Project Documentation: Book Search and Management App

Overview

This project is a mobile application designed to help users sign up, log in, search for books, and manage their bookmarks. The app integrates with various APIs to fetch book data and country information, and it uses a local database to store user credentials and bookmarked books.

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1. Landing Screen

The landing screen provides two Call-to-Action (CTA) buttons: Signup and Login.
Features
- **Signup CTA**: Directs users to the Signup Screen.
- **Login CTA**: Directs users to the Login Screen.

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2. Signup Screen

The Signup Screen allows users to create an account with email, password, and country selection.
Features
- **Email Input**: Users enter their email address.
  - **Validation**: Ensures the email format is correct.
- **Password Input**: Users enter a password.
  - **Validation**:
    - Minimum 8 characters
    - At least 1 uppercase letter
    - At least 1 special character
- **Country Picker**:
  - **API for Country Data**: Uses [First API](#) to load country information and store it in a local database.
  - **Default Country Selection**: Uses IPinfo API to set the default country based on the user's IP address.
- **Signup Process**:
  - **Validation**: Checks email and password against validation rules.
  - **Local Storage**: Saves user information in a local database.
  - **Navigation**: Redirects users to the Home Screen upon successful signup.

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3. Login Screen

The Login Screen allows users to access their accounts by entering their email and password.
Features
- **Email and Password Input**: Users enter their credentials.
  - **Validation**: Checks credentials against the local database.

- **Authentication**: Validates the entered credentials and allows access if correct.
- **Session Management**:
  - **Persistent Login**: Maintains session so that users land on the Home Screen after reopening the app until they log out.

4. Home Screen

The Home Screen enables users to search for books and view results.
Features
- **Search Bar**: Allows users to search for books by title.
- **Book Listing**:
  - **API**: Fetches book data from Open Library API.
  - **Parameters**:
    - title – Search query
    - limit – Number of results
    - offset – Skips initial results
  - **Cover Image**:
    - Fetches cover images using Open Library Cover Image API.
  - **Sorting**: Manual sorting of search results by title, average rating, or hits.
  - **Pagination**: Loads more results when the end of the list is reached.

Table View Cell Modifications
- **Bookmark Button**: Added to each book result.
  - **Bookmark Action**: Stores the book in the local database when bookmarked.

5. Bookmarked Screen

The Bookmarked Screen shows a list of books that the user has bookmarked.
Features
- **Display**: Shows bookmarked books in a TableView using the same cell design as the Home Screen.
- **Remove Bookmark**: Allows users to unbookmark a book from the Bookmarked Screen.

Findings
1. **Default Country API**:
   - **Issue**: Used IPinfo API instead of IP-API due to security concerns (HTTP vs. HTTPS). The app crashed with HTTP-based APIs.

Bug Reports
1. **Back Button Bug**:
   - **Issue**: When logging in or signing up, the back button appears (that should not be present)
2. **Logout Issue**:
   - **Issue**: After logging out, the app does not return to the landing page; instead, it remains on the Home Screen until the app is restarted manually.
3. **Country Picker Update**:

- Issue: The country picker does not update its value correctly when using the country code API as the new API has a different country code so it does not match with the [First API](#).