Submission Instructions

1. After you've completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it "**Capstone Project**"
3. Add this document to your repo. Make sure it's named "**Capstone_Stage1.pdf**"

GitHub Username: tagazok

My Book Library

Description

With My Book Library, you no longer have to worry about whether you already have a book in your library or not. Simply scan your books and we will import all of them in a secure place when you can access all the informations such as cover, authors, publisher and synopsis.
My Book Library also helps you to manage your Wishlist of books.

Intended User

This app is for everyone who struggle to remember what book he or she already have or miss his or her book library.

Features

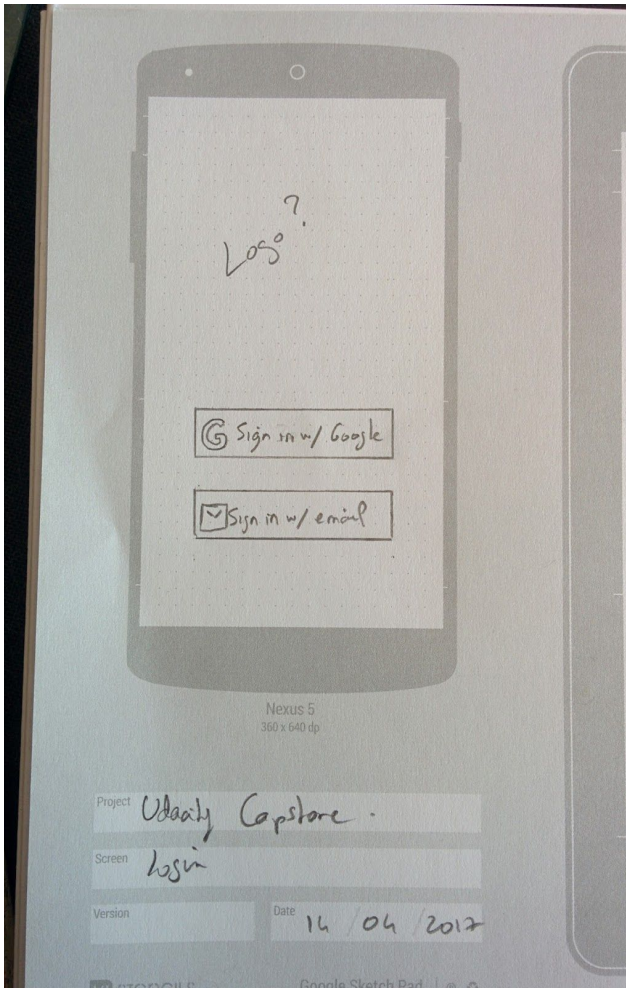
List the main features of your app. For example:

- Scan your books
- Browse your virtual library
- Manage your books wishlist
- Google and Email (or Facebook, TBD) Login
- Data saved in the cloud

User Interface Mocks

These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

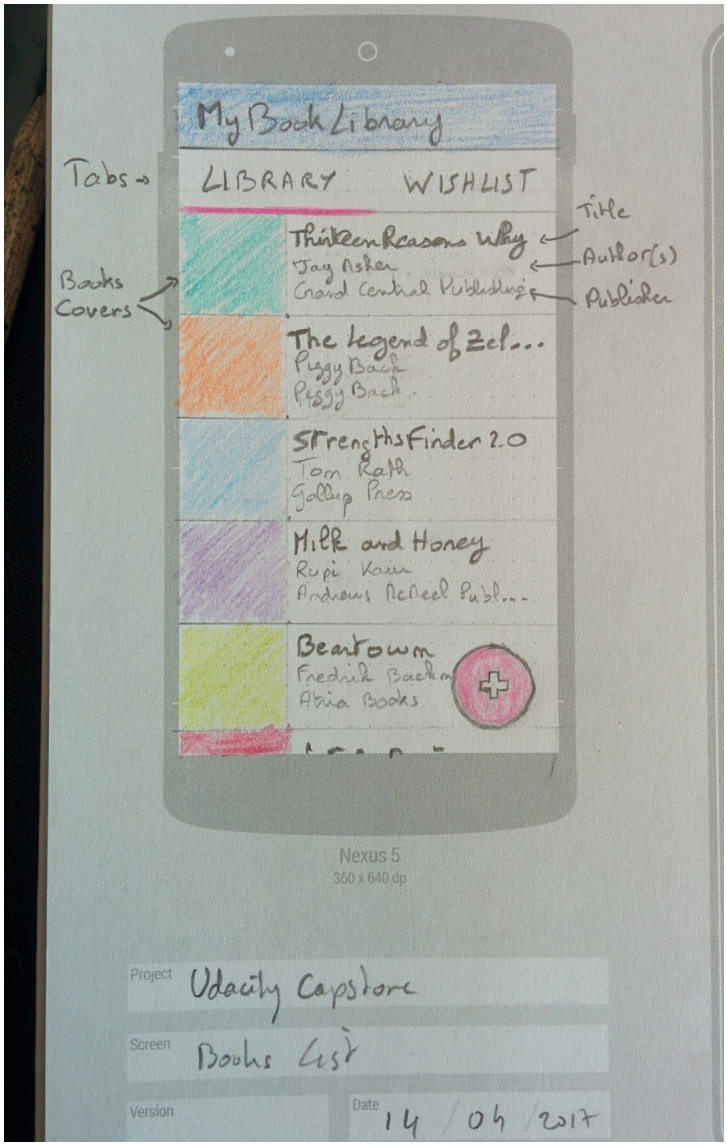
Login screen



Use Firebase Login to display 2 buttons:

- User can login with Google
- User can login with email (or Facebook, TBD)

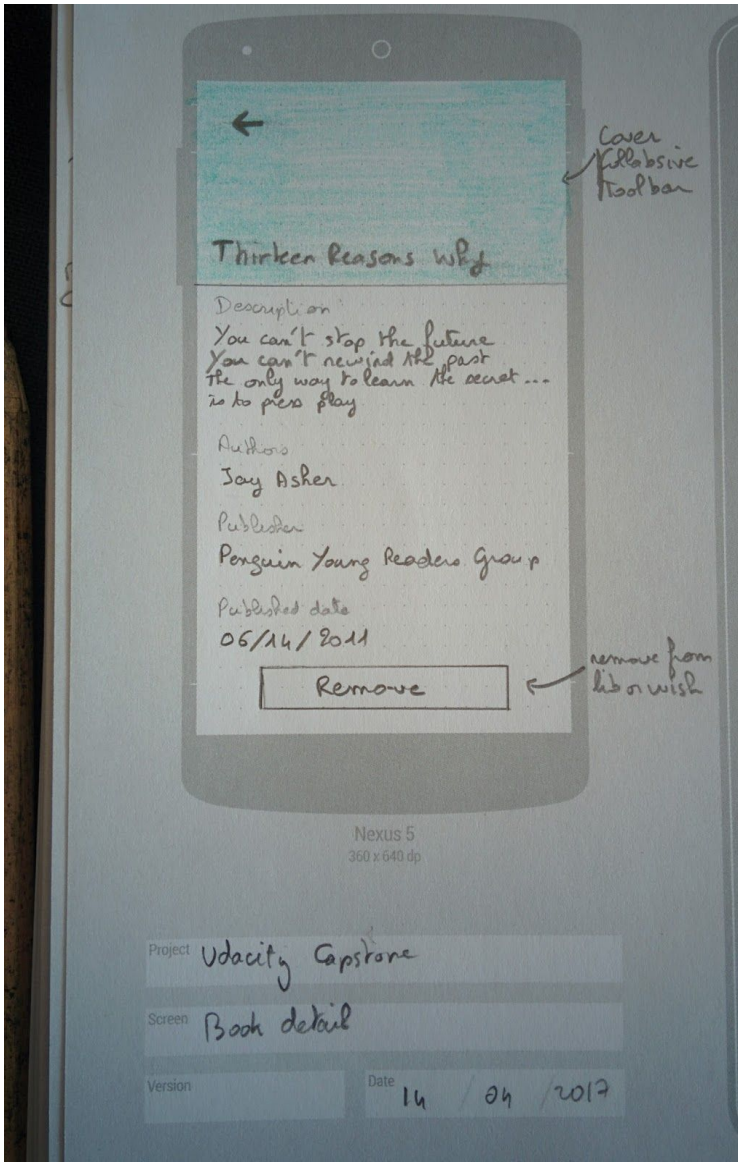
Books list screen



Two tabs :

- Your library
    - Display book cover, title, author(s) and publisher
- Your wishlist
    - Same template as library
- Button to launch codebar scanner.

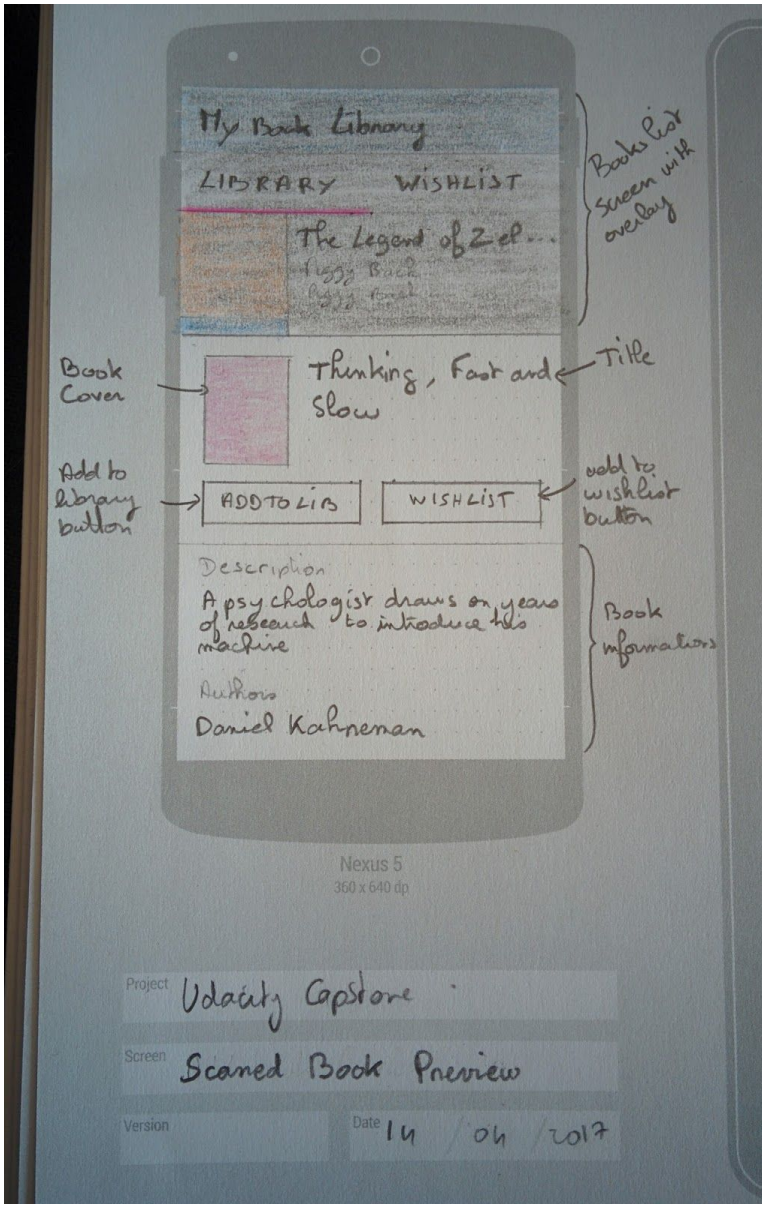
Book details screen



Book details :

- Use collabsive toolbar to display book cover.
    - On click, display cover in fullscreen.
- Display general infos : title, description, author(s), publisher, published date
- Remove button to remove the book from library or wishlist

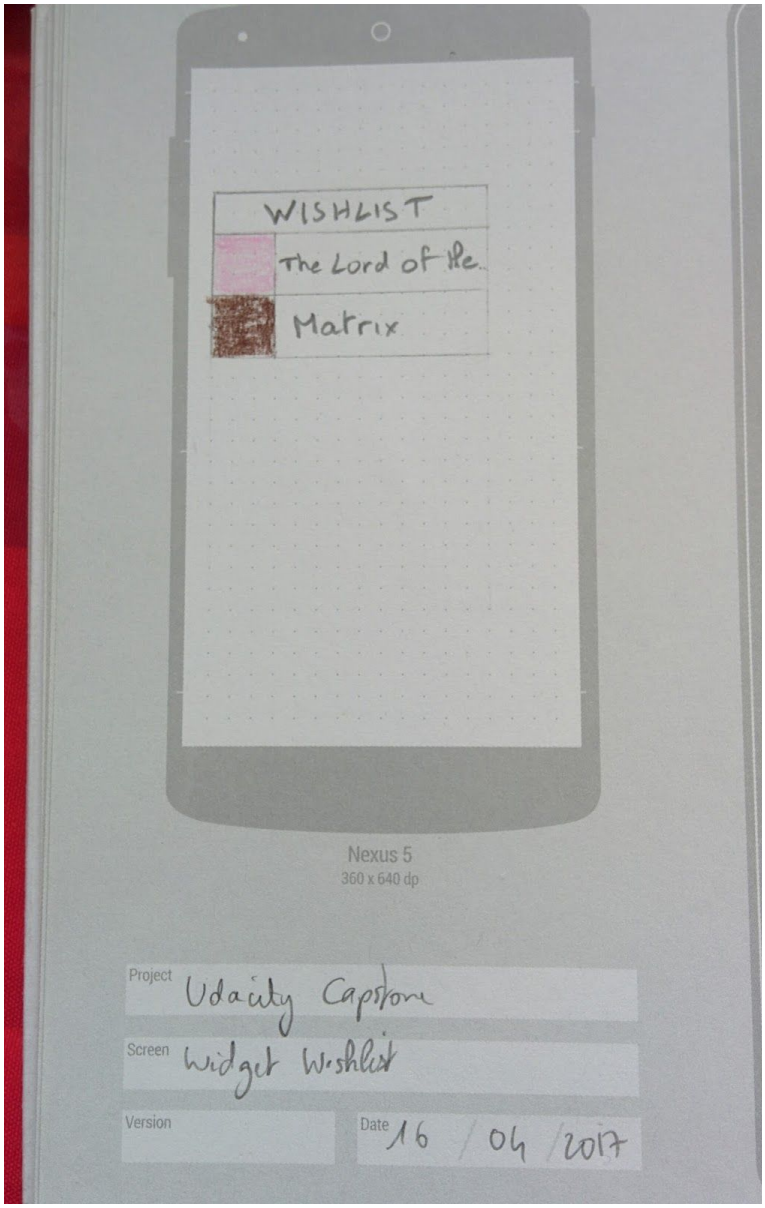
Scanned book preview



When use clicks on the + button to scan a new book, the Google APi is called and the book details are displayed in a BottomSheetDialogFragment showing all the informations (Title, cover, description, author(s)).
Two buttons :

- Add to library
- Add to wishlist

Wishlist widget



Display the wishlist as a widget with basic informations :

- Book cover
- Book title

Key Considerations

How will your app handle data persistence?

Data persistence will be handle through Firebase.

Describe any corner cases in the UX.

When in Book details:

- User clicks on the Android back button or on the upper left corner arrow to go back to Library

When in Book preview after scanning :

- User clicks on the Android back button or on the overlay zone to close the preview and go back to the Library
- User clicks on “Add to lib” or “Wishlist” button to add the book and is redirected to his Library

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

- Glide to display images from the network
- Firebase-database for storing and syncing data
- Firebase-ui-auth for Google and Facebook authentication
- Zing for barcode scanning to retrieve ISBN
- Google-api-services-books to retrieve books from Google Books
    - Search must be done in an AsyncTask :
        - If book if found then redirect to preview
        - If no book found, display Toast and stay on scanner

Describe how you will implement Google Play Services.

Describe which Google Play Services you will use and how.
I will use Firebase for two main pieces of the app :

- Through firebase auth service so data are secured and user can retrieve them if they re-install the app
- Through firebase database to save data online.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

- Setup Android project with minimum sdk and api to be compatible with all the libraries I will use
- Create Firebase Project

Task 2: Implement Books list

- Build UI for BookListActivity
- Remove Firebase Security rules
- Create fake data on Firebase
- Connect BookListActivity to Firebase to display list of books
- Add glide library to Gradle to display images thumbnails

Task 3: Add new book

- Add zing library to Gradle
- Add google-api-services-books to Gradle
- Add “add” button to BookListActivity to launch Zing barcode scanner
- Call Google Books api to retrieve book based on isbn Zing gives us
- Add book to Firebase if book is found

Task 4: View book details

- Create BookDetailActivity and Fragment
- Connect detail view to list so when user click on an item of the list, the details Activity is launched
- Use Glide to load images

Task 5: Enchance book scanning

- Create DialogFragment UI to see a resume of book details

- Display DialogFragment after book is retrieved from Google Books instead of adding it directly to Firebase
- Give the choice to the user to either add book to library of add to wishlist
- Check if book is already either in library or wishlist
    - If book is in library, display “Delete” button only
    - If book is in wishlist display “Delete” and “Add to library” buttons

Task 5: Securing data

- Put back security rules in Firebase console
- Add firebase-ui-auth library to gradle
- Implement login for Google and Facebook

Task 5: Other

- Wishlist widget
- Check Accessibility
- RTL

Submission Instructions

1. After you’ve completed all the sections, download this document as a PDF [File → Download as PDF]
2. Create a new GitHub repo for the capstone. Name it “**Capstone Project**”
3. Add this document to your repo. Make sure it’s named “**Capstone_Stage1.pdf**”