Advanced Task Management System

Develop a simplified bookstore API that allows users to browse books, add books to a cart, and place orders. The system should support user authentication and authorization.

Objective

Requirements

1. User Authentication and Authorization:

- Users should be able to register and log in.
- Only authenticated users can add books to their cart and place orders.

2. Books:

- List all books.
- View book details.

3. **Cart:**

- Add books to the cart.
- o Remove books from the cart.
- View cart details.

4. Orders:

- Place an order from the cart.
- View order history.

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Books:

- GET /api/books List all books.
- GET /api/books/:id Get book details.

• Cart:

- GET /api/cart Get cart details for the authenticated user.
- POST /api/cart Add a book to the cart.
- o DELETE /api/cart/:itemId Remove a book from the cart.

Orders:

o POST /api/orders - Place an order.API Endpoints:

Authentication:

- o POST /api/auth/register Register a new user.
- o POST /api/auth/login Log in a user.
- o GET /api/orders View order history for the authenticated user.
- o GET /api/orders/:id Get order details.

Deliverables

1. Database Design (in image format):

o Database Design tables for Users, Books, Cart, Cart_Items, Orders, Order_Items, etc.

2. Database .sql File:

• SQL script to create the necessary database schema.

3. Code with Installation Guide (in GitHub repository):

- ExpressJS code with detailed README for setup and installation.
- o Proper folder structure and code organization.
- Use environment variables for sensitive data.

4. Postman Collection:

Postman collection for all the API endpoints.

Notes

- Ensure proper validation and error handling for all endpoints.
- Use middleware for authentication and authorization.
- Follow best practices for code structure and organization.
- Include comments and documentation within the code for clarity.
- Use modern JavaScript (ES6+) features and syntax.