



**LOYOLA-ICAM
COLLEGE OF ENGINEERING AND TECHNOLOGY**

(Autonomous)

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***PROJECT REPORT
BOOK STORE***



SUBMITTED BY

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**BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE AND ENGINEERING**

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PROJECT OVERVIEW

BOOK STORE

Purpose:

The purpose of the *BookScape*, the Book Store application is to provide a seamless platform for users to browse, purchase, and review books while enabling sellers to manage their inventory efficiently and allowing admins to oversee the platform's operations. Built using the MERN stack, the application aims to enhance the online book-shopping experience by offering a robust set of features for users, sellers, and administrators.

Features

- **User Persona:**
 - Registration and profile management.
 - Search for books by title and view top recommendations.
 - Wishlist management and book purchase with shipping and billing information.
 - Track orders with status updates.
- **Seller Persona:**
 - Registration and profile updates.
 - Dashboard view with bar graphs for inventory and orders.
 - Manage book listings, including adding, updating, and removing books.
 - View and fulfill orders from users.
- **Admin Persona:**
 - Comprehensive dashboard with statistics on users, sellers, books, and orders.
 - Manage user and seller information.
 - Oversee book listings and order statuses.

ARCHITECTURE

Frontend

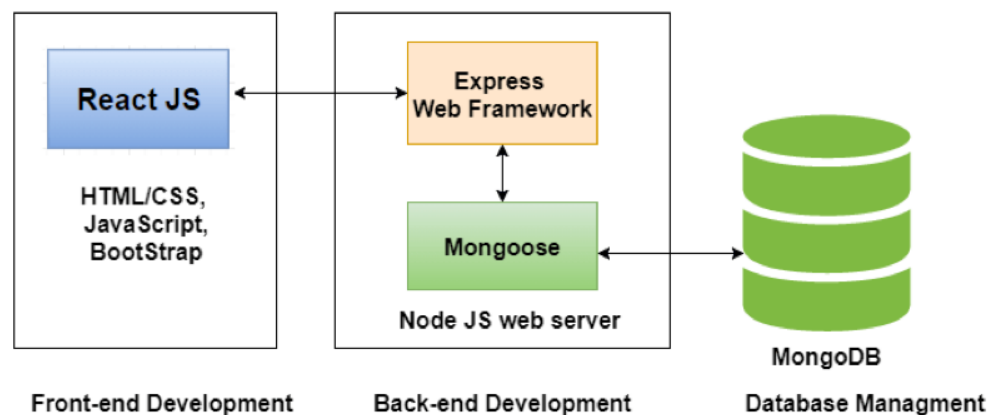
- Built using **React.js** to create a dynamic and responsive user interface.
- Utilizes **React Router** for seamless navigation across pages.
- Components styled using **Bootstrap** and **React-Bootstrap** for a clean and modern design.

Backend

- Developed with **Node.js** and **Express.js**, providing a robust server-side framework.
- Includes middleware such as **CORS** and **body-parser** for secure and efficient data handling.
- API routes handle authentication, book listing, order management, and other core functionalities.

Database

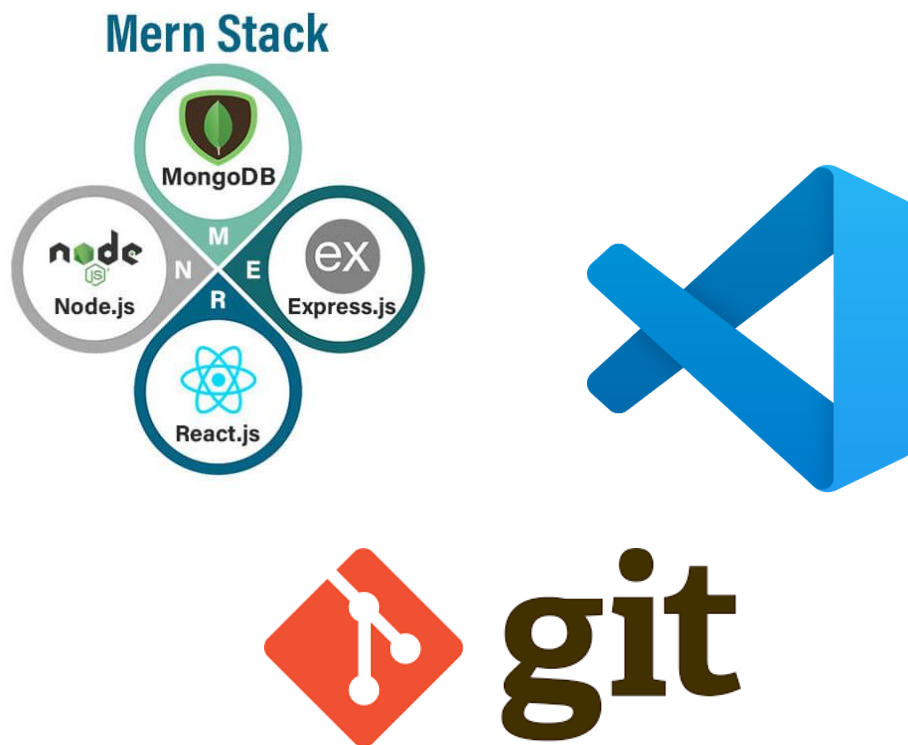
- Utilizes **MongoDB** for data storage, ensuring scalability and flexibility.
- Data models and schemas defined using **Mongoose** for structured interaction with the database.
- Key entities include **Users**, **Books**, **Orders**, and **Sellers**.



MERN STACK ARCHITECTURE

PREREQUISITES

1. **Node.js and npm:** Required for server-side JavaScript execution and dependency management.
 - <https://nodejs.org/en/download>
2. **MongoDB:** Install MongoDB locally or use a cloud-based service for database storage.
 - <https://www.mongodb.com/try/download/community>
3. **React.js:** Ensure a proper setup for creating a single-page application.
 - <https://vite.dev/guide/>
4. **Git:** Use version control for collaboration and tracking.
 - <https://git-scm.com/downloads>
5. **Code Editor:** Use an IDE like Visual Studio Code for development.
 - <https://code.visualstudio.com/download>



APPLICATION INITIALIZATION AND RUNNING

Initialization of Application:

Backend: npm init

Frontend: npm i create vite@latest

Running of Application:

Backend: node server.js

Frontend: npm run dev

```
> frontend@0.0.0 dev
> vite

VITE v5.4.11 ready in 2749 ms

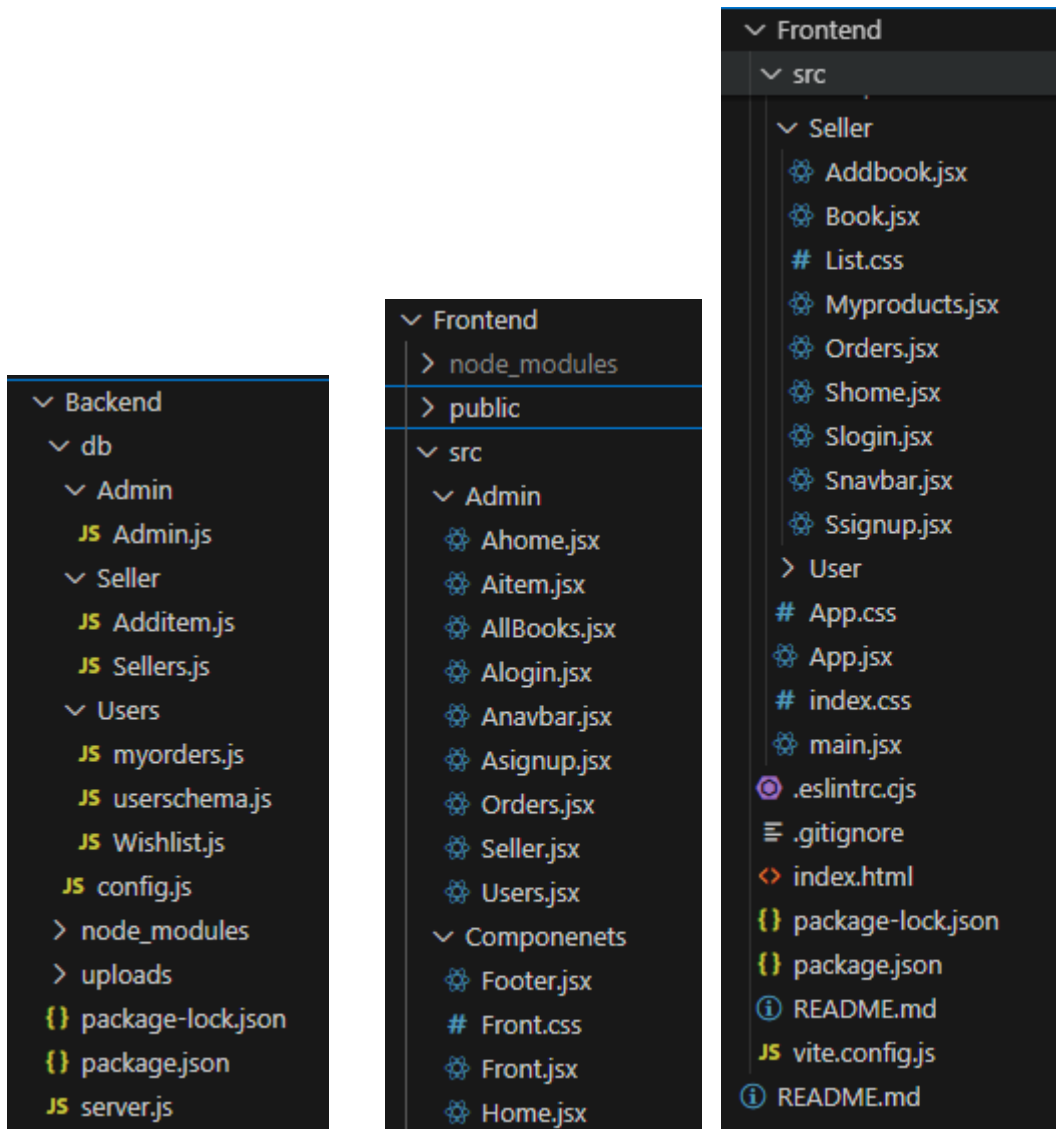
→ Local:   http://localhost:5173/
→ Network: use --host to expose
→ press h + enter to show help
```

```
\backend> node server.js
server is running on 4000
```

Access the application in your browser at **http://localhost:5173**.

FOLDER STRUCTURE

The project folder structure is designed to maintain clear separation of concerns, ensuring ease of navigation and scalability. It is divided into **Frontend** and **Backend** directories, each comprising functionalities corresponding to the three personas: **User**, **Seller**, and **Admin**.



The frontend folder houses the client-side codebase, primarily developed using React.js.

The backend folder hosts the server-side logic and API endpoints, developed using Node.js and Express.js, with MongoDB as the database.

APPLICATION WORKFLOW

User Flow

1. Sign up or log in to access personalized features.
2. Search for books by title or explore recommendations.
3. Add books to a wishlist or purchase them directly.
4. Confirm orders by providing shipping and billing details.
5. View order history and provide feedback.

Seller Flow

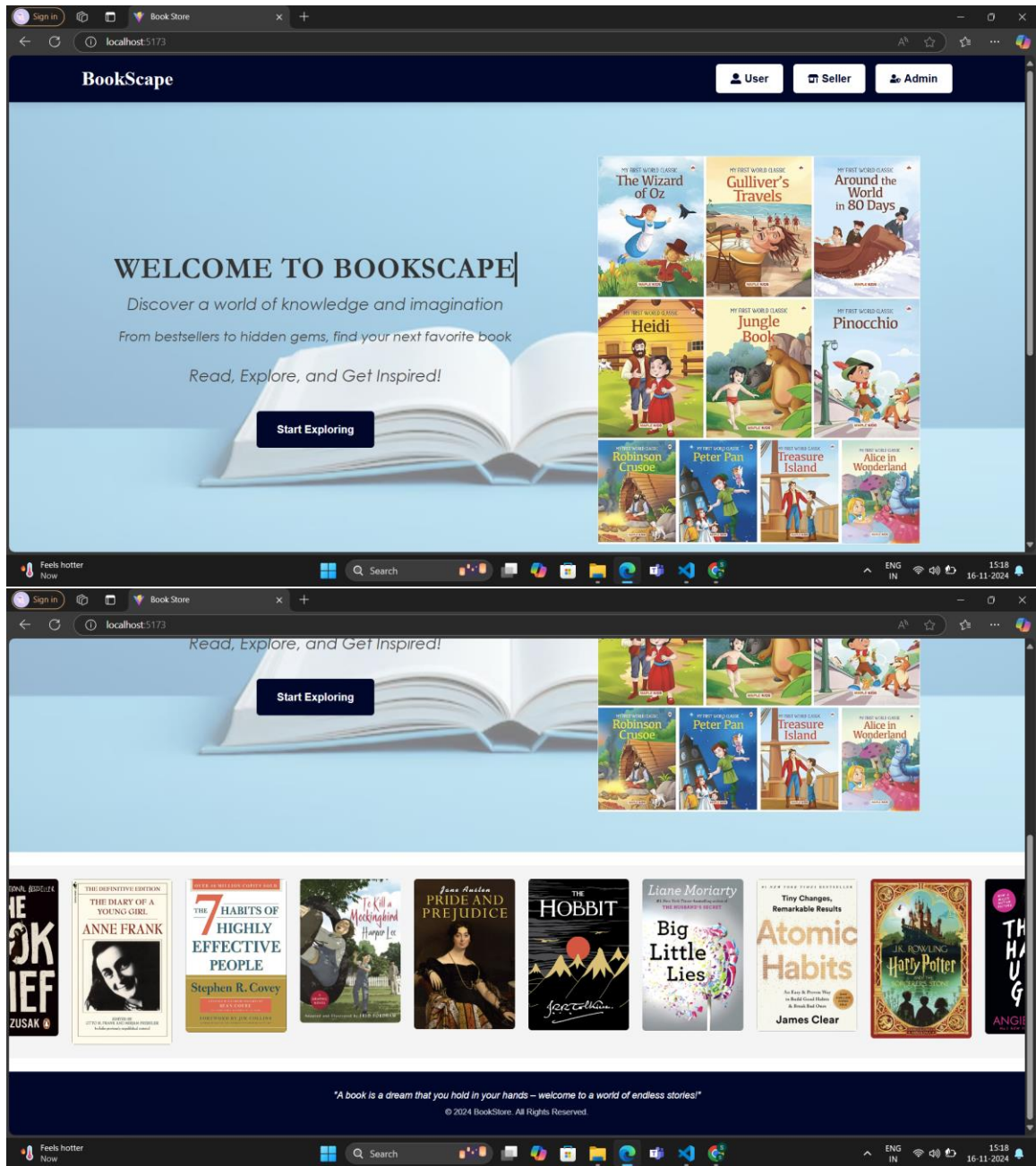
1. Sign up and log in to access the seller dashboard.
2. Add books with details like title, author, genre, and price.
3. Monitor inventory levels and update or delete listings as needed.
4. Track orders and fulfill them promptly.

Admin Flow

1. Log in to access administrative controls.
2. View comprehensive dashboards for users, sellers, books, and orders.
3. Manage accounts and enforce system-level configurations.
4. Monitor trends and maintain platform integrity.

APPLICATION UI SCREENSHOTS

a) Landing Page



b) User Functionalities (Registration and Login)

BookScape

User Seller Admin

User Registration


Name
user1

Email address
user1@gmail.com

Password

Signup

Already have an account? [Login](#)



BookScape

User Seller Admin


User Login

Email address
user5@gmail.com

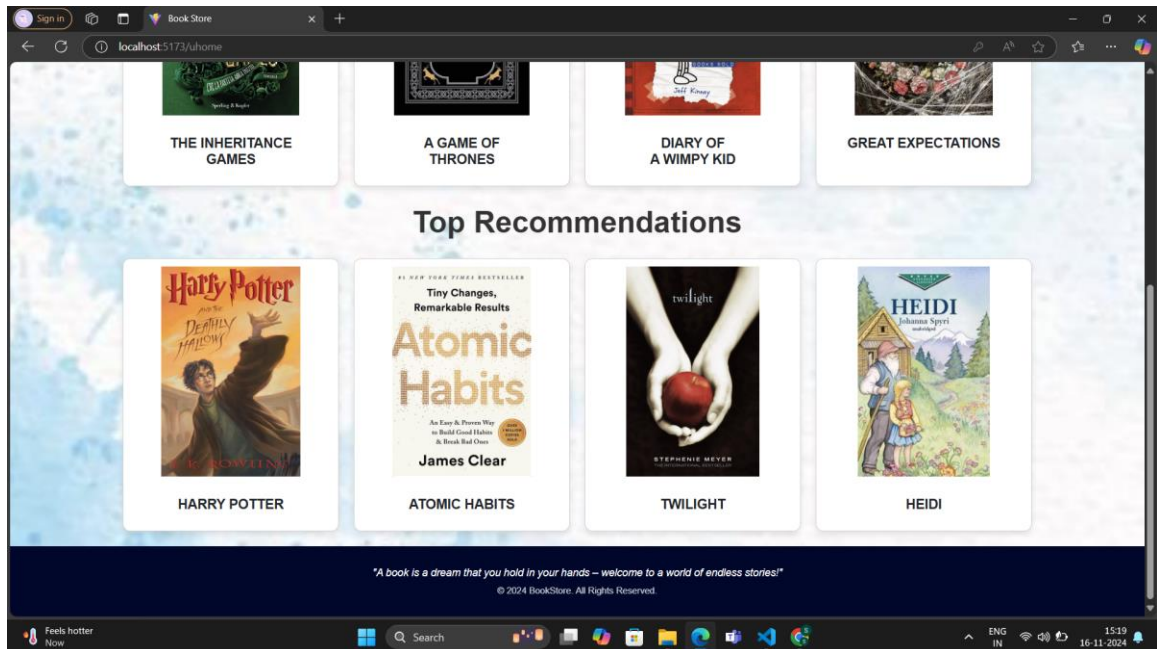
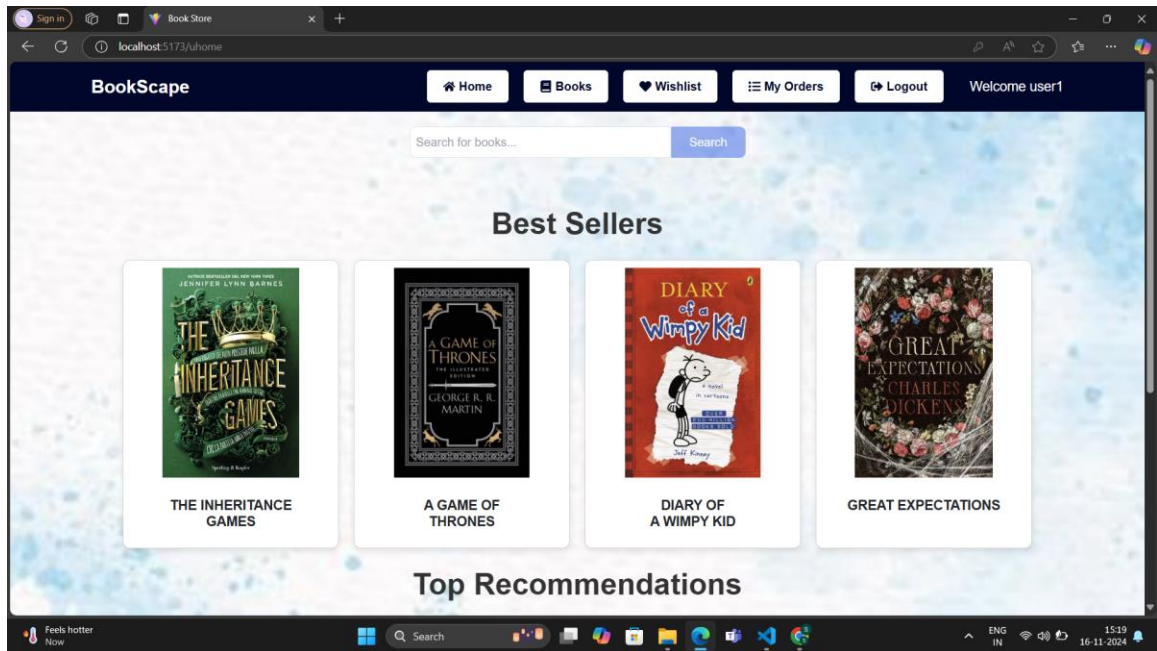
Password

Login

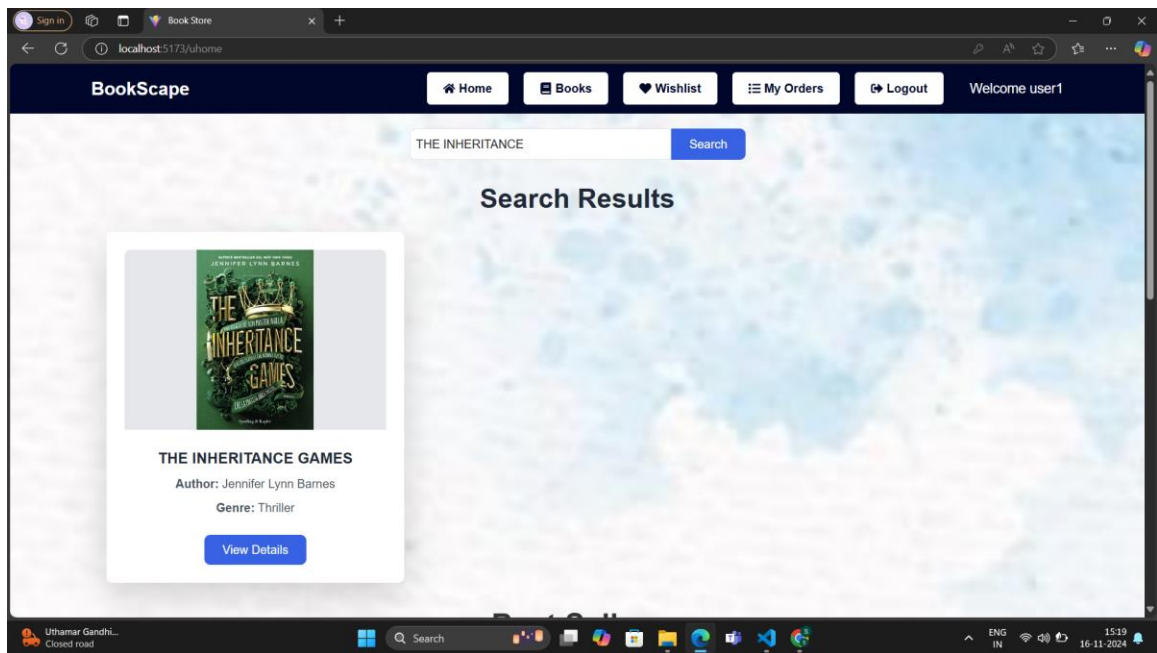
Don't have an account? [Signup](#)



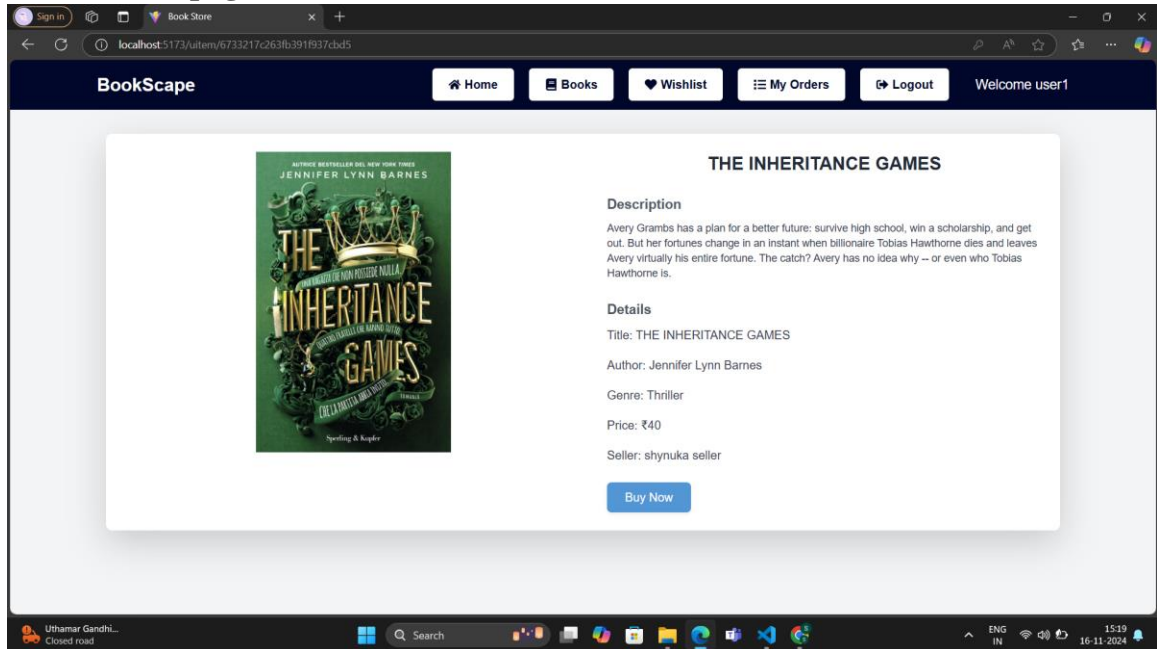
User home page



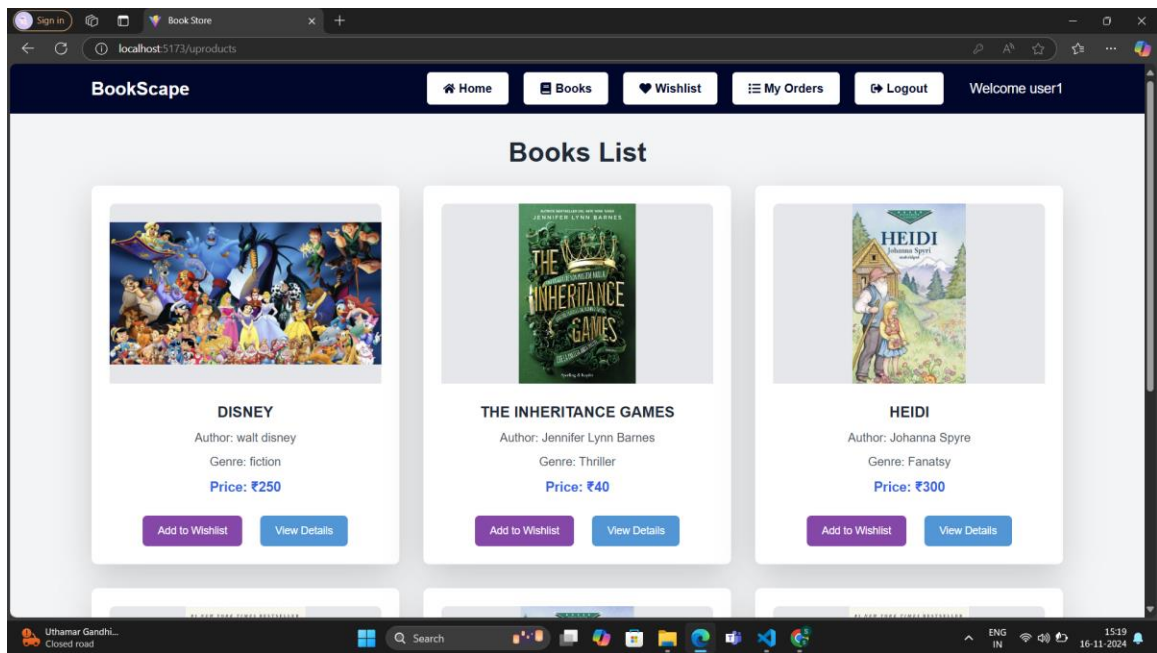
Basic search functionality



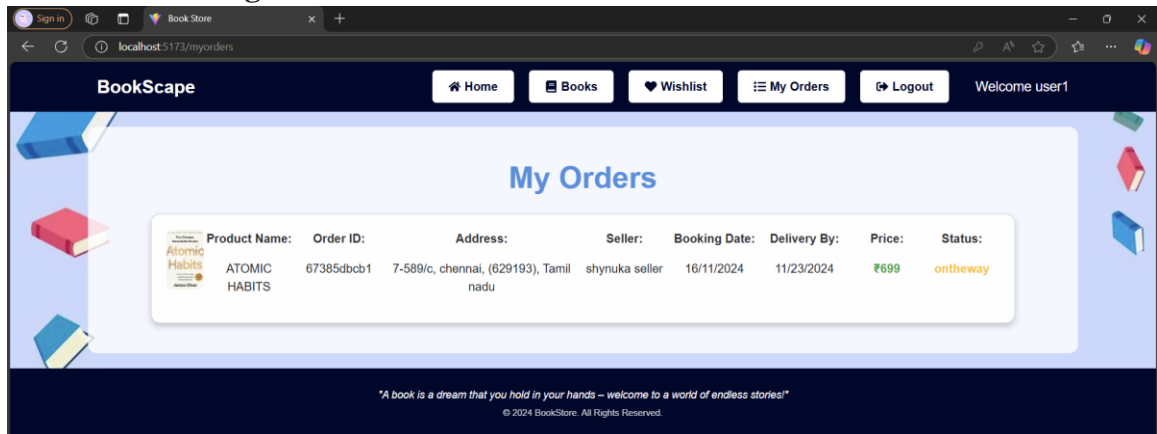
Book Details page



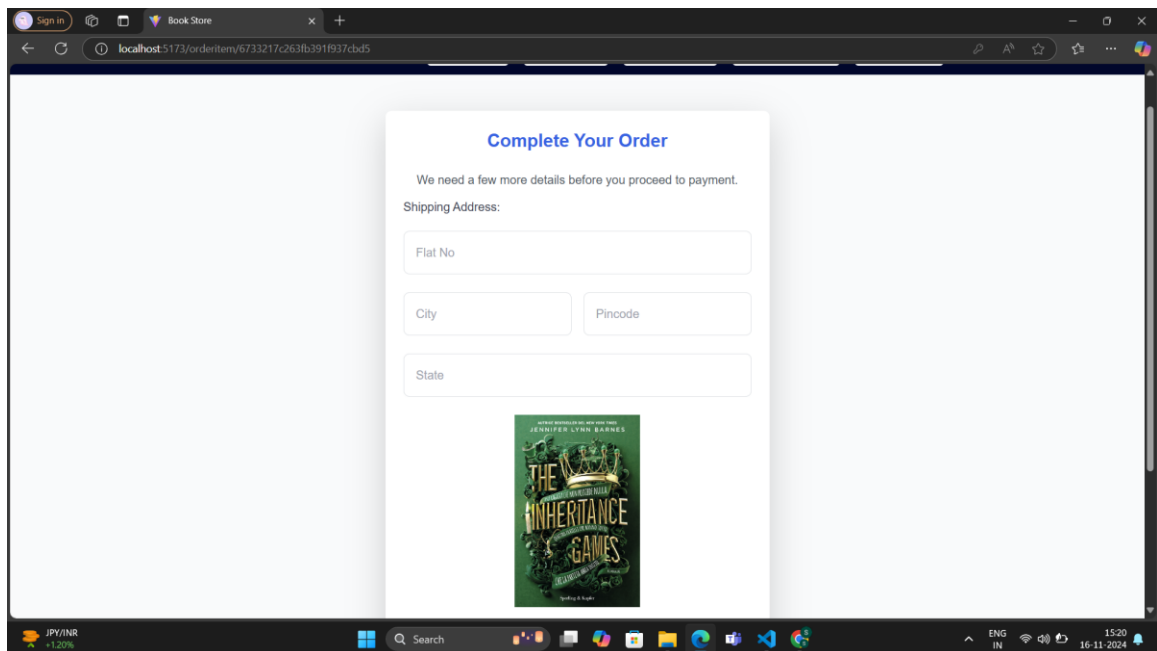
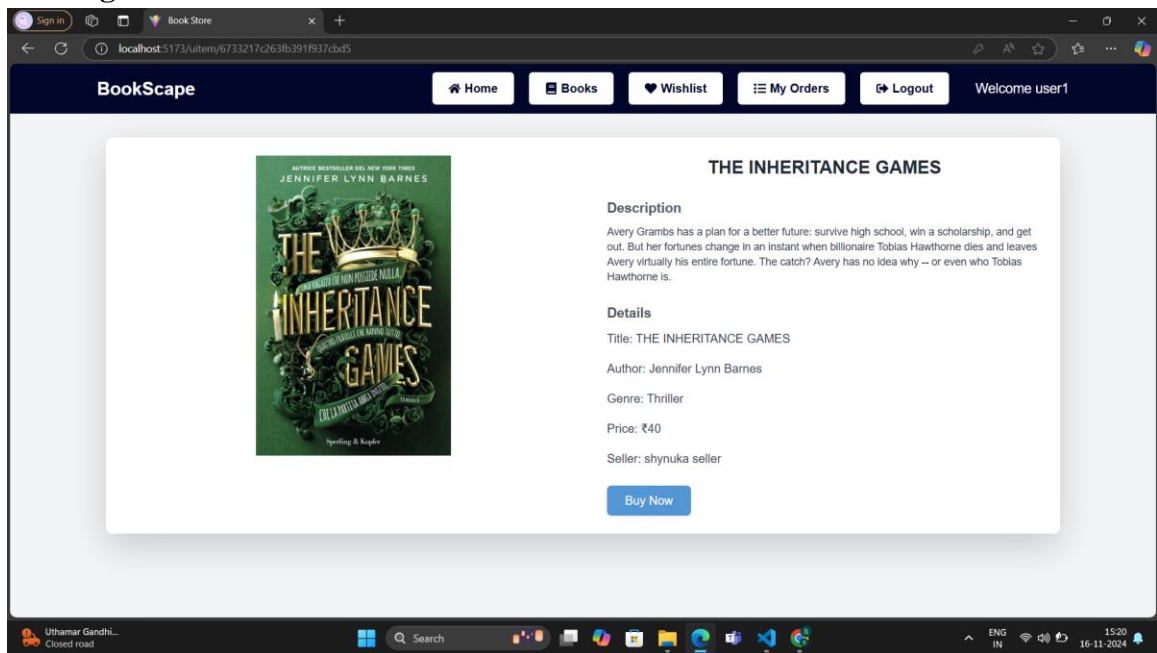
Books List Page

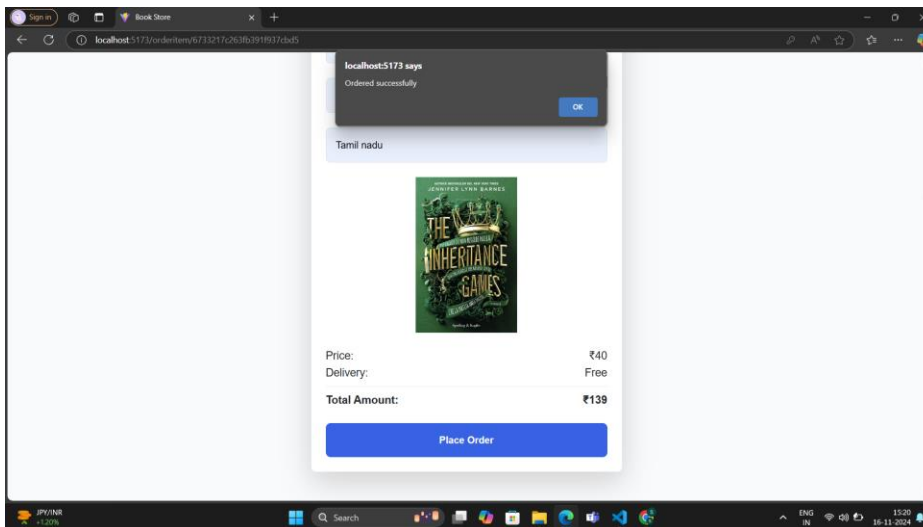
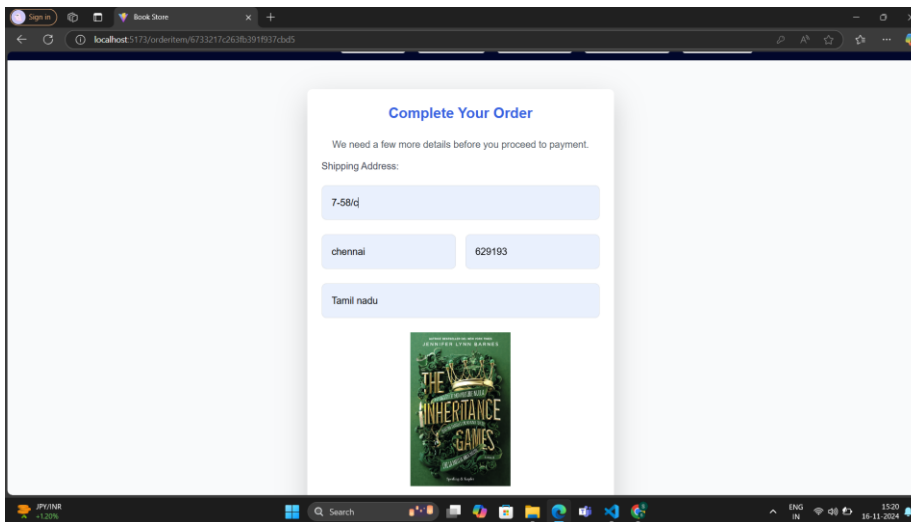


User's Orders Page

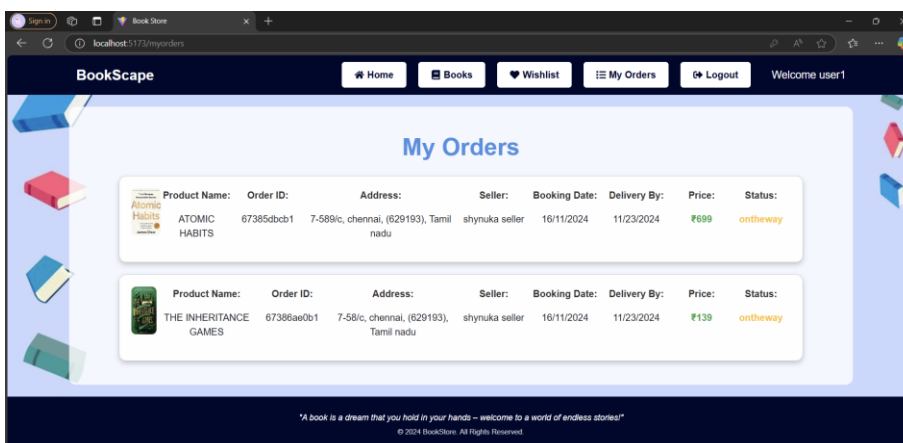


Making an order






Orders Page after making an order



Adding books to wishlist


BookScape[Home](#)[Books](#)[Wishlist](#)[My Orders](#)[Logout](#)Welcome user5

Books List



The Lion, the Witch and the Wardrobe
Author: C.S. Lewis
Genre: Fantasy
Price: ₹400

[Add to Wishlist](#)[View Details](#)




dlaksd
Author: dfmfs
Genre: Fantasy
Price: ₹233

[Remove from Wishlist](#)[View Details](#)

BookScape[Home](#)[Books](#)[Wishlist](#)[My Orders](#)[Logout](#)Welcome user5

Wishlist



dlaksd
Author: dfmfs
Genre: Fantasy
Price: ₹233


[Remove from Wishlist](#)[View Details](#)

Activate Windows

c) Seller Functionalities (Login & Registration)

BookScape

User Seller Admin



Log In to Seller account

Email address


Password

[Log In](#)

Don't have an account? [Signup](#)

BookScape

User Seller Admin



Seller Registration

Name

Email address

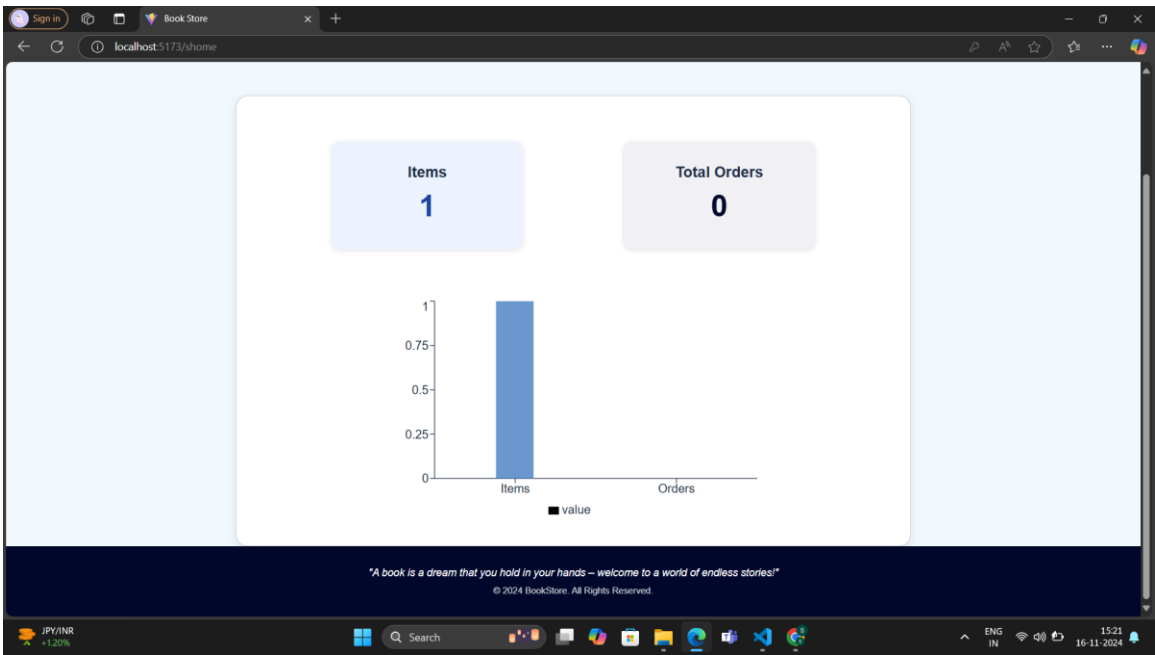
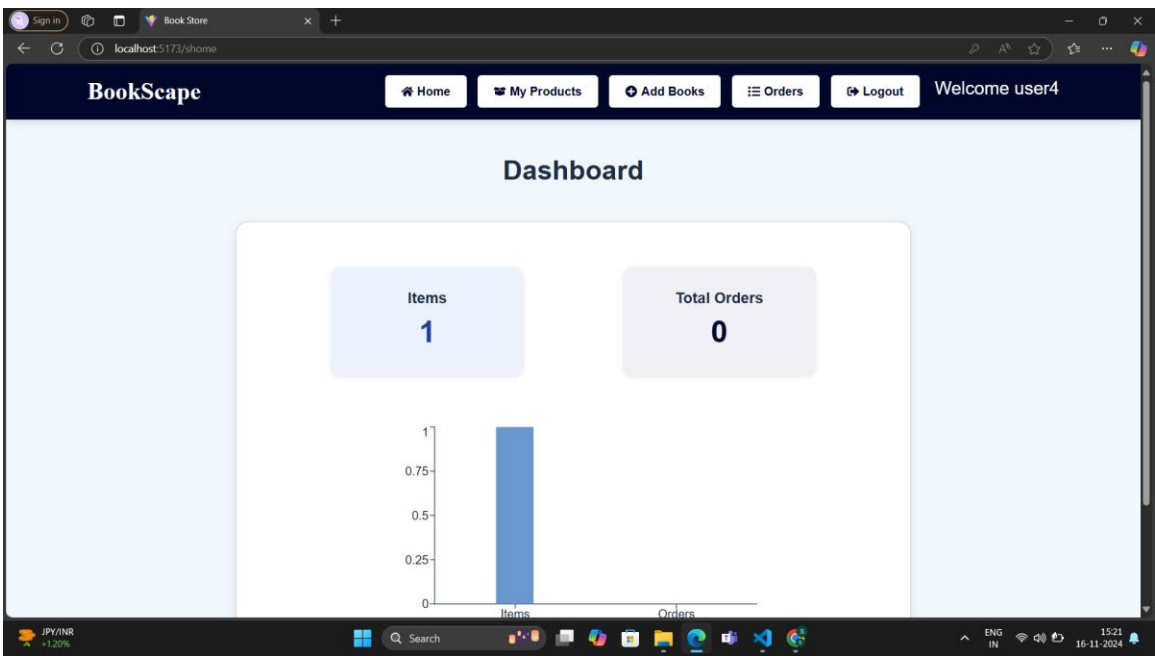
Password

[Signup](#)

Already have an account? [Login](#)

Activate Windows
Go to Settings to activate Windows.

Seller's Home page



Add Book Page and its functionality

BookScape

Home My Products Add Books Orders Logout Welcome user4

Add New Book

Book Title

Author Name

Genre

Price

Description

Upload Book Image

Add New Book

atomic habits

james clear

Motivation

350

motivation for life

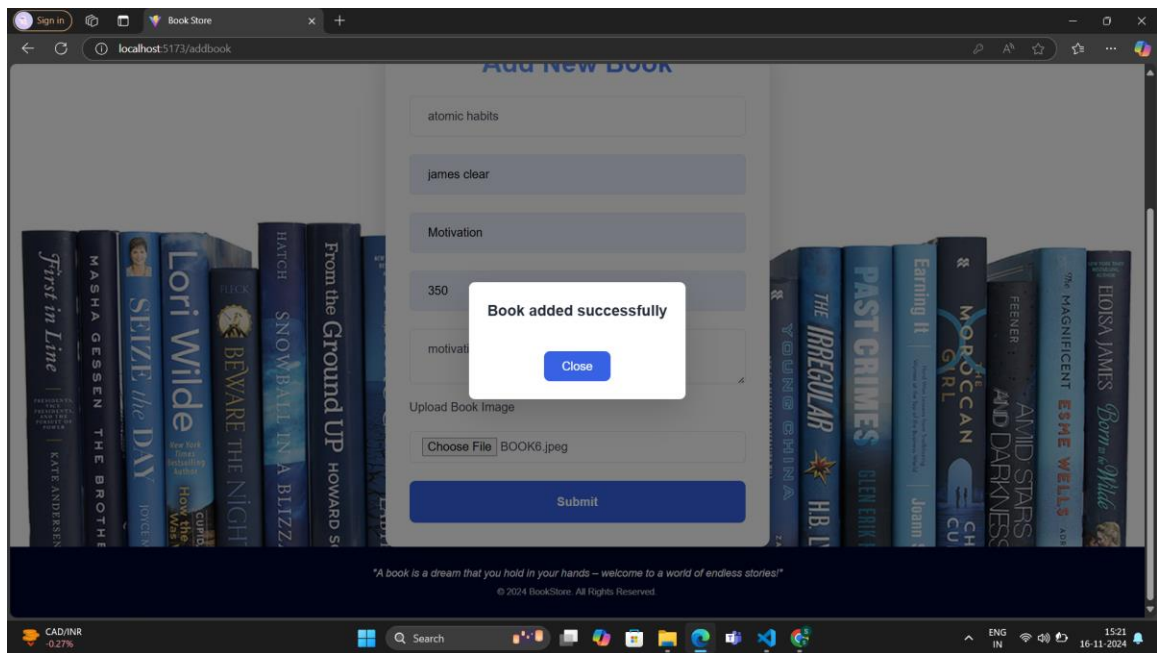
Upload Book Image

Choose File BOOK6.jpeg

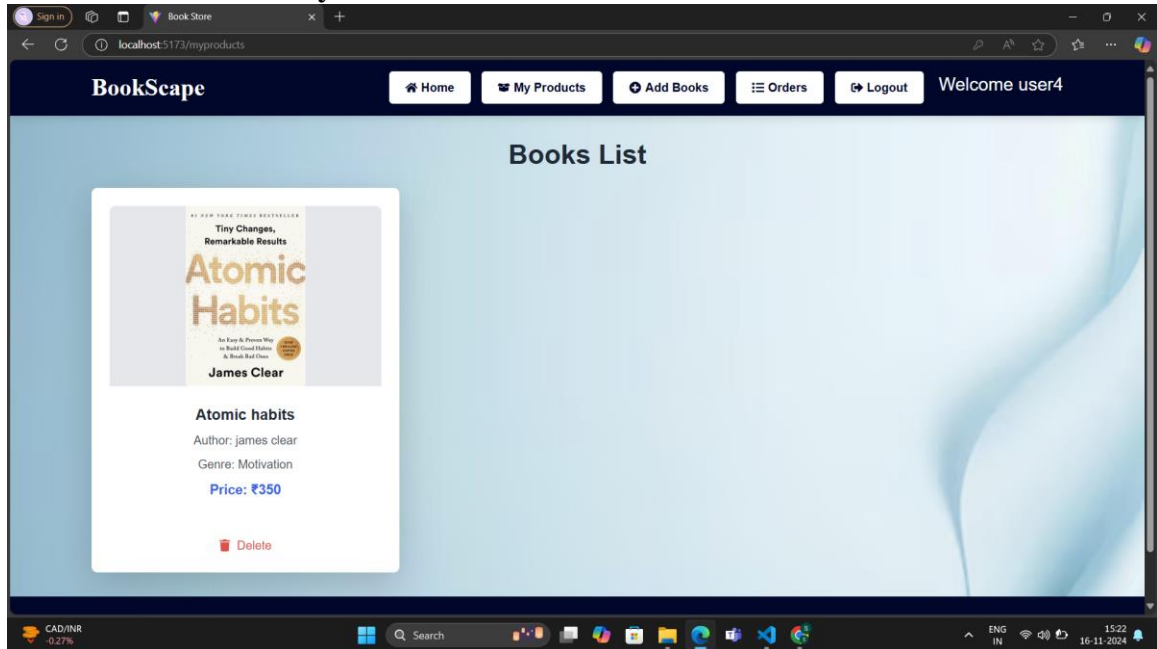
Submit

"A book is a dream that you hold in your hands – welcome to a world of endless stories!"

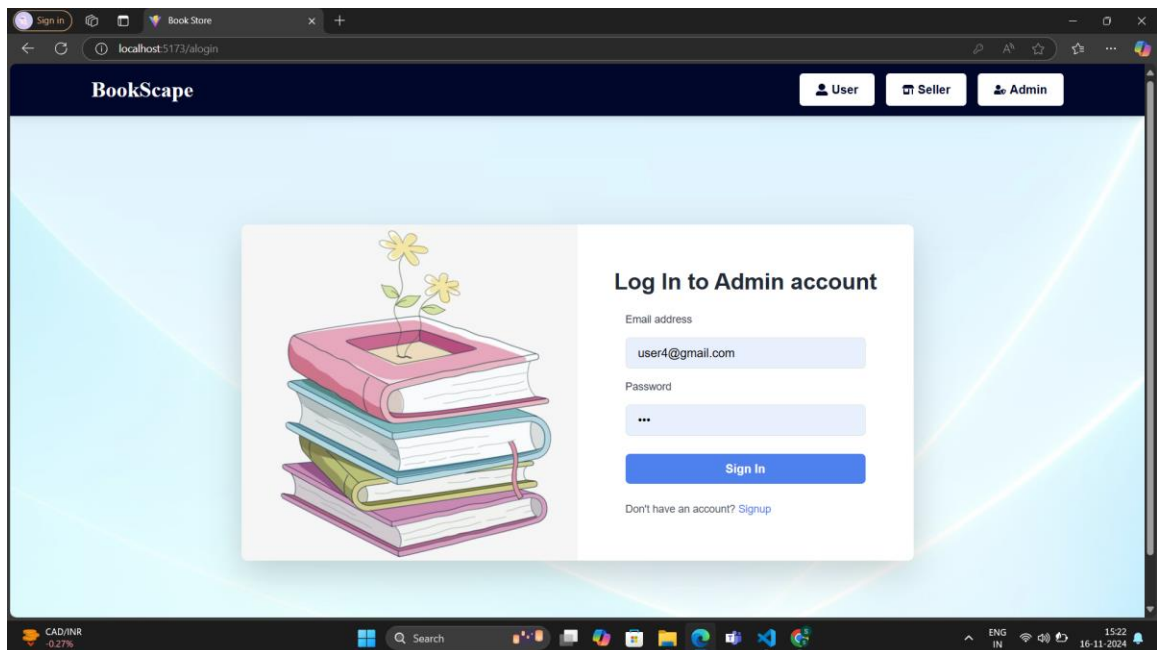
© 2024 BookStore. All Rights Reserved.



Seller's Book Inventory



d) Admin Functionalities (Login)

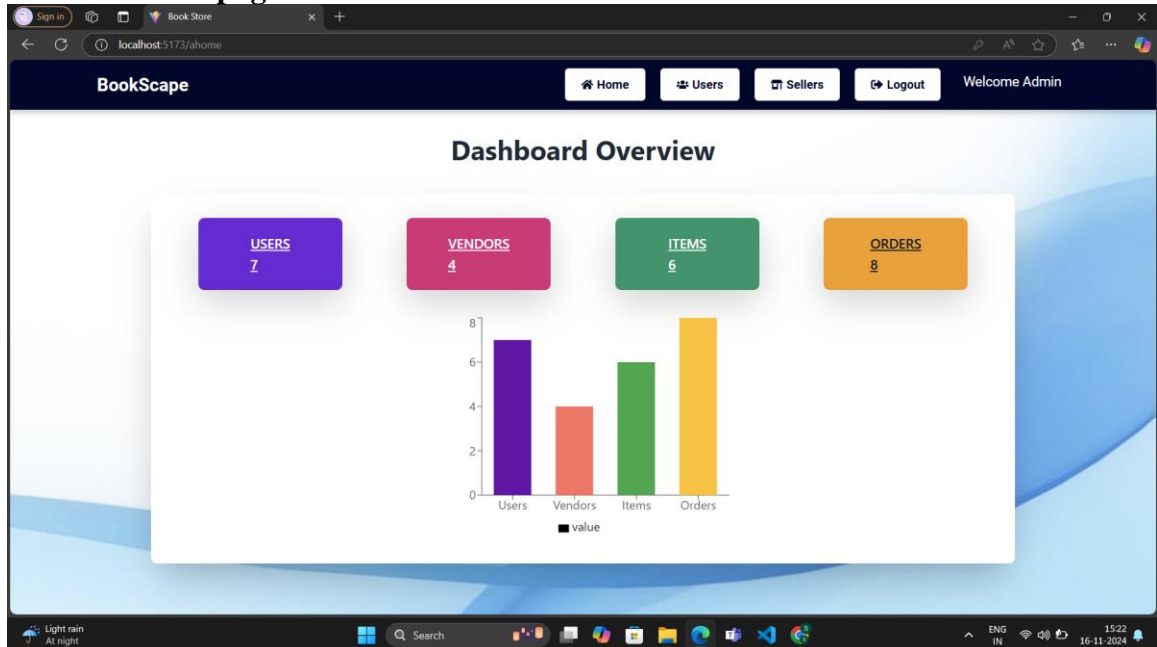


The screenshot shows the 'BookScape' Admin Login page. The page has a dark blue header with the 'BookScape' logo and navigation buttons for 'User', 'Seller', and 'Admin'. The main content area features a light blue background with a central white login box. On the left of the login box is an illustration of a stack of books with a small plant growing from the top. The login box contains the following fields and elements:

- Log In to Admin account**
- Email address:** A text input field containing 'user4@gmail.com'.
- Password:** A text input field with masked characters '***'.
- Sign In:** A blue button.
- Don't have an account? Signup**: A link below the Sign In button.

The browser's address bar shows 'localhost:5173/admin'. The Windows taskbar at the bottom displays the date '16-11-2024' and time '15:22'.

Admin's home page



Admin's Users List page

SI/No	Userid	User Name	Email	Operation
1	673197daa1e787d9f9ee1fc9	shynuka shynuka	shynuka.25cs@licet.ac.in	
2	6733262f641b5271229f889	user	user@gmail.com	
3	67385a63b10df0419c67bab5	user	usernew@gmail.com	
4	67385b79b10df0419c67bab9	usernanmudhalvan	usernanmudhalvan@gmail.com	
5	67385d5fb10df0419c67baed	user1	user1@gmail.com	
6	6738654eb10df0419c67bb20	usernew1	usernew1@gmail.com	
7	673865eab10df0419c67bb27	user3	user3@gmail.com	

Admin's Sellers/Vendors List page

S/No	Userid	User Name	Email	Operation
1	67332016263fb391f937cbce	shynuka seller	shynukajohn@gmail.com	
2	67385c38b10df0419c67badb	user1	user1@gmail.com	
3	67385deeb10df0419c67bafb	user2	user2@gmail.com	
4	67386660b10df0419c67bb3a	user4	user4@gmail.com	

Admin's Books List page

BookScape

Home


Users

Sellers


Logout

Welcome Admin


Books List



The Lion, the Witch and the Wardrobe
 Author: C.S. Lewis
 Genre: Fantasy
 Price: ₹400
[View Details](#)



Don't Let Her Stay
 Author: dlmids
 Genre: Fantasy
 Price: ₹233
[View Details](#)



How the Earth Got its Beauty
 Author: Sudha Murty
 Genre: Fiction
 Price: ₹200
[View Details](#)

Admin's page to see all orders

BookScape

Home


Users


Sellers

Logout

Welcome Admin

All Orders

Image	Product Name	Order ID	Address	Seller	Booking Date	Delivery By	Price	Status
	The Lion, the Witch and the Wardrobe	67383d9710	123, chennai, (500 006), TAMIL NADU	Seller1	16/11/2024	11/23/2024	₹499	ontheway



Product Name: ATOMIC HABITS

Order ID: 67385dbcb1

Address: 7-589/c, chennai, (629193), Tamil nadu


Seller: shynuka seller

Booking Date: 16/11/2024

Delivery By: 11/23/2024

Price: ₹699

Status: ontheway



Product Name: THE INHERITANCE GAMES

Order ID: 67386ae0b1

Address: 7-58/c, chennai, (629193), Tamil nadu

Seller: shynuka seller

Booking Date: 16/11/2024

Delivery By: 11/23/2024

Price: ₹139

Status: ontheway

"A book is a dream that you hold in your hands – welcome to a world of endless stories!"

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CONCLUSION

The **BookScape** application demonstrates the effective implementation of a MERN stack to create a robust and user-friendly online bookstore. By addressing the needs of users, sellers, and admins, the project delivers a comprehensive solution for book purchasing and management. The project reflects a well-structured development approach, showcasing skills in full-stack development, database management, and UI/UX design.

Future Enhancements

- Enhanced Search: Improve search by enabling search by author, genre, and other metadata.
- Recommendation System: Implement machine learning algorithms for personalized book suggestions.
- Payment gateway integration: Add payment gateway integration for seamless book purchase.

REFERENCES

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2. MongoDB Documentation. (n.d.). Retrieved from <https://docs.mongodb.com/>
3. Express.js Documentation. (n.d.). Retrieved from <https://expressjs.com/>
4. Material UI. (n.d.). Retrieved from <https://mui.com/>
5. Project Template. (n.d.). Retrieved from https://drive.google.com/drive/folders/1SE8Nexr5pa_MalnlocQfzi09JnGs8UjB