

# Assignment

Course Code : CSE 305  
Course Title: Software Engineering

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**Project Title:** Book Exchange Platform

**SDLC Model:** Waterfall

The book exchange platform aims to connect users within a community to facilitate the exchange, borrowing, or lending of books. It serves as a centralized hub where members can list their books, browse available titles, request books from other users, and manage their borrowing/lending activities

### **1. Requirements Gathering:**

Gathering functional requirements involves enabling users to create profiles, list books, search, request titles, use communication tools, and implement a feedback system.

### **2. System Design:**

System design includes detailed architecture planning, frontend and backend component design, and creation of UI/UX wireframes and mock-ups.

### **3. Implementation:**

Implementation covers frontend development with React or Angular, backend work with Django, Flask, or Java for handling user authentication, book listing, and requests.

### **4. Testing:**

Testing stages encompass unit testing, integration testing, system testing for overall performance, and User Acceptance Testing (UAT) with real users.

### **5. Deployment:**

Deployment involves hosting the platform on services like Heroku, AWS, or Azure while configuring for optimal performance.

### **6. Maintenance & Support:**

- Continuous support for users, addressing queries, and troubleshooting issues.
- Incorporation of user feedback for platform improvements.
- Addition of new features and updates as needed.

### **Tools & Technologies:**

Programming Languages: Java, JavaScript

Databases: MySQL

Testing: JUnit