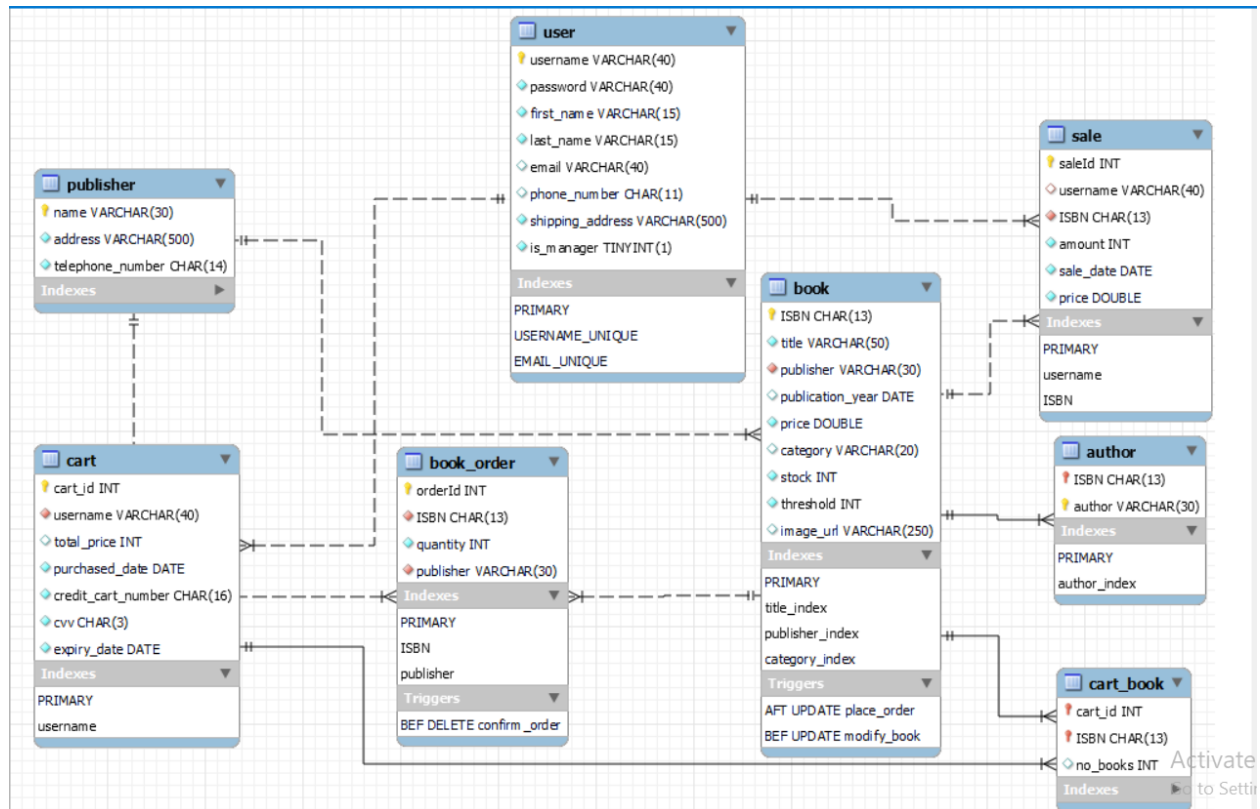


BookStore Project

Team members:

ID	Name
19015550	جمال عبدالحميد ناصف
19015854	صلاح الدين أحمد محمد السيد الطنجي
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19015893	عبدالرحمن السيد احمد علي
19015894	عبدالرحمن السيد جاد السيد
19015941	عبدالعزيز محمد عبدالعزيز
19016063	عمر خيرت محمد أبوضيف
19016574	محمود محمد مرعي
19016195	لؤي مجدي عبد الحليم علي
19016198	لؤي نصر زهران محمد

ERD Diagram



Triggers Analysis

We created 3 triggers:

- **modify book trigger**: happen before update on book table check if there enough in stock before any purchase.
- **place order trigger**: happen after update on book table check if the number of books becomes less than the threshold, and place order if true.
- **confirm order trigger**: happen before delete on book order update the book with the order ISBN and add the amount on order to the stock.

Indices Analysis

We created indices to speed up the searching process. The indices are created on the attributes searched by the users like ISBN, title, category, author and publisher.

Transaction Control

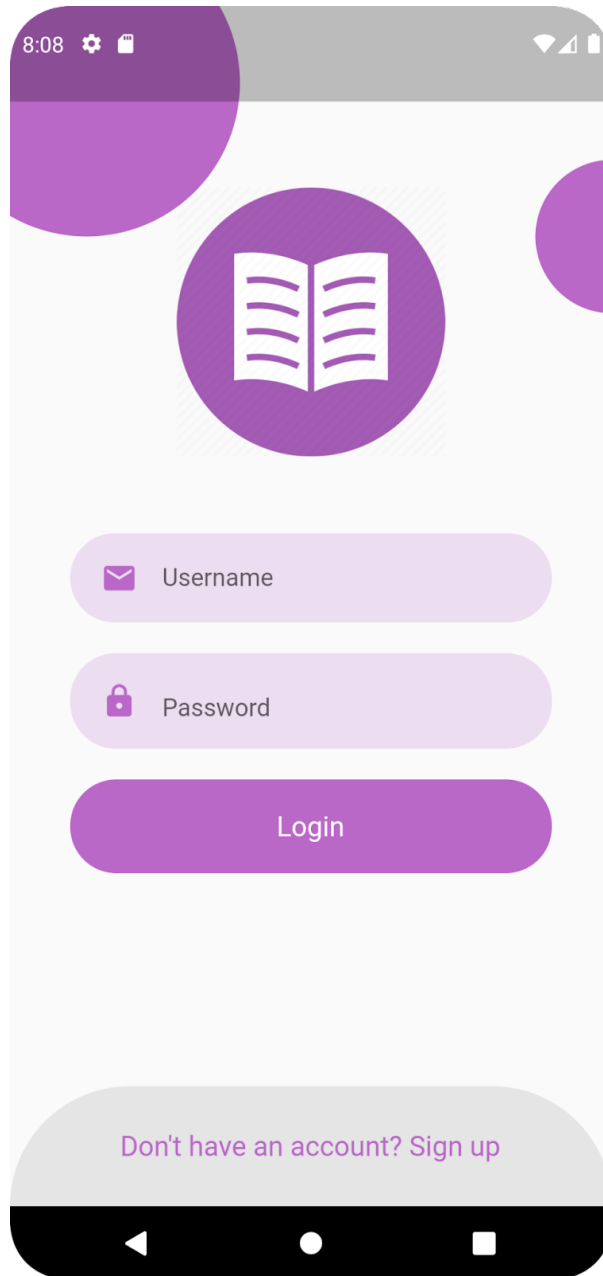
As we use JDBC driver in the backend, we use the auto-commit mode which is the default setting for JDBC and automatically begins a transaction on every query and either commits it when it finishes execution or roll it back if an exception of any kind happens. More on that [here](#).

Concurrency Control

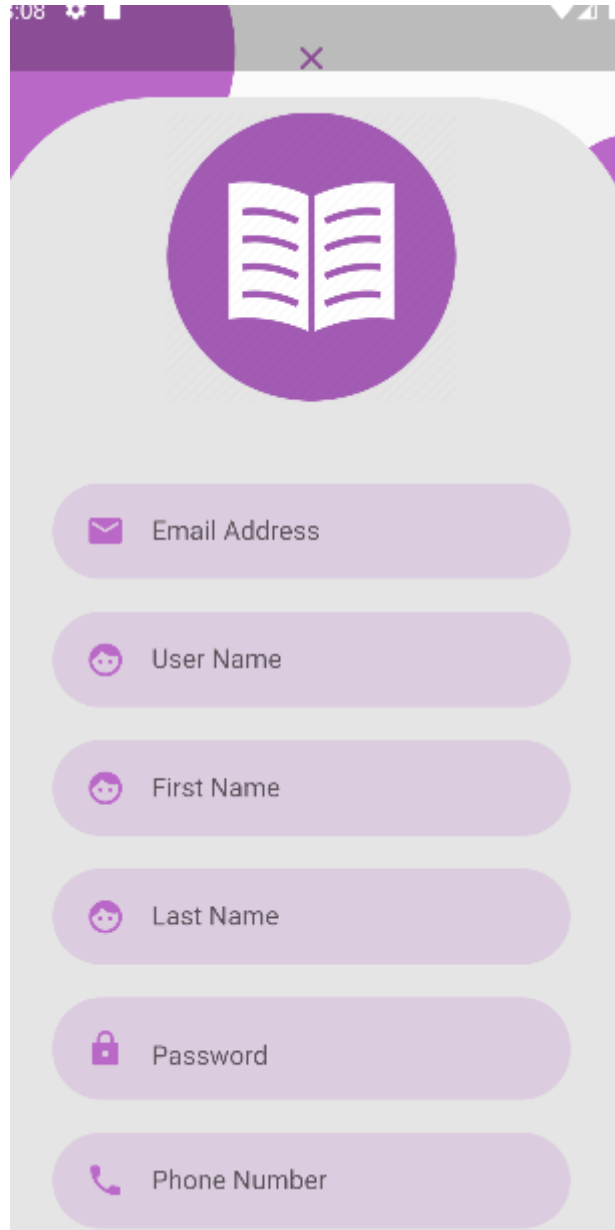
We use an isolation level of “Repeatable Read” which is provided by MySQL, we believe it is more than enough as it is more strict than “Committed Read” which is the bare minimum for our application. More on that [here](#).

Sample Runs

- Login



- Signup



A mobile application interface for a signup screen. At the top, there is a purple header bar with a white 'X' icon in the center. Below the header is a large, rounded rectangular area with a light gray background. Inside this area, at the top, is a purple circular icon containing a white open book symbol. Below the icon are six rounded rectangular input fields, each with a purple icon on the left and a text label on the right. The fields are: 1. Email Address (with an envelope icon), 2. User Name (with a person icon), 3. First Name (with a person icon), 4. Last Name (with a person icon), 5. Password (with a padlock icon), and 6. Phone Number (with a telephone handset icon).

Email Address

User Name

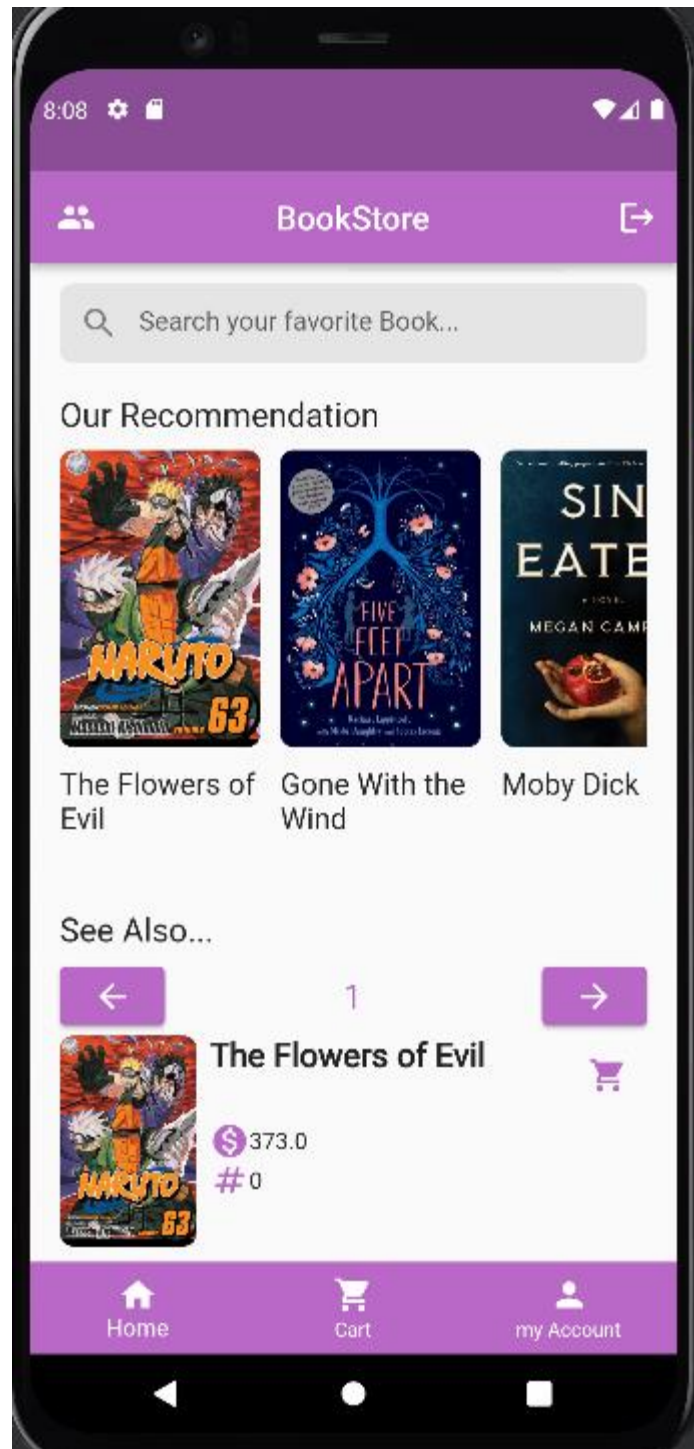
First Name

Last Name

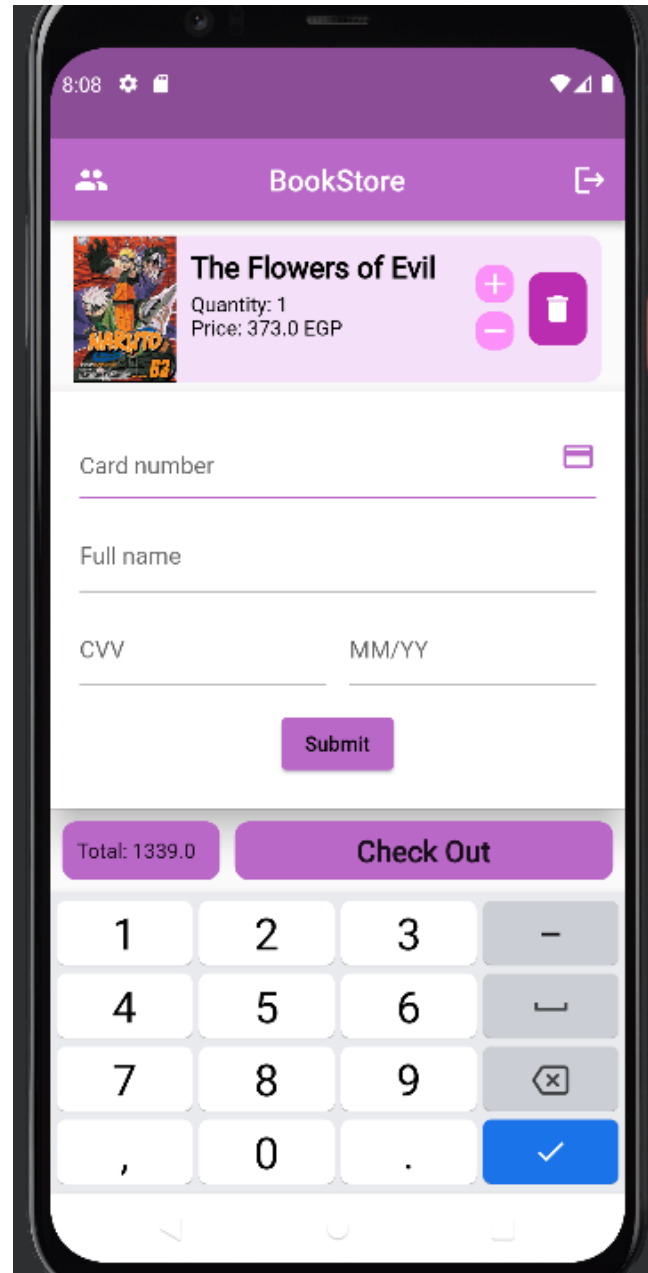
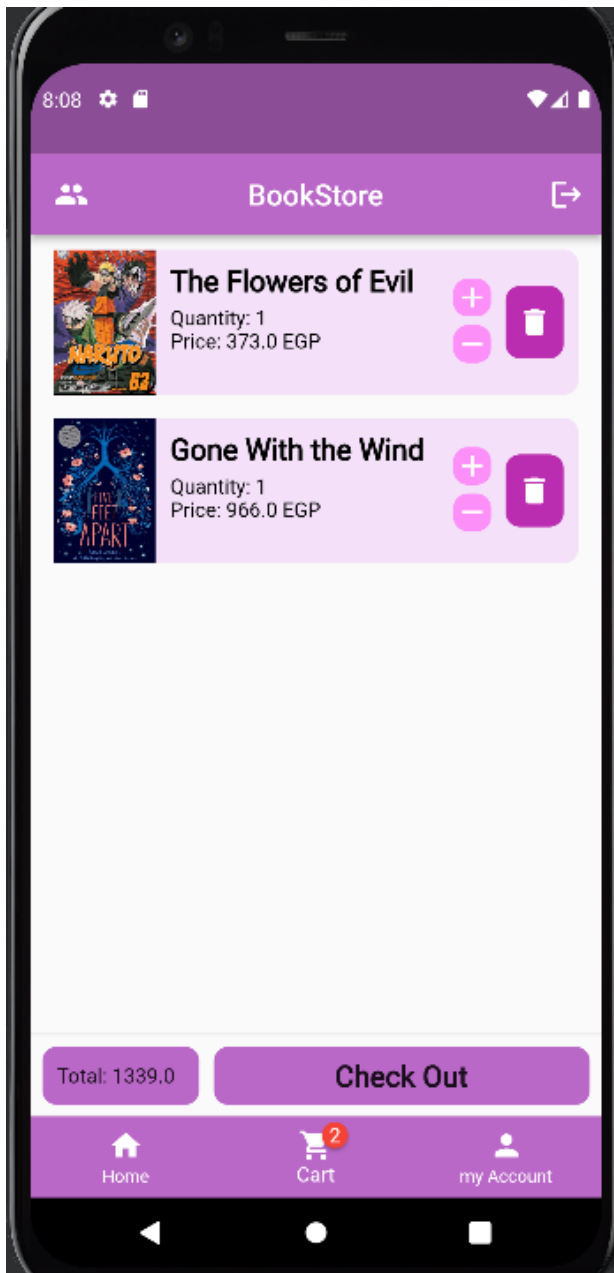
Password

Phone Number

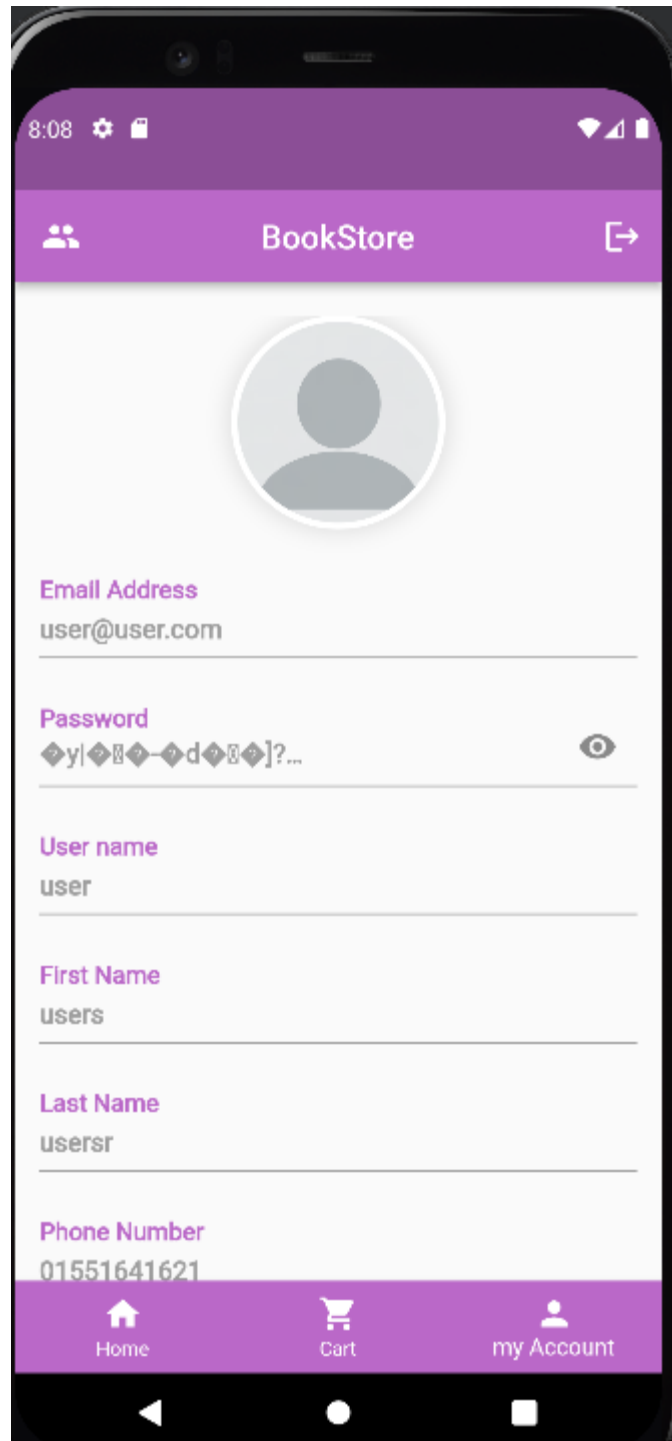
- Home page



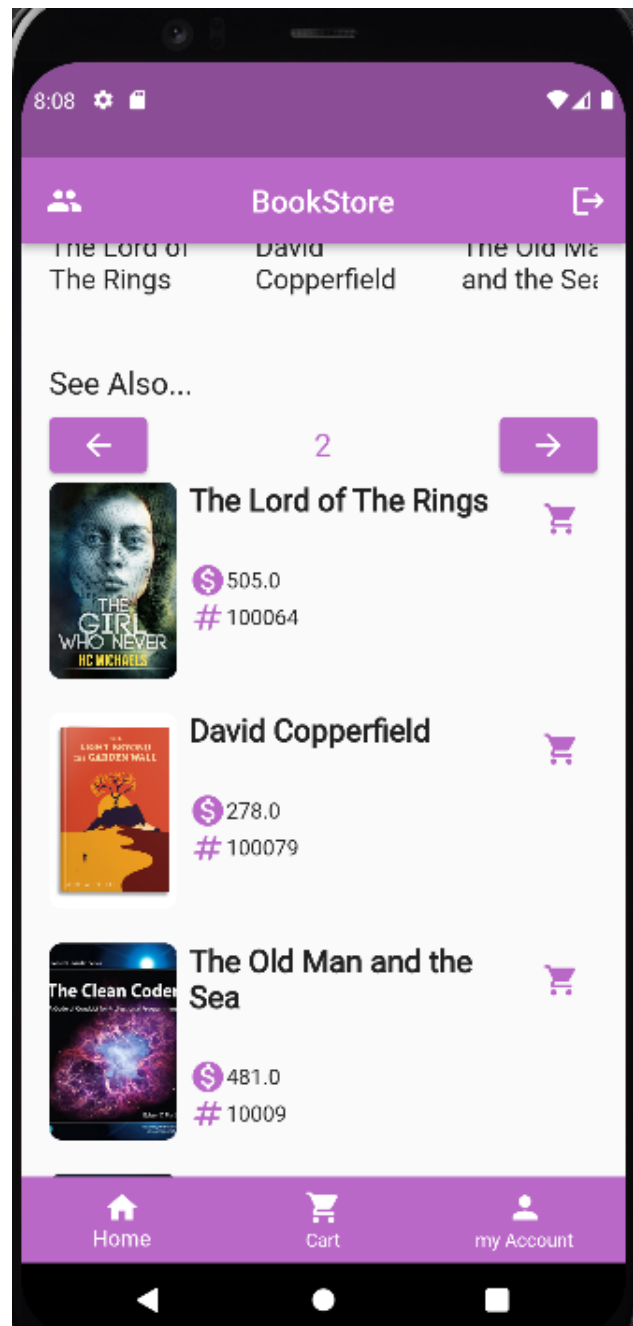
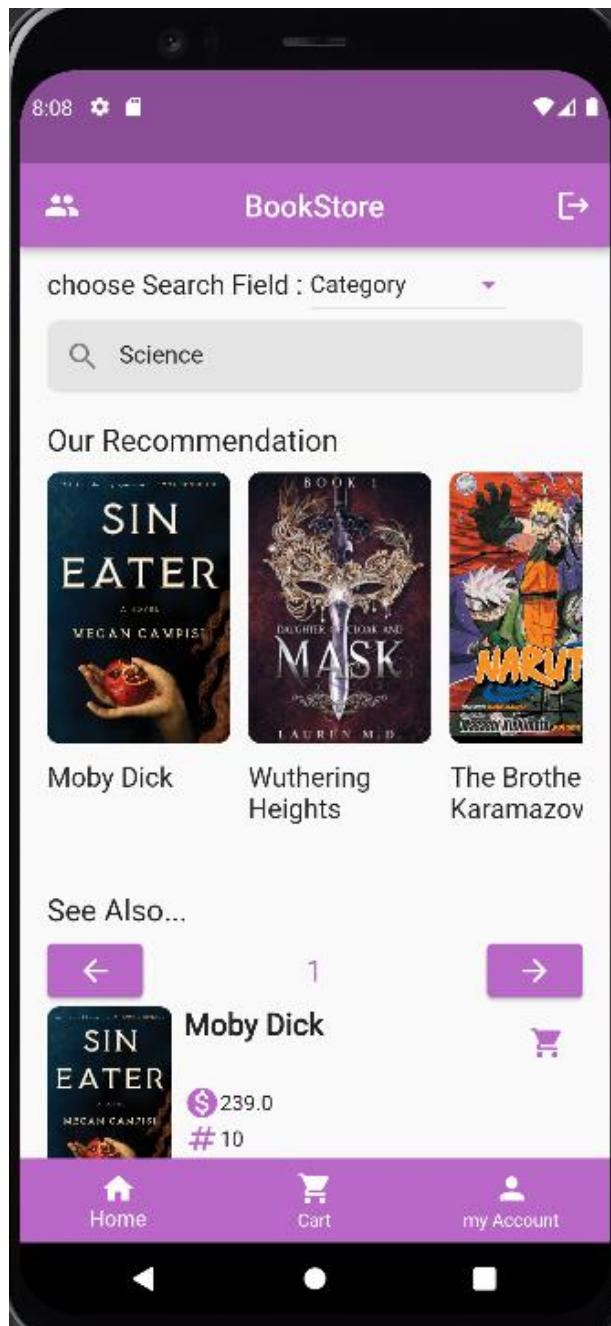
- Cart



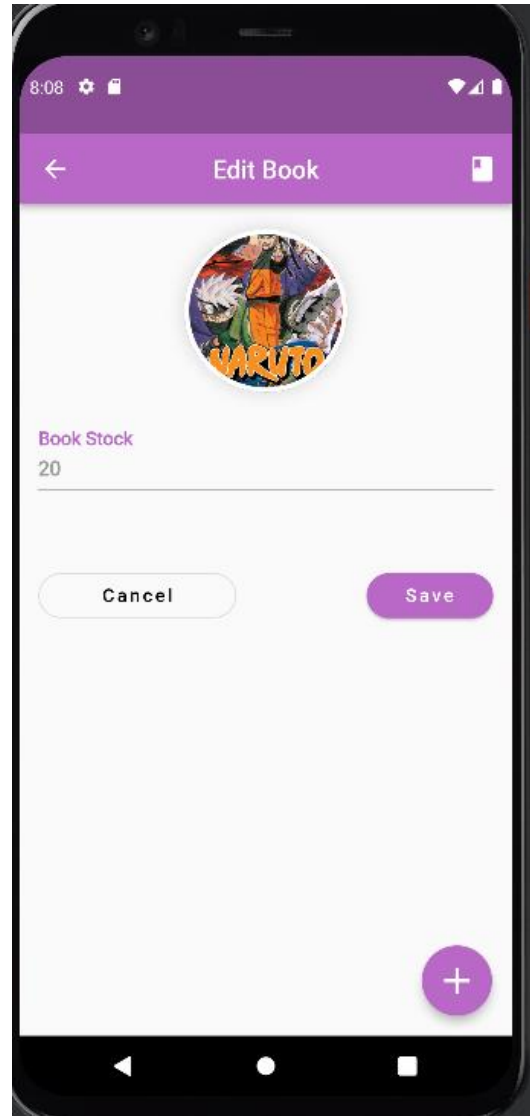
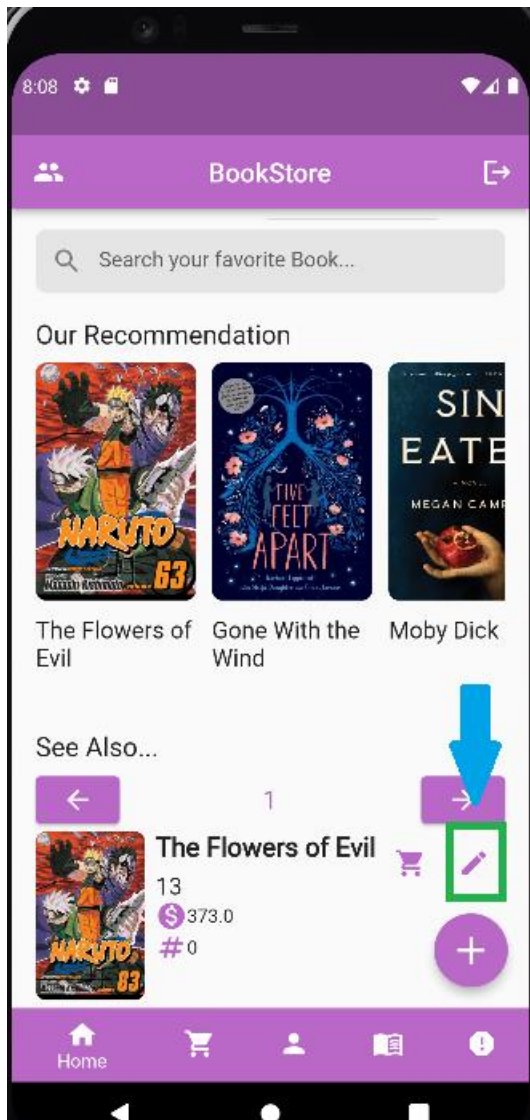
- Edit profile

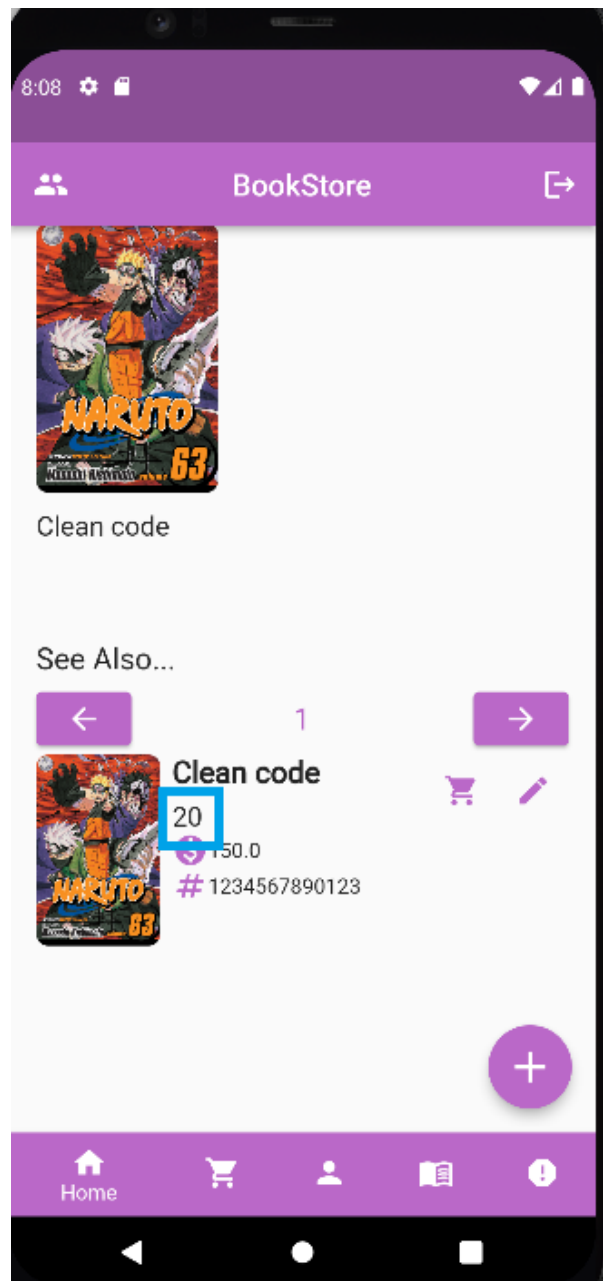


- Search by category

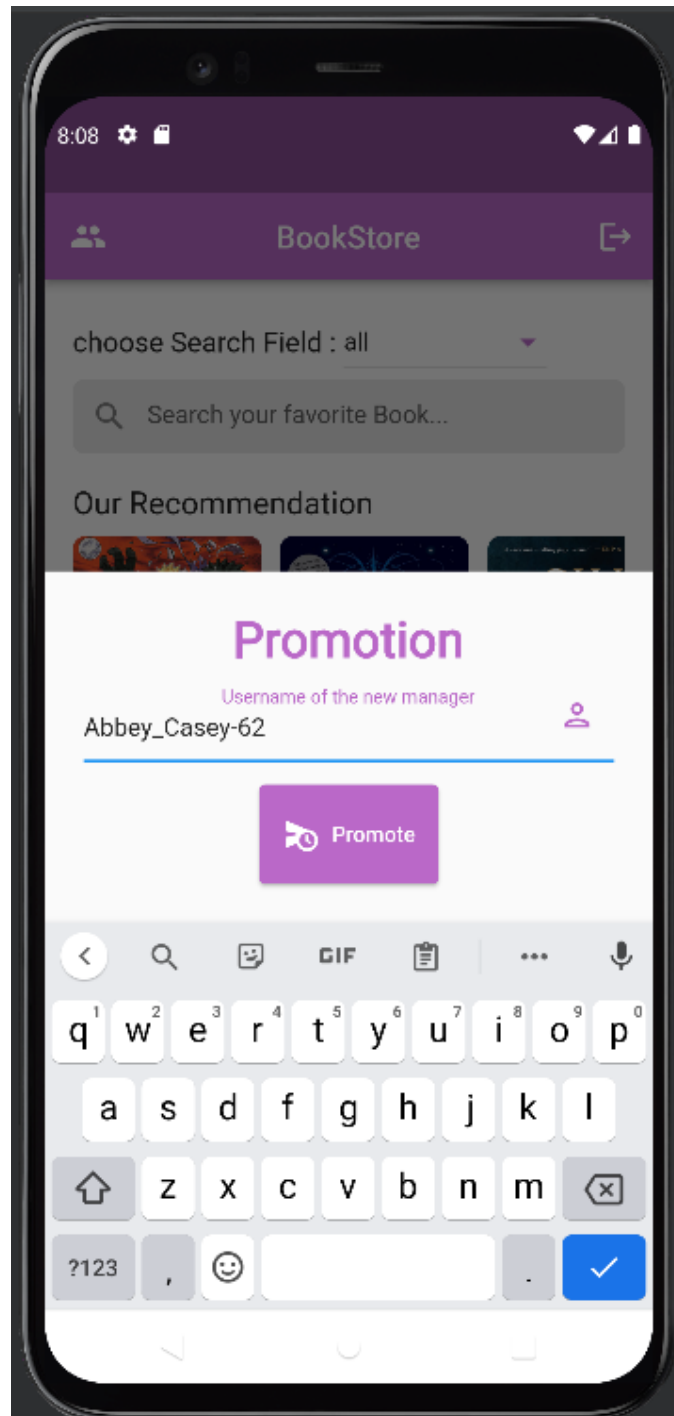


- Edit Book

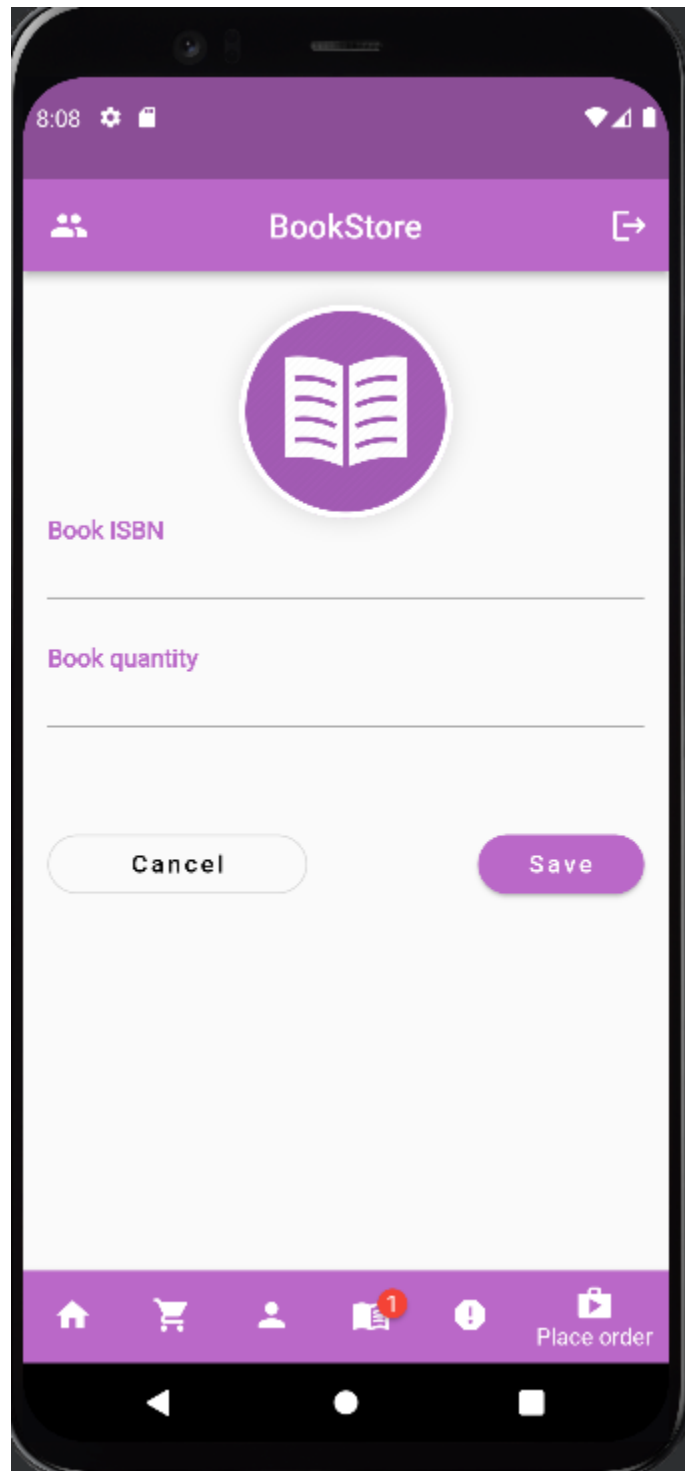




- Promote Client



- Book Order



- Top 10 selling book

Top10Books

ISBN	TITLE	TOTAL_SALES
302485	Game of Thrones	20
330679	In Search of Lost Time	20
808578	Anna Karenina	20
980291	Game of Thrones	20
170051	Hamlet	19
47028	One Thousand and One Nights	19
636386	The Odyssey	19
890677	The Red and the Black	19
993010	The Good Soldier	19
144524	Oedipus at Colonus	18

- Top 5 Customers

TITLE

Add a description here

username	PURCHASE_AMOUNT
Richards_Lara-96	2384.0
Lara_Javier-27	2126.0
Carl_Bullock-12	2079.0
Roscoe_Analise-73	2052.0
Abbot_Fred-34	1942.0

- Top sales

TITLE

Add a description here

ISBN	TITLE	TOTAL_SALES
105124	Oedipus at Colonus	8
114493	Gone With the Wind	8
134704	One Thousand and One Nights	6
1588	The Magic Mountain	6
188943	Anna Karenina	15
199313	The Lord of The Rings	9
21865	Invisible Man	18
233399	The Old Man and the Sea	14
25261	Invisible Man	6
259607	Les Misérables	15
313233	The Canterbury Tales	11
330679	In Search of Lost Time	20
360437	Game of Thrones	9
383687	The Great Gatsby	12
457815	The Divine Comedy	10
489915	Great Expectations	11
523459	The Brothers Karamazov	10
594973	Robinson Crusoe	1
599443	Les Misérables	9
646776	Vanity Fair	11