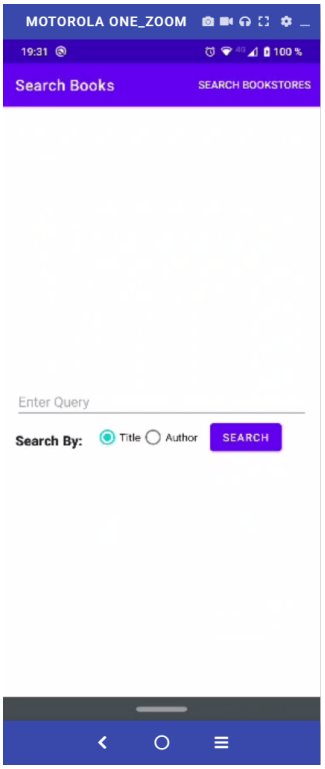
Books Application Design Document

Overview

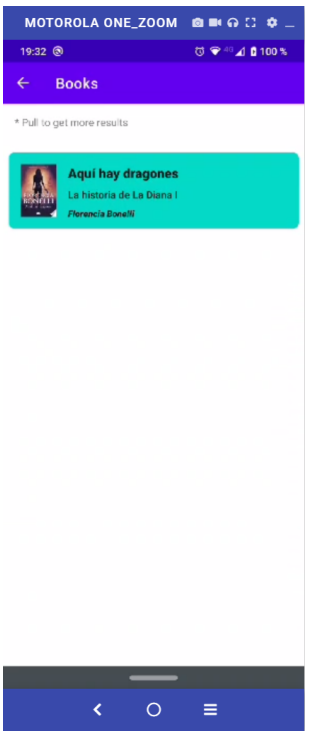
The app purpose is to have the ability to use Google Books API to find books by title or author, showing a list with the books found and being able to see each book's details.
There is a link to access to Google Play to buy the book (going out of the app to access Google Books)
Also the user can use maps to find books stores by location name.

Screenshots

The first screen is the Search Screen where the user can search books by title (by default) or Author. Also this screen has the option menu to search bookstores.

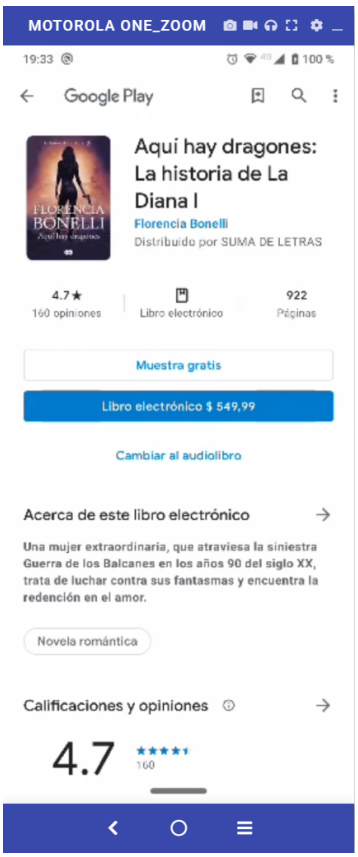


When the user taps search button, it will search the books and show a recycler view with the results found.

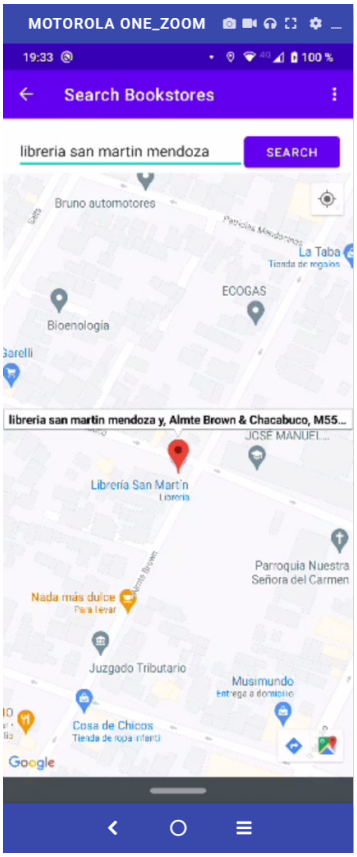


Tapping in a book's card the app will navigate to the book's details screen.

And tapping the buy button will open Google Books Application.



When the user selects Search BookStores menu the map opens in the current location and is able to search a bookstore by location name.



Data Source

The data is retrieved from `https://www.googleapis.com/books/v1/volumes` building the query by author or title according to user selection.
Every time the call is made to the API the data is stored in a local database so we can have a cache for the information retrieved.
In the list pull to refresh delete all data from the database and call the API again.
There is also a worker running once a day to cache the latest query in case the user wants to search the same books.

Rubrics

Android UI/UX : All the interfaces have some styles and animations using MotionLayout and ConstraintLayout.

Local and Network data: As mentioned in the section before the data is retrieve from Google Books API and stored in a local database following the data structure.

Android system and hardware integration: The app is build with MVVM and used Location to find bookstores.