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Y-Library

I will use java programming language, I will use android studio 3.5 and gradle plugin 3.5.0 .

Description:

Many of us are fond of reading books and find it difficult to go to public libraries and borrow books or take time, so this application is designed to facilitate reading any reader can create an account to browse the list of books and read or add to the reading list later.

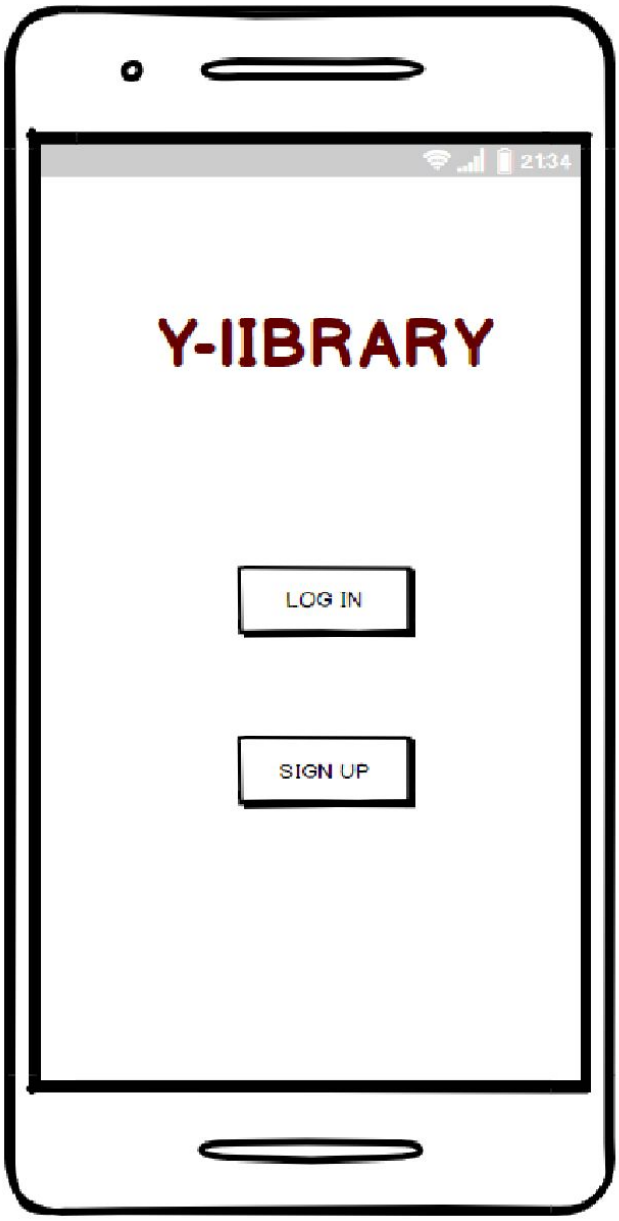
Intended User:

reading lovers and for any one who wants to read books online

Features:

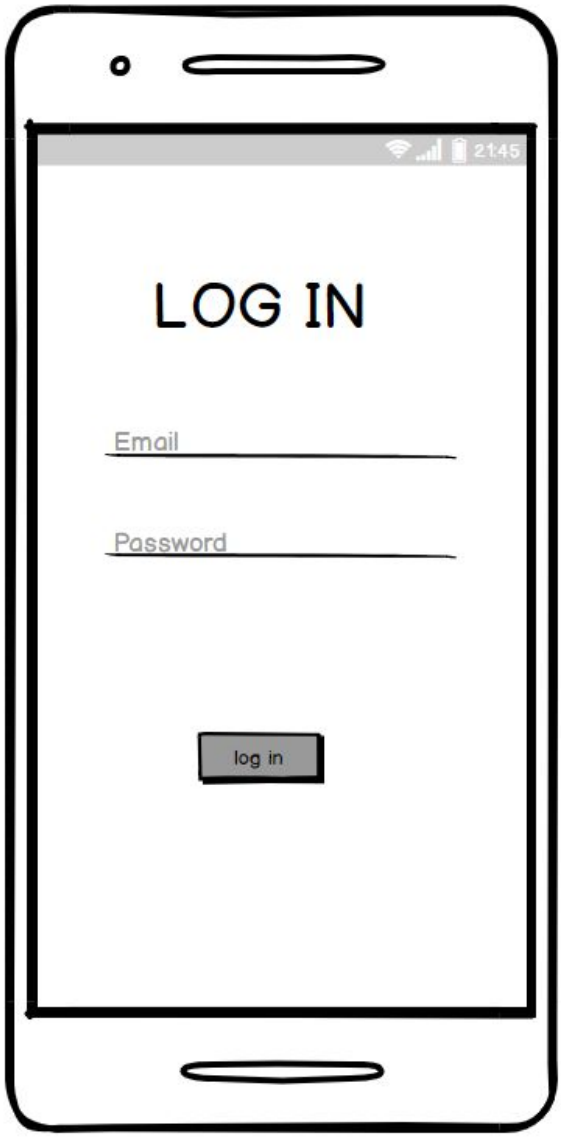
1. Create account for each user
2. Main screen to display list of books
3. Display details of the book
4.Read book as pdf
5. Add book to favorite or read later list
6. Widget to display the books in the reading later list

User Interface Mocks:

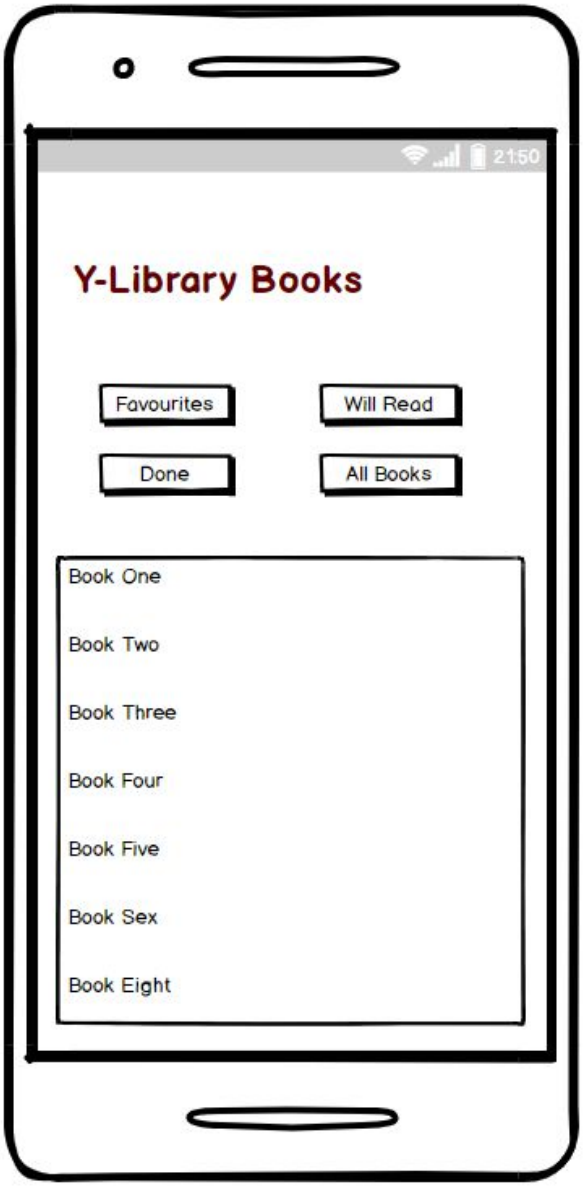


LogIn and Sign Up Activity

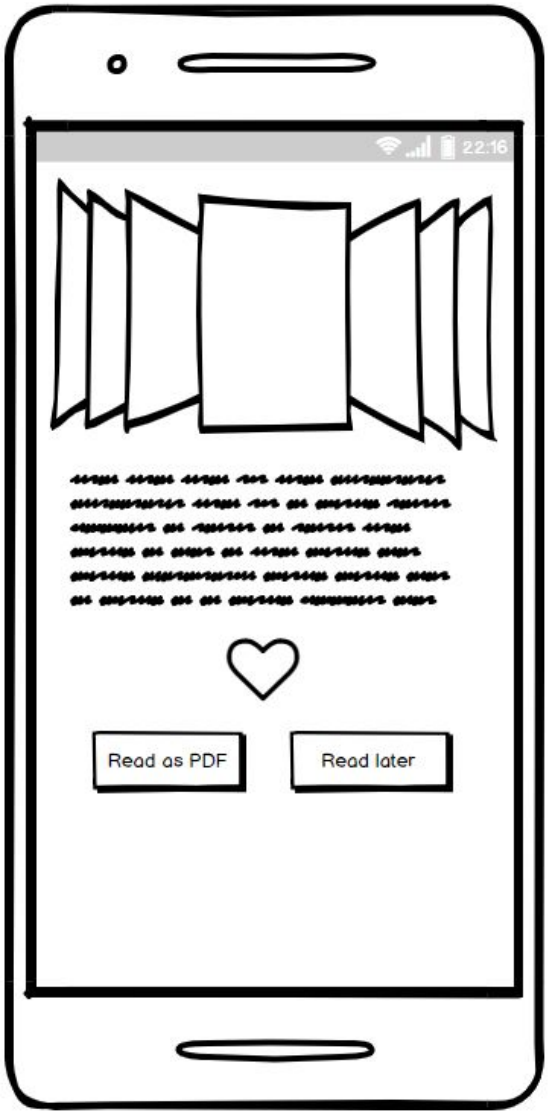
Signup Activity



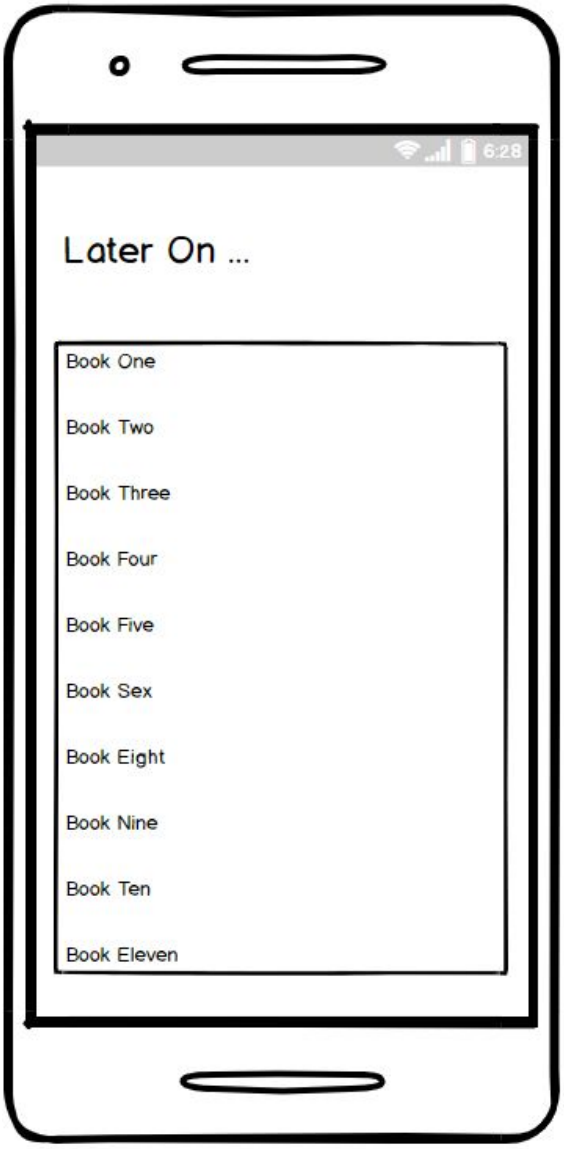
LogIn Activity



Library Activity



BookDetails Activity



Widget for show books will read later

How will your app handle data persistence?

save user information using firebase auth , save the data of the books manually in the firebase cloud firestore and handle the favorite and read later data using Room, Live ..

Describe any edge or corner cases in the app?

The main screen has 4 buttons to navigate between the lists of books by category or read later or favorite or read.

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

Picasso to upload the image properly and handling and cashing the images.

Describe how you will implement Google Play Services or other external services?

I decided to use a firebase authentication and firestore to login by using email account to make the process for login or sign up easier for the user.
Read the data of the books that I will present to you from the firestore .

Technical steps:

Task 1: Project Setup:

1. Create new project
2. Configure libraries and dependencies
3. Configure values of colors in colors.xml and strings in strings.xml

Task 2: Implement UI for Each Activity and Fragment:

1. Start Implement UI for Login, signup Activity.
2. Implement UI for Profile Activity for each reader.
3. Implement widget to show books that will he read it .
4. Implement main Activity to show books in the library.
5. Implement UI to show book's details and buttons to read and add to favourites.

Task 3: Handle login and signup operations:

1. Connect the app with firebase
2. Implement buttons in the first screen
3. Implement the signup
4. Implement login

Task 4: Implement the MainActivity functionalities :

1. **Create the Book class.**
2. **Implement the AsyncTask to fetch the books data from firestore.**
3. **Implement displaying the books functionality in RecyclerView.**

Task 5:The bookdetails activity:

1.Display the details of the book
2. Implement the Entity and Dao to use Room database
3.Implement the buttons: favorite, read later, read PDF

Task 6: Implement the widget functionality :

1. **Implement the Widget Provider**
2. **Implement displaying the books read later list with the help of Remote view Service**

Task 7: check if the app meet all the specifications include the following:

1. **App utilizes stable release versions of all libraries, Gradle, and Android Studio.**
2. **App validates all input from servers and users. If data does not exist or is in the wrong format, the app logs this fact and does not crash.**
3. **App includes support for accessibility. That includes content descriptions, navigation using a D-pad, and, if applicable, non-audio versions of audio cues.**
4. **App keeps all strings in a strings.xml file and enables RTL layout switching on all layouts.**