

Book Lending System - Full Stack Project Requirement

Project Name: Book Lending System

Objective:

Build a local full-stack application where users can borrow and return books. Admins can manage the book inventory and monitor lending activity.

Core Features:

1. User Roles

- There are two roles: User and Admin
- Role can be selected during login (authentication not required)

2. For Admin:

- Add new books with:
 - Title
 - Author
 - ISBN
 - Total copies
 - Short description
- Edit or delete books
- View list of all books and their availability
- View borrowing history for all users

3. For Users:

- View available books
- Borrow a book (only if copies are available)

- View currently borrowed books
- Return a book

4. Book Details Page:

- Show full details of the book
- Show total and available copies
- Borrow button should be disabled if no copies are available

5. Borrowing Logic:

- When a book is borrowed, reduce available copies
- When returned, increase available copies
- Prevent the same user from borrowing the same book twice without returning it first

Challenging Requirement:

Implement return deadline tracking and show which books are overdue for return.

Data to Store:

- Users (basic info and role)
- Books (title, copies, etc.)
- Lending records (user ID, book ID, borrow date, return date)

Demo Expectations:

- Local demo with working User and Admin functionality
- Book list, lending, returning, and admin reports
- Basic input validations
- Simple and clean UI to demonstrate all features clearly