

## YSD\_B03\_MERN - Midterm Project

For the midterm project you are required to implement an **Online Book Store Management System**. It will be fully based on the REST API and **all the results should be shown with Postman**. For implementation, the technologies used should be Node JS, Express JS, MongoDB and libraries and packages where required.

In the system, there will be two types of users who can access it. Access management will be based on authentication and authorization with JWT.

The user, who will be able to buy and checkout with books using a cart based system. Additionally, the prices of the books will also vary based on the discounts that are provided.

The other type of user in the system will be an **administrator** who can add and remove books from the system, and update their data accordingly. They will also be able to manipulate specific user data.

Types of user
1. User
2. Admin

### Functionalities:

Common Functionality	1. Log in to the system
	2. View all the books
	3. View all the books (with filter, sort, pagination and search)
	4. Log management on server end
User	1. Sign up for system
	2. View books in cart
	3. View transactions
	4. Add books to cart individually
	5. Remove books from cart individually

	6. Add rating for books
	7. Remove rating for books
	8. Add reviews for books
	9. Edit reviews for books
	10. Remove reviews for books
	11. Avail discounted price for books if discount time is valid
	12. Add transaction by checking out using cart
	13. Book stock must be reduced after a successful checkout
	14. Every user will have a balance, that will be deducted from once a transaction (checkout) successfully takes place
	15. Balance can be updated by user when its too low
	16. Prevent transaction from taking place if user does not have sufficient balance
Admin	<b>1. Cart, transaction is not required for admin</b>
	2. View transactions of all users
	3. View all user data
	4. Edit selected existing user data
	5. Delete user
	6. Edit book data individually
	7. Add new books
	8. Delete existing books
	9. Add discounts for books, which will be available for certain products only for a limited amount of time
	10. Update discounts for books

**Deliverables:**

1. API Specification Document (in Excel Sheet) a. Inputs and Outputs should be mentioned in the document
2. Project implementation using Node JS, Express JS and MongoDB a. <b>Project results</b> should be shown in <b>Postman</b> and be synchronized with the documentation in the API document b. Source code should be maintained in Github
Start Date: 14-09-2023 Submission Date: 19-09-2023 Demonstration Date: 20-09-2023

**Evaluation criteria:**

Requirement understanding - 10
Expected Output - 10
Code Quality -10
Demonstration - 10
Live Coding Test/ Code Understanding - 10