1.1-PURPOSE

The purpose of the Online Bookstore is to provide a user-friendly platform where customers can easily browse, search, and purchase a wide variety of books from the comfort of their homes. It aims to enhance the reading experience by offering personalized recommendations and facilitating user reviews and ratings.

1.2 - SCOPE

Platform: Web based application for browsing, searching, and purchasing books.

User Features:

- Account management (registration, login, profile)

- Shopping cart with secure checkout

- Order tracking

- User reviews and ratings

Focus Areas:

- Enhancing user experience

- Ensuring data security

Exclusions:

- Physical book sales

- Author publishing services

1.3- DEFINATION, ACRONYMS AND ABBREVIATION

Definitions

- Online Bookstore: A web-based platform that allows users to browse, search, and purchase books electronically.
- User: An individual who visits the online bookstore to browse and purchase books.
- Shopping Cart: A feature that allows users to select and manage books for purchase before checking out.
- Order Tracking: The process of monitoring the status of a user's order after purchase.

Acronyms:

- SRS: Software Requirements Specification
- BRD: Business Requirements Document
- SRD: System Requirements Document
- API: Application Programming Interface
- ISBN: International Standard Book Number

Abbreviations:

- <u>UX:</u> User Experience
- <u>UI:</u> User Interface
- <u>DB</u>: Database
- <u>SSL</u>: Secure Sockets Layer (for secure transactions)
- <u>GDPR:</u> General Data Protection Regulation (data protection compliance)

1.4- OVERVIEW

- The Online Bookstore aims to create a seamless shopping experience for book lovers by providing a comprehensive catalo of titles across various genres.
- Users will be able to easily navigate the platform, search for books, and manage their purchases through an intuitive interface.
- The application will prioritize security and user privacy, ensuring safe transactions and data protection.
- Additionally, it will feature community engagement through user reviews and ratings to enhance the overall shopping experience.

2.1- PRODUCT PERSPECTIVE

- **User Experience:** navigation and robust search feature

Personalize recommendation based on user behaviour

- **Content Variety:**

Diverse Inventory (genre, formats) and user generated reviews

- **Community Engagement:**

Book club, community and virtual author interaction events

- **Marketing Strategies**
  - Email newsletter
  - Influencer marketing
  - Social Media presence

Customer Support:

Live Chats and comprehensive FAQ solutions

Payment Options:

Multiple payment options and subscription available

2.2-PRODUCT FUNCTIONALITY

- User Account
- Search and browse
- Book Details
- Personalized Recommendation
- Shopping Cart and Checkouts
- Payment Processing
- Digital Content Delivery
- User reviews and ratings
- Order tracking
- Customer Support
- Mobile Compatibility
- Wishlist

2.3-USER CLASS AND PERSPECTIVE

- **Casual Reader:** Reads occasionally for leisure or relaxation.
- **Avid Reader:** Frequently reads and actively seeks out new books.
- **Student:** Reads for educational purposes and academic growth.
- **Professional:** Reads to enhance career skills and stay informed in their file

User characteristic

- **Demographics:**

Target audience characteristics, including age, gender, income, education, and location, influencing book preferences.

- **Technology Savvy:**

Customer proficiency and comfort in using digital devices and navigating the online bookstore platform.

- **Reading Habits:**

Patterns in customers' reading consumption, including purchase frequency, preferred genres, and formats

- **Budget Sensitivity:**

Customer awareness of price changes and responsiveness to discounts when making book purchases.

- **Social Engagement:**

Customer participation in reading-related social activities, such as book clubs and online discussions.

2.4-OPERATING ENVIRONMENT

- **Hardware requirement:** server with processing power according to the need
- **Software requirement: content** management system and payments processing application, invoice processing
- **Network requirement:** reliable internet connection
- **Other dependencies:** third party payment gateway (Paytm etc)

2.5-DESIGN AND IMPLEMENTATION CONSTRAINT

Design and Implementation Requirements for an Online Book Store

1. Design Requirements

- **Architecture:** Use a microservices architecture for flexibility and scalability.
- **User Interface (UI):** Create a clean, intuitive design with easy navigation and book displays.
- **User Experience (UX):** Ensure responsive design for both mobile and desktop users.
- **Data Models:** Design a database for managing users, inventory, orders, and reviews.
- **Integration Points:** Integrate payment APIs (e.g., Stripe, PayPal) and inventory management systems.

2. Implementation Requirements

- **Programming Languages:** Use JavaScript (React.js for frontend, Node.js for backend).
- **Development Tools:** Utilize Git for version control and Postman for API testing.
- **Testing Frameworks**: Implement Jest for unit testing and Cypress for end-to-end testing.
- **Deployment Environment:** Host on cloud services like AWS or Azure.

3. Quality Assurance Requirements

- **Coding Standards:** Follow JavaScript best practices and use ESLint for code quality.
- **Performance Criteria**: Ensure pages load in under 2 seconds and support 10,000 users simultaneously.
- **Security Standards:** Implement HTTPS and data encryption for user protection.

4. Documentation Requirements

- **Technical Documentation:** Maintain documentation for system architecture and API details.
- **User Documentation:** Provide guides for navigating the site and making purchases.

5. Training Requirements

- **Training Materials:** Create resources for staff on inventory management and customer support.
- **Training Sessions:** Conduct sessions to prepare staff for user assistance.

3.0-3.5 FUNCTIONAL CHARACTERISTIC

- **User Registration:** Users must be able to create an account by providing their email, password, and personal information.

- **User Login**: Registered users should be able to log in securely using their email and password.

- **Search Functionality:** Users must be able to search for books by title, author, genre, or keywords.

- **Shopping Cart:** Users should be able to add, remove, and update items in their shopping cart before checkout.

- **Payment Processing:** The system must securely process payments using various methods, such as credit cards and digital wallets.

3.5-3.8 NON -FUNCTIONAL CHARACTERISTIC

- **Performance:** Ensures fast loading times and can smoothly handle high user traffic for an optimal shopping experience.

- **Security:** Implements strong encryption protocols and secure payment processing to protect customer information.

- **Usability:** Features an intuitive design that allows users to navigate easily and make purchases without hassle.

- **Scalability:** Capable of growing to accommodate an increasing number of users and expanding inventory.
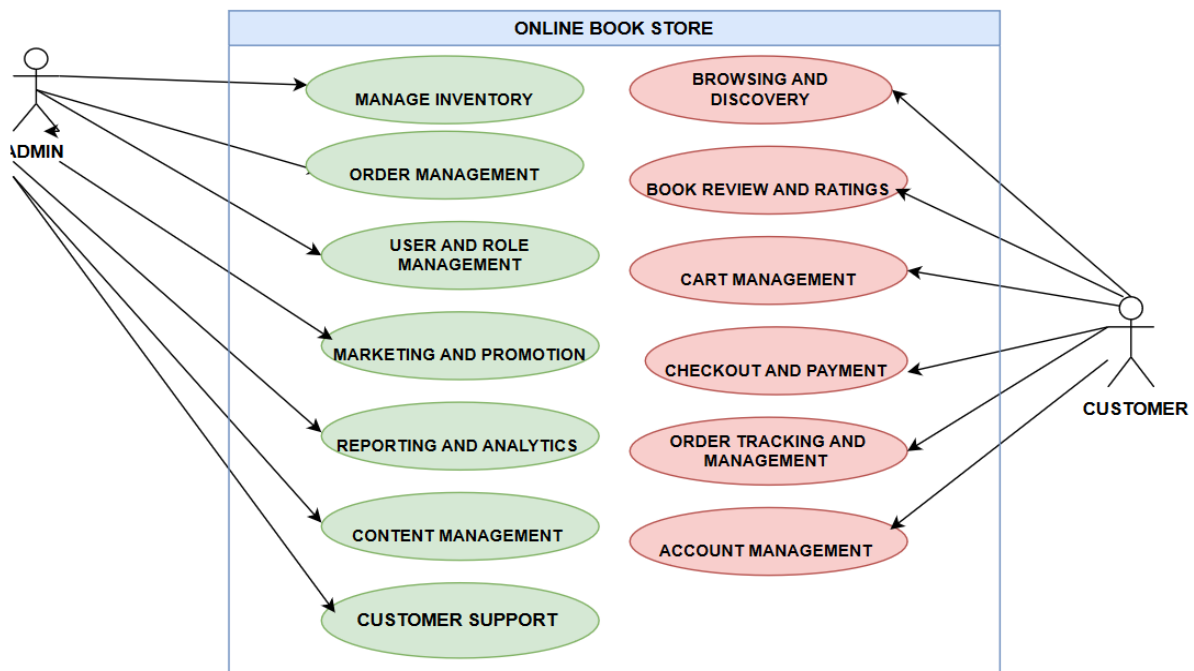
5.1 - USE CASE DIAGRAM

Fig 1.1 - Use Case Diagram for Readers Center

5.2 -USE CASE DESCRIPTION

6.1-REFERENCES

Bookseller Association (2023): This report provides insights into the trends and challenges in the online book retail industry, highlighting best practices for e-commerce platforms.

- *URL: Bookseller Association*

Nielsen Books can (2022): A comprehensive analysis of book sales data, offering valuable information on consumer preferences and purchasing behaviour in the online book market.

- *URL: Nielsen Books can*

6.2-GLOSSARY

- User Authentication: The process of verifying a user's identity through login credentials (e.g., email and password).
- Shopping Cart: A feature that allows users to select and store books they wish to purchase before proceeding to checkout.
- Payment Processing: The secure handling of financial transactions to complete purchases using various payment methods (e.g., credit cards, digital wallets).
- Search Functionality: A feature that enables users to find books based on criteria such as title, author, genre, or keywords.
- We, the undersigned, approve the Software Requirements Specification (SRS) for the Online Book Store as of the date indicated.

6.3-SIGNATURE

We, the undersigned, approve the Software Requirements Specification (SRS) for the Online Book Store as of the date indicated.

ROLE	NAME	SIGNATURE	DATE
PROJECT MANAGER			
BUSINESS ANALYST			
LEAD DEVELOPER			
QA LEAD			
CLIENT REPRESENTATIVE			