price, condition, and seller ratings.

5. Messaging System:

- Users should have the ability to communicate with each other through an integrated messaging system, enabling discussions, coordination of book exchanges, and sharing of recommendations.

6. Geographic Mapping:

- The application should include a map feature that displays users' locations, allowing for localized interactions and facilitating the organization of book exchanges within specific geographical areas.

7. Feedback and Rating System:

- Users should be able to leave feedback and ratings for book exchanges, donations, and interactions with other users to promote transparency and accountability within the community.

Non-functional Requirements

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1. Usability:

- The application should have a user-friendly interface to ensure ease of use for both Eduarda, Paula, and other users with varying levels of technological proficiency.
- The system should provide clear instructions and guidance to users on how to list, exchange, donate, and purchase books.

2. Privacy and Security:

- The app must adhere to data privacy regulations and ensure the confidentiality of user information, including personal details and transaction history.
- Users should have control over their privacy settings, allowing them to manage visibility on the map feature and control who can contact them.

3. Performance:

- The application should be responsive and perform efficiently, even during peak usage times.
- Load times for book listings, messaging, and other functionalities should be minimized to provide a seamless user experience.

4. Accessibility:

- The app should be accessible to users with disabilities, following best practices for design and development to accommodate diverse needs.
- Features such as text-to-speech, adjustable font sizes, and high contrast modes should be available to enhance accessibility.

Next steps

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- What type of prototype are you considering?
 - We opted to use the paper prototype due to it being easily changeable and don't have associated costs.
- How will you test it?
 - We are going to present to our colleagues to test it for us and collect data from it, with the analysis of the data we are going to remake our final project in the better way possible.