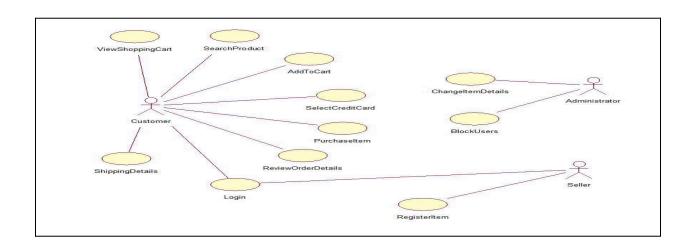
Team ID. : LTVIP2025TMID57356

Project Name: Booknest where stories nestle

# **ER-Diagram**



## **User-Book Relationship:**

Type: Many-to-Many (M:M). A single user can read or interact with many books, and a single book can be accessed by many users.

Implementation: Introduce an intermediate entity, "Interaction", with foreign keys to both User and Book tables. This table could store additional information like reading progress, reviews, or ratings.

## **Book-Inventory Relationship:**

Type: One-to-Many (1:M). Each book can have multiple copies in inventory, but each copy belongs to one book.

Implementation: Maintain a separate Inventory table with fields like BookID (foreign key), quantity, location, and condition.

## **User-Order Relationship:**

Type: One-to-Many (1:M). A single user can place multiple orders, but each order belongs to one user.Implementation: Keep the UserID foreign key in the Order table to track user purchase history.

## Additional Relationships:

Book-Author Relationship: Many-to-Many (M:M). A book can have multiple authors, and an author can write multiple books. (Similar to User-Book, use an intermediate "WrittenBy" table)
Book-Genre Relationship: Many-to-Many (M:M). A book can belong to multiple genres, and a genre can have many books. (Similar to User-Book, use an intermediate "CategorizedAs" table)
Review-User Relationship: Many-to-One (M:1). A review is written by one user, but a user can write many reviews. (Keep UserID as a foreign key in the Review table)

#### **Key Features:**

**User Registration and Authentication:** Allow users to register accounts securely, log in, and authenticate their identity to access the book store platform.

**Book Listings:** Display a comprehensive list of available books with details such as title, author, genre, description, price, and availability status.

**Book Selection:** Provide users with options to select their preferred books based on factors like genre, author, ratings, and popularity.

**Purchase Process:** Allow users to add books to their cart, specify quantities, and complete purchases securely. Upon successful completion, an order is generated, and the inventory is updated accordingly.

**Order Confirmation:** Provide users with a confirmation page or notification containing details of their order, including book information, total price, and order ID.

**Order History:** Allow users to view their past and current orders, providing options to track shipments, review purchased books, and rate their shopping experience.

**Organizer Dashboard:** Offer administrators an interface to manage book listings, inventory levels, user accounts, orders, and other platform-related activities.

**Create Item:** Organizer can create items and add new items and he can get the items and he can update items.

**Admin Dashboard:** Offer administrators an interface to manage book listings, inventory levels, user accounts, orders, and other platform-related activities. Manage the users and organizers.

**Reporting and Analytics:** Generate reports and analytics on book sales, popular genres, user demographics, and other relevant metrics to gain insights into platform usage and performance.

**Integration with External APIs:** Integrate with third-party APIs for services like payment processing, shipping logistics, and book recommendations to enhance the functionality and user experience of the book store platform.