Software Requirements Specification (SRS) Document BookSwap Hub 02/19/2025

Version 1
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1. Project General Description

BookSwap Hub is a community-driven app designed to facilitate book exchanges between users. The motivation behind this app is to promote reading, sustainability, and accessibility by enabling users to share books they no longer need and find books they want to read without purchasing new copies. The app aims to create a network of book lovers who can easily swap books, leave reviews, and connect with other readers.

2. Product Features

The BookSwap Hub application is designed to revolutionize the way users interact with entertainment content. Below are the key features and functions that define the essence of the application:

Content Preference Customization: Users can select their preferred genres, romance, horror, thriller, comedy, drama, and more.

Personalized Profile Creation: Enables users to create personalized profiles reflecting their unique tastes and preferences.

Book & Listing Search: Users can list books they own and search for books available for swap.

Swap Coordination: A user-friendly messaging system for arranging book swaps.

Review & Rating System: Users can leave feedback on books and swapping experiences.

Content Creation and Sharing: Provides a platform for content creators to publish and highlight their original content, reaching a targeted audience of users interested in similar content. This includes integration with social features, allowing users to share their discoveries and recommendations with friends and followers.

3. Functional Requirements

User (Customer):

- FR0: The app will allow all users to create a profile.
- FR1The app will allow all users to modify their profile.
- FR2: The app will allow the users to browse available books for swapping.
- FR3: Users can request a swap by contacting the book owner through in-app messaging.
- FR4: The app will allow the user to view their saved content.
- FR5: Users can write reviews on swapped books and swapping experiences.

Provider (User Offering Books to Swap):

- -FR10: The provider can sign up with a username, email, and password.
- -FR11: The provider can add/edit details such as name, location, and a short description.
- -FR12: The provider can delete their account, removing all their listings.
- -FR13: The provider can upload book details (title, author, genre, condition, description, and images).
- -FR14: The provider can mark a book as "Available" or "Swapped".
- -FR15: The provider can edit or delete book listings.
- -FR16: The provider can see how many users have viewed their book listings.
- -FR17: The provider can track swap requests received.
- -FR18: The provider can view reviews left by customers who swapped books with them.
- -FR19: The provider can reply to reviews to address feedback or provide clarification.

- 4. Non-Functional Requirements
- -NFR0: The platform must be available 99% of the time.
- NFR1: Response time for search queries should be under 2 seconds.
- -NFR2: The system should allow a provider to list or modify a book entry within 3 seconds after submitting the form.
- -NF3: The interface for listing books should be intuitive and require no more than 5 steps to complete a book entry.
- -NFR4: A provider's personal information (email, password) should be encrypted and stored securely to prevent unauthorized access.

5. Scenarios

a. Provider – Cincear Weaver

i. Book Swap (Create/Modify/Withdraw Provider Profile)

- **Initial Assumption**: The provider has access to the web app and is logged in.
- **Normal**: The provider navigates to the "Profile" section, where they can create, modify, or delete their profile.
 - o If creating a profile, they enter details such as name, location, and contact information and click "Save."
 - o If modifying, they update the necessary fields and click "Save Changes."
 - o If withdrawing, they click "Delete Account," confirm their action, and the system removes their profile and book listings.

• What Can Go Wrong:

- O The provider may enter incomplete or invalid information, in which case an error message will prompt them to correct it.
- O The provider might delete their account by mistake. A confirmation prompt will require them to confirm their decision before proceeding
- Other Activities: The provider can navigate to other sections like "My Listings" or "Statistics" from the profile page.

• System State on Completion:

- o If the provider creates a profile, their account is set up and active.
- o If the provider modifies their profile, changes are reflected in the system.
- o If the provider withdraws, their account and book listings are removed permanently.

b. Provider – *Cincear Weaver*

- i. Book Swap (List Books for Swapping)
 - **Initial Assumption**: The provider is logged in and on the "My Listings" page.
 - **Normal**: The provider clicks "Add New Book" and enters details such as title, author, genre, condition, description, and uploads images. They click "Submit," and the system adds the book to their listings.
 - What Can Go Wrong:
 - O The provider may leave required fields blank, prompting an error message.
 - O The provider may upload an unsupported file format for images, triggering an error.
 - Other Activities: The provider can edit or delete an existing listing from the "My Listings" page.
 - **System State on Completion**: The book is successfully added to the provider's available swap listings, making it visible to customers.

- c. Provider Cincear Weaver
 - i. Book Swap (View Customer Statistics)
 - **Initial Assumption**: The provider is logged in and on the "Statistics" page.
 - **Normal**: The provider selects a book listing to view statistics. The system displays data such as the number of views, swap requests, and completed swaps.
 - What Can Go Wrong: If there is no data available yet, the system will display a message stating, "No statistics available.".
 - Other Activities: The provider can use filters to sort statistics by date, book genre, or popularity.
 - System State on Completion: The provider gains insights into book performance and customer engagement.

d. Provider – Cincear Weaver

- i. Book Swap(Reply to Review)
 - **Initial Assumption**: The provider is logged in and has received a review on one of their swaps.
 - **Normal**: The provider navigates to "Reviews," selects a review, and clicks "Reply." They type a response and submit it, making the reply visible under the original review.
 - What Can Go Wrong:
 - O The provider may submit an inappropriate response, in which case the system will allow the admin to moderate and remove it.
 - O The provider may lose their internet connection before submitting, causing them to retype the reply.
 - Other Activities: The provider can browse other reviews left by customers and report inappropriate feedback.
 - System State on Completion: The provider's reply is successfully added under the review and visible to future customers.

- Customer Saniyah Khan
 - Book Swap (Create/Modify Profile)
 - Initial Assumption: The customer is logged in.
 - **Normal:** The customer navigates to "Profile" to create, modify, or delete their profile.
 - What Can Go Wrong: Errors in incomplete or incorrect input. A confirmation prompt for account deletion.
 - System State on Completion: Profile is created, modified, or removed successfully.

- Customer Saniyah Khan
 - Book Swap (Browse Available Books)
 - Initial Assumption: The customer is logged in and on the "Browse Books" page.
 - **Normal:** The customer views available books and selects a book for swapping.
 - What Can Go Wrong: No books available in the selected category.
 - System State on Completion: The customer finds books they are interested in swapping.

- Customer Saniyah Khan
 - o Book Swap (Request a Swap)
 - Initial Assumption: The customer has found a book they want to swap.
 - **Normal:** The customer sends a swap request via in-app messaging.
 - What Can Go Wrong: The book owner does not respond or declines the request.
 - System State on Completion: The swap request is either accepted, declined, or remains pending.

- Customer Saniyah Khan
 - Book Swap (Write a Review)
 - Initial Assumption: The customer has completed a book swap.
 - **Normal:** The customer navigates to "Reviews" to select the swapped book, and writes feedback.
 - What Can Go Wrong: The review submission fails due to network issues.
 - **System State on Completion:** The review is successfully added to the book listing.