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Reader's Den

Description

Reader's Den allows you to explore book titles on the go! This app enables you to search books title by text/voice search or by scanning the barcode behind the book, from millions of book titles.

In addition you will be able to explore bestsellers, most popular, popular localized titles etc. The lists are fetched from different review and publication house's API like New York Times Bestsellers Api, Good Readers API, USA Today Bestseller API etc. You can also purchase a book via Amazon depending on its availability.

After exploring or searching for book(s), you can save the book(s) in "MyLibrary". You can mark a book "Done reading" or "Yet to read". In addition a book can be added to a "WishList", from where you can make a purchase on a later date.

Another feature of this app allows you to exchange your books. Yes! Now exchange your books with other books on the go! In this section there will be a list "Want to exchange" where you can

add books that you wish to exchange. The books will be stored on a server in a collective bucket. You can explore all the books available for exchange in the “Available for exchange” list fetched from the same collective bucket on server. You will be able to request an exchange from any of the “Available to exchange” books against any of your “Want to exchange” book chosen by other user (If he accepts your request). Once the exchange is confirmed on both ends. You and the other user can dispatch respective books via post. So, you exchange your books with other book only by paying one side shipping cost! Yesss.. Save money, save trees and read paperbacks and hardcopies like the oldschool way! You can read all the books in the world against just a few books you have done reading, because the world is your library now!! :D

The app will be a little incomplete without social factors and touch. This app will also allow you to share book titles on your favourite social networking profiles like facebook, google plus etc. In addition this app will help you to connect with the world around you through google’s Nearby API. This feature will help you find other users with same reading interests so that you can meet new people living nearby and even exchange books without any shipping costs!

Intended User

This app is for anyone who likes/loves to read and/or want to exchange books.

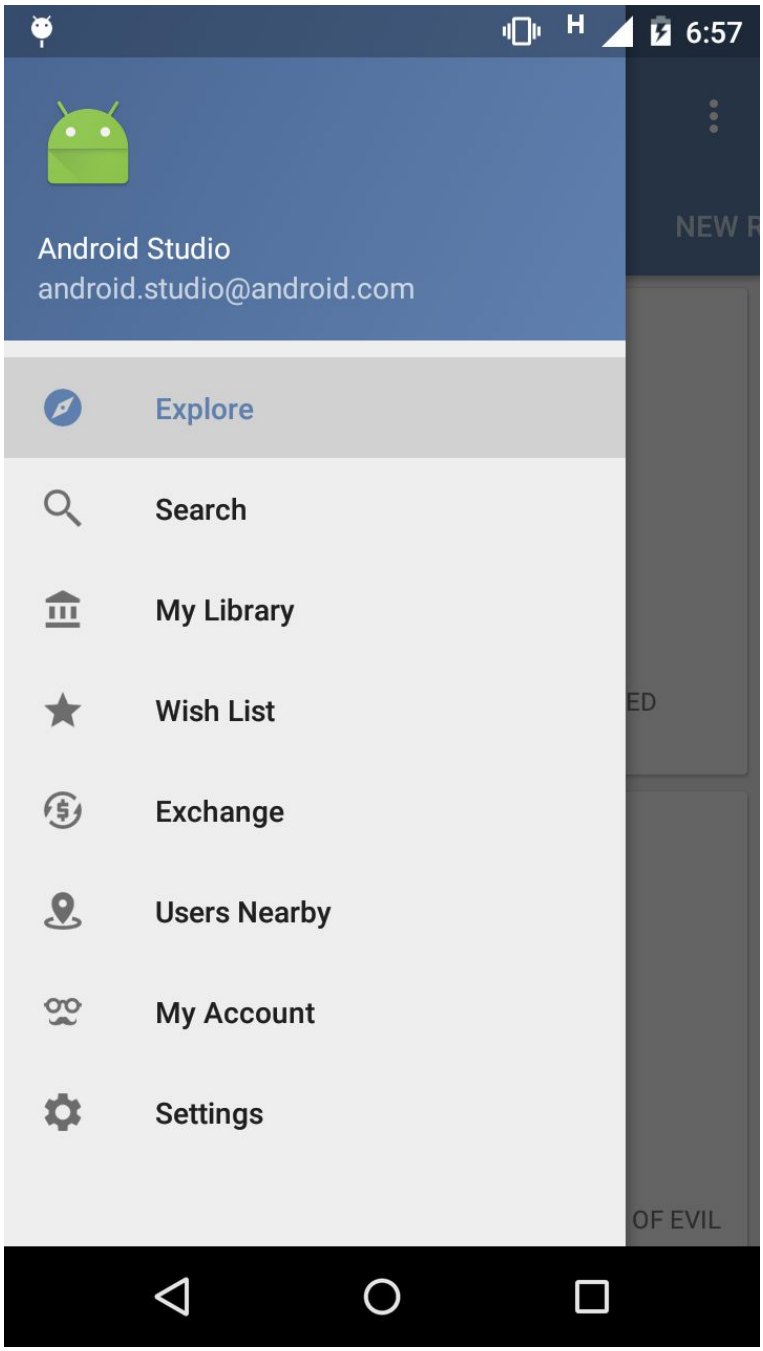
Features

List the main features of your app. For example:

- Saves information
- Scan barcodes
- Uses microphone for voice search

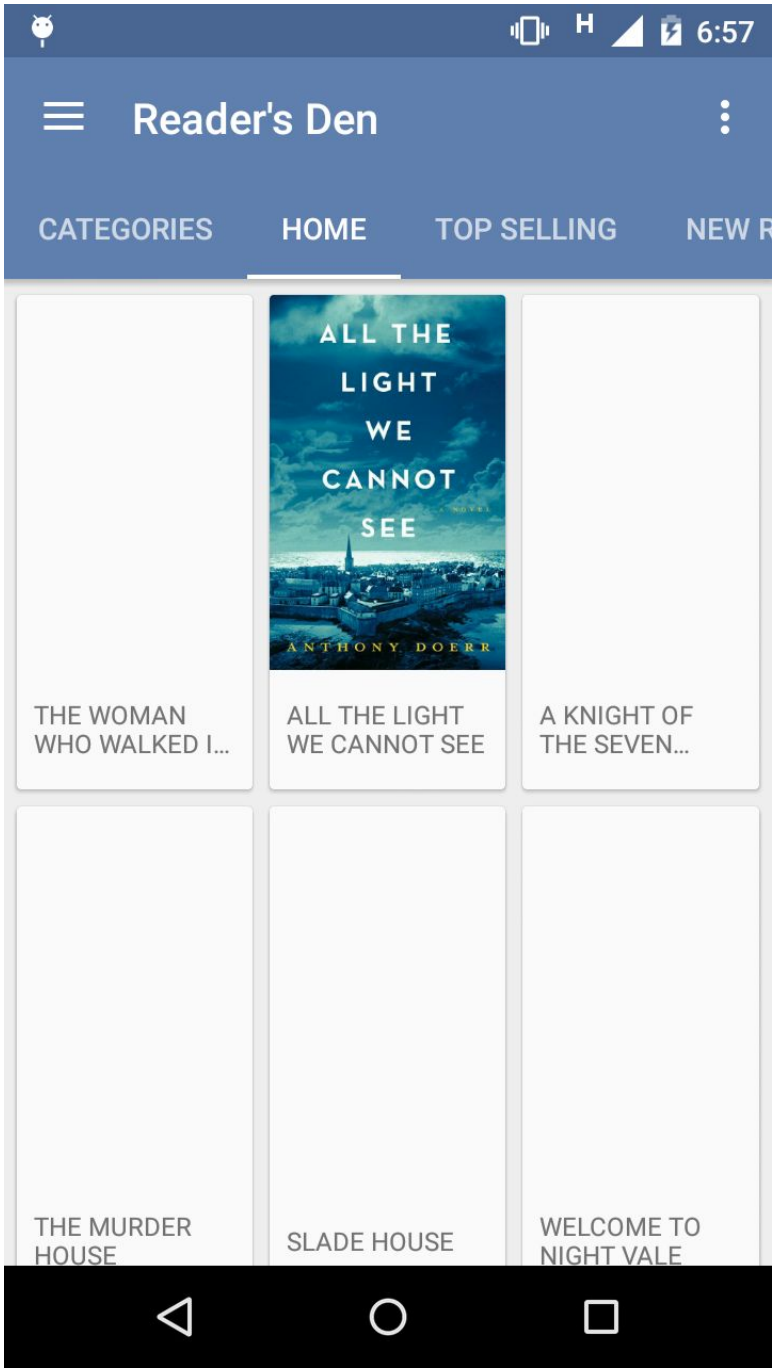
User Interface Mocks

Screen 1



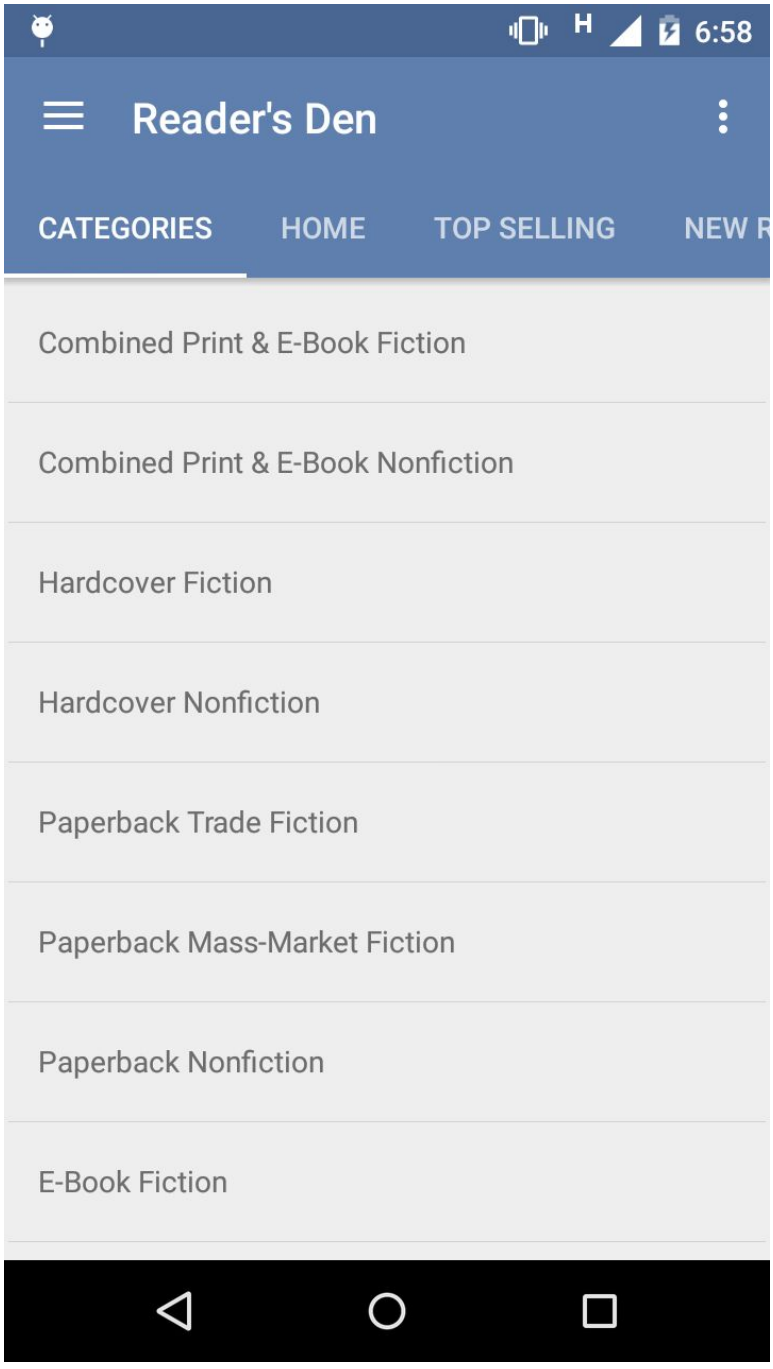
Navigation Drawer with Navigation Items for exploring the different features of the app

.Screen 2



Show list of books in different sections. A user will be able to click on book title and see full details about the book.

.Screen 3



User will be able to see all the categories available for browsing books. When clicked on a category, user will be able to explore the list of top 20/10 books in that category.

Key Considerations

How will your app handle data persistence?

I will use Firebase for data persistence.

Describe any corner cases in the UX.

While book exchange, if the user does not confirm the request. He/she will be able to view the pending requests via a notification and/or an activity in app and will have an option to confirm or cancel the request within a specific period of time (say 24 hours). If no action is taken from the user on expiry of that time, the books will be released for the collective bucket on server (to be explored by other users).

Describe any libraries you'll be using and share your reasoning for including them.

Zxing for Barcode Scan - https://github.com/journeyapps/zxing-android-embedded
Persistent Search for Text and Voice Search - https://github.com/Quinny898/PersistentSearch
Design Support Library for Material Design
Google Play Services for Analytics, Nearby API etc
Volley for Network calls and Caching of Images
Firebase for data persistence, user authentication and backend

Required Tasks

Task 1: Project Setup

- Create a new project
- Configure libraries
- Add models for data

Task 2: Implement UI for Each Activity and Fragment

- Build UI for MainActivity
- Add Navigation Drawer and populate with items
- Build UI for Explore Section

- Build UI for Search Section
- Build UI for My Library
- Build UI for Wish List
- Build UI for User Account

Task 3: Implement tasks associated with backend

- Implement Google Play Services for User Authentication and Nearby Api
- Add scan feature and voice search
- Implement Book Exchange mechanism for exchange section using firebase
- Implement share feature for sharing a book on social networks

Task 4: Handle exceptions and improve UI

- Handle exceptions and add progress bars wherever required
- Add Activity transition animations for lollipop and above
- Add runtime user permissions for Android M and above
- Add licences and terms

Task 5: Make Application compatible

- Implement Material design elements
- Make app compatible with tablets
- Check string resources for localization
- Check for right to left alignment

Task 6: Get feedback from code reviewer and friends

- Get feedback from the code reviewer and friends
- Implement suggested feedback
- Publish on Google Play Store