Online Book Store - A Mini Project Report

Welcome to our presentation on the Online Book Store, a comprehensive web application developed as a mini project. This report will guide you through the key functionalities, technologies, and insights gained from this engaging software engineering endeavor.

by Abhinavu Prasad

Project Overview

1 Objectives

Develop an e-commerce platform for online book sales and inventory management.

2 Key Features

User registration, book browsing, purchasing, and order tracking.

Core Functionalities

User Management

Secure user registration, login, and profile management.

Book Catalog

Browse, search, and filter through a comprehensive book inventory.

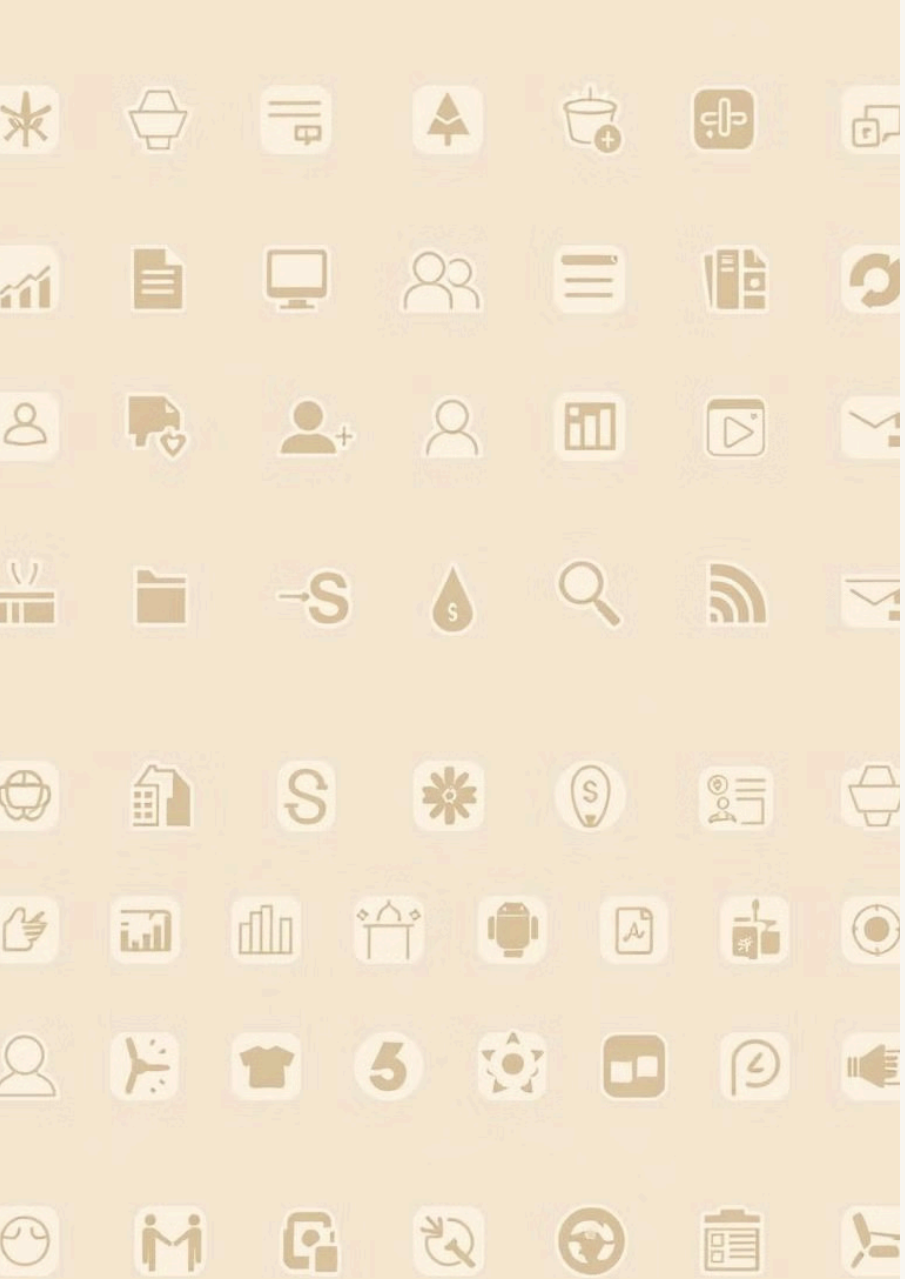
Purchasing & Order Management

Shopping Cart

Add books to cart, view order summary, and proceed to checkout.

Order Tracking

View order status, history, and customer support options.



Technical Foundations

Java & JDBC

Robust backend development using Java programming language and JDBC for database connectivity.

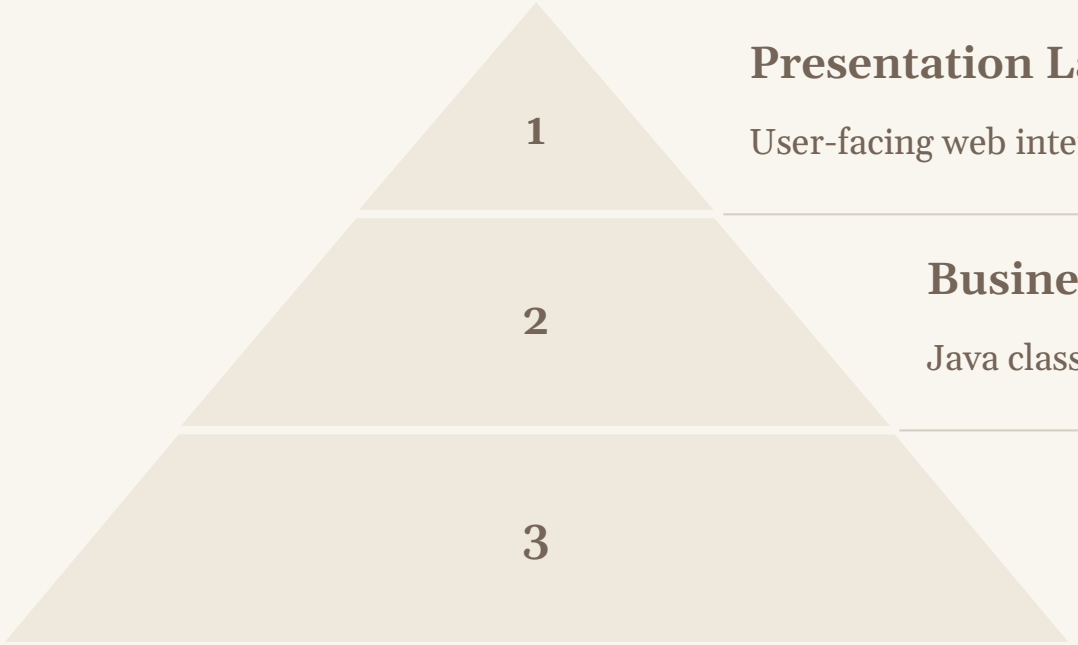
MySQL Database

Relational database management system for storing and retrieving book, user, and order data.

Generic Servlets

Servlet-based web application architecture for handling HTTP requests and responses.

System Architecture



Presentation Layer

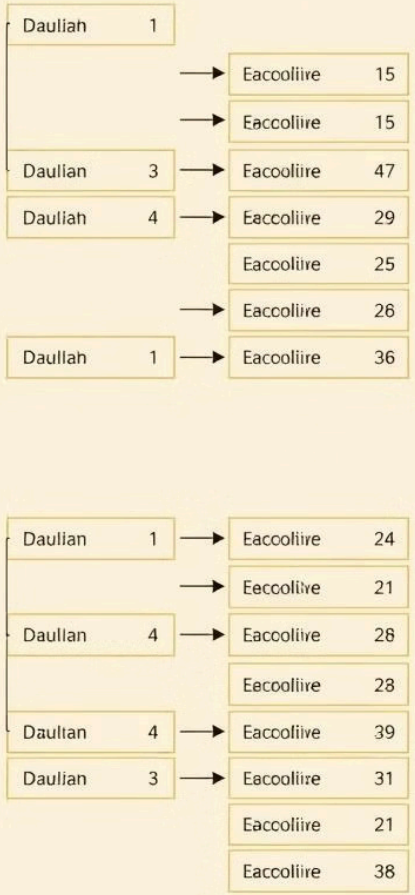
User-facing web interface built with servlets and JSPs.

Business Logic

Java classes and JDBC for implementing core functionalities.

Data Access

MySQL database for storing and retrieving data.



Database Design

1 Users

Stores user registration details and login credentials.

2 Books

Maintains the book inventory, including title, author, price, and availability.

3 Orders

Tracks customer orders, including order details, status, and payment information.

Challenges & Lessons Learned

Security Considerations

Implemented secure user authentication and authorization to protect sensitive data.

Performance Optimization

Optimized database queries and caching for improved response times.

Agile Development

Embraced an iterative approach to quickly respond to changing requirements.

Conclusion

Key Takeaways

Leveraged Java, JDBC, and MySQL to build a robust e-commerce platform.

Future Improvements

Explore machine learning for personalized recommendations and expand payment options.