High Level Document

New And Old Book Shop

1.Introduction

The Online Book Shop System is a web-based application designed to facilitate the buying, selling, and management of books. It allows users to register, log in, browse books, purchase books, sell books, view transaction history, and manage their profiles.

2. Project Overview:

The project consists of the following key components:

Controller (Servlets): Handle HTTP requests and interact with the backend services.

DAO Implementations (JDBC): Manage database operations for books, customers, and transactions.

JSP (JavaServer Pages): Render dynamic web pages for user interaction and display.

3. Functionalities:

Registration and Login:

Users can register by providing their name, email, password, and address.

Registered users can log in using their email and password.

Book Management:

Display Books: Users can view a list of available books with details like name, author, price, and condition.

Search Books: Users can search books based on book name.

Buy Book: Users can purchase books by clicking the "Buy" button next to each book.

Upload Book: Sellers can upload books for sale by providing details such as name, author, price, and condition.

Sell Book: Sellers can register a book sale transaction after uploading a book for sale.

Profile Management:

View Profile: Users can view their profile details, including ID, name, email, and address.

Transaction History: Users can view their transaction history, including details of bought and sold books.

4. Technologies Used:

Java EE (Enterprise Edition): Servlets, JSP for server-side development.

JDBC (Java Database Connectivity): Database interaction using DAO pattern.

HTML, CSS, JavaScript: Front-end development for user interface and interactivity.

MySQL: Database management system for storing book, customer, and transaction data.

5. Architecture:

Front-end: HTML, CSS, JavaScript for user interface and client-side validation.

Back-end: Java Servlets for handling HTTP requests, DAO implementations for database operations.

Database: MySQL for storing and managing book, customer, and transaction data.

Session Management: HttpSession for managing user sessions and attributes.

Error Handling: Exception handling for managing runtime errors and exceptions.

6. Deployment:

The application can be deployed on a web server like Apache Tomcat or any other compatible server.

MySQL database server is used for data storage, and database connectivity is established using JDBC.

7. Future Enhancements:

Implementing user roles (e.g., admin, seller, buyer) for more granular access control.

Enhancing the user interface with more interactive features using AJAX and modern UI frameworks.

Adding search and filter functionalities for better book browsing experience.

Incorporating security measures like HTTPS, data encryption, and input validation to enhance security.

8. Conclusion:

The Online Book Shop System provides a user-friendly platform for buying and selling books online. It streamlines book management, user profiles, and transactions, making it convenient for users to explore, purchase, and sell books from the comfort of their homes.