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CERTIFICATE

This is to certify that the Project Report entitled **"Online Reading Platform"** which is submitted by Aman Chauhan and in partial fulfillment of the requirement for the "**Web Development using JSP, Servlet and MySQL**" in the Department of CRC-Training of ABES Institute of Technology, is a record of the candidate own work carried out by him under my/our supervision.

Mr. Gaurav Kansal

Mr. Vijay Kumar

Date:

ACKNOWLEDGEMENT

It gives us a great sense of pleasure to present the report of the "**Web Development using JSP, Servlet and MySQL**" *undertaken during B. Tech, 3rd Year. We owe a special debt of gratitude to Mr. Vijay Kumar and Mr. Gaurav Kansal for his constant support and guidance throughout the course of our work.His constant motivation has been a constant source of inspiration for us. It is only his cognizant efforts that our endeavors have seen light of the day.*

We also take the opportunity to acknowledge the contribution of team members of CRC-Training and HOD Name (HOD) for their full support and assistance during the development of the project.

We also do not like to miss the opportunity to acknowledge the motivation of the Department Of Data Science, ABES Institute of Technology to provide us the opportunity to undergo training at CRC-Training.

Signature:

Name : Aman Chauhan
RollNo : 2102901540017
Date :

ABSTRACT

The project aims to revolutionize the traditional book purchasing experience by providing a convenient, user-friendly, and efficient method for customers to order books online. The need for such a platform arises from the increasing demand for digital solutions that simplify everyday tasks, particularly in the context of online shopping. The problem addressed by this project is the lack of a dedicated, streamlined system that enables users to browse, select, and purchase books with ease, while ensuring timely delivery. Utilizing JSP and Servlet technologies, the platform facilitates seamless interactions between the user interface and the server, managing user requests, processing payments, and coordinating delivery logistics. The system's design emphasizes reliability, scalability, and security, ensuring a smooth user experience. The project successfully delivers a fully functional prototype that meets the core objectives of improving access to books and enhancing the overall user experience in the online book market. The conclusions drawn from this study highlight the effectiveness of JSP and Servlet technologies in building robust e-commerce solutions and underscore the platform's potential for wider adoption in the online retail industry.

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CHAPTER-1

INTRODUCTION

The rapid advancement of technology has fundamentally transformed the way we live, work, and interact with the world around us. Among the many industries affected by this digital revolution, the retail sector has seen a significant shift from traditional brick-and-mortar stores to online platforms. This shift is particularly evident in the book industry, where the convenience and accessibility of online shopping have led to a decline in physical bookstore sales. However, despite the growth of e-commerce, many consumers still face challenges in finding and purchasing books online due to the lack of specialized platforms that cater specifically to their needs.

This project, titled "Online Reading Platform," addresses this gap by developing a dedicated online system that streamlines the process of browsing, selecting, and purchasing books. The platform aims to enhance the user experience by offering a comprehensive solution that not only facilitates book purchases but also ensures reliable and timely delivery to the customer's doorstep.

The inspiration for this project stems from the recognition of the limitations in current online book shopping options, where general e-commerce platforms often fail to provide the personalized experience that book enthusiasts seek. By focusing on a niche market, this platform intends to offer a tailored service that meets the specific needs of book buyers, thereby differentiating itself from broader e-commerce sites.

In designing this platform, the project leverages JSP and Servlet technologies to create a dynamic and interactive web application. These technologies were chosen for their robustness, scalability, and ability to seamlessly integrate with backend systems. The project's objective is to demonstrate that a well-designed online book delivery platform can not only improve customer satisfaction but also contribute to the broader adoption of online retail solutions in the book industry.

In summary, this introduction provides an overview of the project's motivation, the gap it seeks to fill in the current market, and the technological approach employed to achieve its goals. The following sections of the report will delve deeper into the problem statement, the methodology used, and the results obtained from the development and testing of the platform.

Problem Introduction

The evolution of the internet has led to significant changes in the way people shop, with e-commerce becoming increasingly popular. While the online shopping experience has improved in many areas, the specific niche of book shopping still faces challenges. Traditional brick-and-mortar bookstores are declining, yet the current online platforms often do not provide a user-friendly experience tailored specifically to book buyers. This project addresses these shortcomings by creating a dedicated "Online Book Delivery Platform" that simplifies the process of browsing, selecting, purchasing, and receiving books.

1.1 Problem Definition

The main problem that this project seeks to solve is the lack of a specialized, efficient, and user-friendly platform for purchasing books online. Existing e-commerce websites are often too broad in scope, making it difficult for users to find specific books quickly. This project aims to create a platform that focuses solely on books, providing a streamlined experience for both casual readers and avid book enthusiasts.

1.2 Motivation

The motivation behind this project comes from the observation that while many consumers have shifted to online shopping, the experience of buying books online can be frustrating and inefficient. As a book lover, finding the right book should be as enjoyable as reading it. The current market lacks a specialized platform that caters to the unique needs of book buyers, such as easy browsing, quick access to reviews, personalized recommendations, and reliable delivery options. The desire to improve this experience and to make book shopping as seamless as possible is the primary driving force behind this project.

1.3 Objective of the Project

The primary objective of the "Online Book Delivery Platform" is to develop a web application that provides a specialized, user-friendly, and efficient interface for purchasing books online. The platform aims to offer:

- A comprehensive search functionality that allows users to easily find books by title, author, genre, or ISBN.
- Personalized recommendations based on user preferences and purchase history.
- A streamlined checkout process with multiple payment options.
- Reliable and timely delivery of purchased books.
- A secure and scalable backend to handle user data, transactions, and inventory management.

1.4 Scope of the Project

The scope of the project includes the development of both frontend and backend components for the online book delivery platform. The frontend will be designed using JSP (JavaServer Pages) for dynamic content generation, while the backend will be managed using Servlets and a MySQL database. The project also involves integrating a recommendation engine to suggest books based on user behavior and preferences. Additionally, the platform will feature a robust order management system to track purchases and deliveries. The project is expected to be scalable, allowing for future enhancements such as adding more genres, integrating with other book-related services, or expanding the user base.

1.5 Need of Work

The need for this work arises from the growing demand for convenient, specialized online shopping experiences. As consumers increasingly turn to the internet for their purchasing needs, the lack of a dedicated platform for book buyers becomes more apparent. This project addresses this gap by offering a tailored solution that meets the specific needs of book enthusiasts, providing an improved online shopping experience that could potentially replace or complement physical bookstores.

1.6 Technological Background

The development of the "Online Book Delivery Platform" leverages several key technologies, including MySQL, Servlet, JSP, and JavaBeans. Each of these technologies plays a critical role in building a robust, scalable, and user-friendly web application.

1.6.1 MySQL (Database)

MySQL is a widely used open-source relational database management system (RDBMS). It is a key component in this project, providing the necessary backend support for storing and managing data such as user information, book inventory, transaction records, and delivery statuses. MySQL is chosen for its reliability, scalability, and ease of integration with Java-based web applications.

Some Example Commands:

- **DDL (Data Definition Language):**
  - `CREATE TABLE books (book_id INT PRIMARY KEY, title VARCHAR(255), author VARCHAR(255), genre VARCHAR(100), price DECIMAL(10, 2));`
  - `ALTER TABLE books ADD COLUMN book_status STATUS;`
  - `DROP TABLE orders;`
  - `TRUNCATE TABLE employees;`
  - `RENAME TABLE employees TO staff;`
- **DML (Data Manipulation Language):**
  - `INSERT INTO books (book_id, title, author, category, price) VALUES (1, 'The Great Gatsby', 'F. Scott Fitzgerald', 'Fiction', 10.99);`
  - `UPDATE books SET price = 12.99 WHERE book_id = 1;`
  - `DELETE FROM books WHERE book_id = 1;`
- **DQL (Data Query Language):**
  - `SELECT * FROM books WHERE category = 'NEW' ;`
  - `SELECT title, author FROM books WHERE price < 15.00;`

Tables Used in Project-

Table 1: User

Name	Type	Extra	Key
name	varchar(30)	-	-
phonenumber	varchar(30)	-	-
email	varchar(30)	-	-
username	varchar(30)	-	Primary
password	varchar(30)	-	-

Table 2 : Admin

Name	Type	Extra	Key

Adminname	varchar(30)	-	-
Adminemail	varchar(30)	-	-
Adminusename	varchar(30)	-	Primary
Adminpassword	varchar(30)	-	-

Table 3 : Books

Name	Type	Extra	Key
bookid	Int(5)	Auto-increment	Primary
bookname	varchar(30)	-	-
author	varchar(30)	-	-
price	varchar(30)	-	-
category	varchar(30)	-	-
status	varchar(30)	-	-
bookphoto	varchar(50)	-	-

Table 4 : Cart

Name	Type	Extra	Key
cartid	Int(5)	Auto-increment	Primary
bookid	Int(5)	-	-
username	varchar(30)	-	-
bookname	varchar(30)	-	-
author	varchar(30)	-	-
price	Int(10)	-	-
totalprice	Int(10)	-	-

Table 5 : Bookorders

Name	Type	Extra	Key
id	Int(5)	Auto-increment	Primary
orderid	varchar(20)	-	-
name	varchar(30)	-	-
username	varchar(20)	-	-
email	varchar(30)	-	-
phonenumber	varchar(20)	-	-
address	varchar(30)	-	-
pincode	varchar(20)	-	-
bookname	varchar(20)	-	-
author	varchar(30)	-	-
price	Int(5)	-	-
payment	varchar(20)	-	-

1.6.2 Why Servlet, JSP, and Bean?

Servlets, JSP, and JavaBeans are used in this project to create a dynamic, interactive, and maintainable web application. Servlets handle the server-side logic, processing user requests, and managing the flow of data between the front-end and the database. JSP is used for generating dynamic HTML content, allowing for the separation of presentation and business logic. JavaBeans are utilized to encapsulate reusable components such as user data, which can be easily accessed and manipulated across different parts of the application.

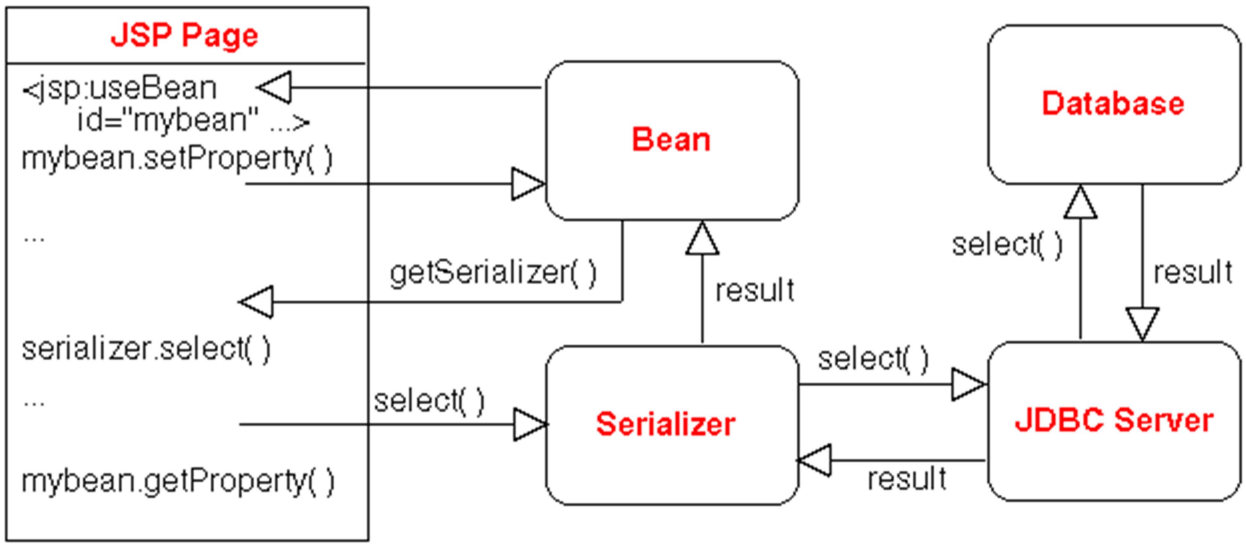

Fig-1.1.1

These technologies were chosen because they are well-supported, scalable, and efficient for developing enterprise-level web applications. They also integrate seamlessly with each other, allowing for a clear separation of concerns, which makes the application easier to maintain and extend.

1.6.3 Servlet/JSP Together

Servlets and JSP work together to handle the entire process of a web application from user interaction to data processing and response generation. When a user makes a request (such as searching for a book), the Servlet handles the request, processes any necessary logic (e.g., querying the database for matching books), and then forwards the request to a JSP page. The JSP page then generates the HTML response that is sent back to the user, displaying the search results.

This combination allows for a clean separation of concerns: Servlets manage the business logic and control flow, while JSPs handle the presentation logic. This modularity improves the maintainability and scalability of the application.

1.6.4 Bean/JSP Together

JavaBeans and JSP work together to manage and display data in the web application. JavaBeans are used to encapsulate data such as user profiles, book details, or order information. These beans are then accessed within JSP pages using simple tags and expressions, making it easy to display data to the user without embedding complex logic in the presentation layer.

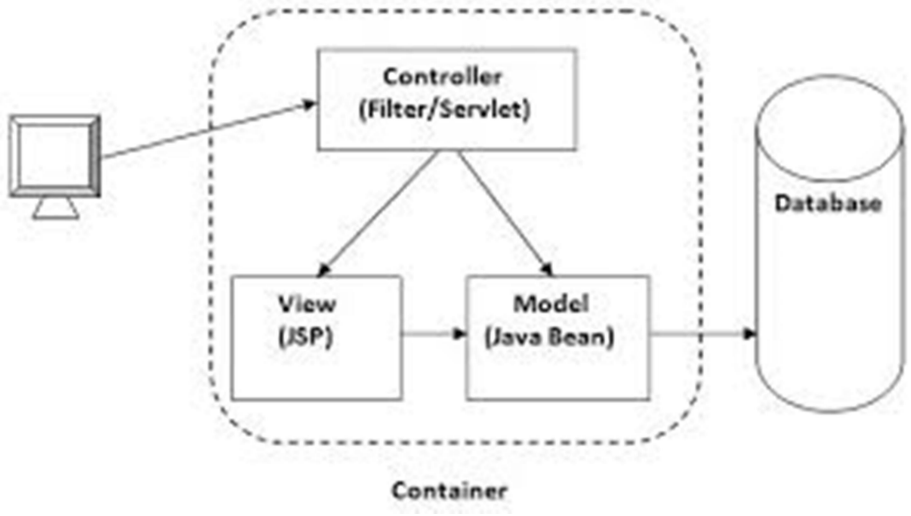

Fig-1.1.2

CHAPTER-2

Related Previous Work/Market Survey

The project is inspired by the growing trend of digital transformation within the retail sector, particularly in the book industry. Several previous works and existing web portals have addressed the challenges of online book purchasing, each contributing to the current understanding of the market and highlighting areas that require further improvement.

Previous Work in the Field

Several studies have been conducted to explore the dynamics of online book retailing. These studies have examined the transition from physical bookstores to digital platforms, identifying key factors that influence consumer behavior, such as ease of access, pricing, and the availability of digital versions of books. For instance, research by Jones and colleagues (2018) analyzed consumer preferences in online book shopping, finding that the ability to quickly find specific books and receive personalized recommendations significantly improves user satisfaction. Their study emphasized the importance of creating intuitive search and recommendation systems, which are critical components of any successful online book retail platform.

In another study, Smith et al. (2019) explored the impact of delivery logistics on customer satisfaction in the e-commerce sector, including online book sales. The study found that delays in delivery and a lack of tracking options were major pain points for customers. These findings underscore the need for a robust order management and delivery system, which is a key focus area for the "Online Book Delivery Platform" project.

Existing Web Portals

The market for online book delivery is currently dominated by a few major players, each offering a range of services but also having certain limitations:

- **Amazon Books:** Amazon is the largest player in the online book market, offering an extensive selection of books across genres. While Amazon provides a comprehensive shopping experience, its broad focus means that the platform does not cater specifically to book enthusiasts. The user interface is designed for general e-commerce and lacks the personalized touch that a niche book platform could offer.
- **Barnes & Noble:** Barnes & Noble's online platform is a digital extension of its physical stores. It offers a range of features, including book previews, customer reviews, and recommendations. However, its digital presence is often overshadowed by Amazon, and the platform can feel cluttered due to its attempt to replicate the in-store experience online.
- **Book Depository:** Acquired by Amazon, Book Depository is known for its global reach and free worldwide shipping. However, the platform lacks sophisticated search and recommendation features, and its delivery times can be slow depending on the location, affecting customer satisfaction.

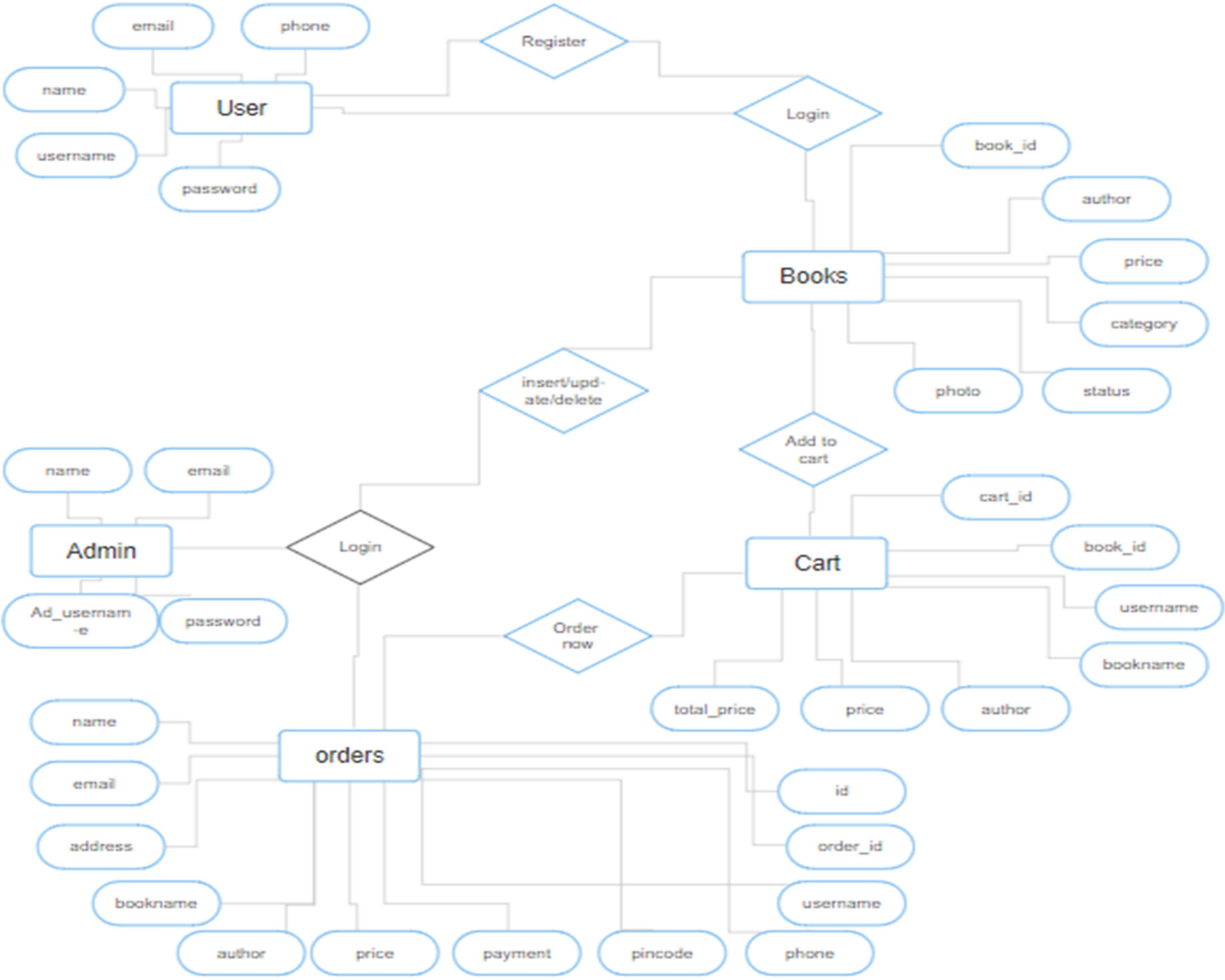

Fig-2.1.1, E-R diagram

CHAPTER-3

IMPLEMENTATION AND RESULTS

This section outlines the essential software and hardware components required for the successful implementation of the "Online Reading Platform." It also discusses any assumptions, dependencies, and constraints that may impact the development and deployment of the project, along with implementation details.

3.1 Software Requirements

- **Web Server** : Apache Tomcat
- **Database Management System** : MySQL
- **Java Development Kit (JDK)** : JDK 8
- **Technologies** : Java, JSP ,Servlets, and JavaBeans
- **Operating System** : Windows 10/11

3.1 Hardware Requirements

- **Processor** : Intel Core i5
- **RAM** : Minimum 8 GB
- **Network** : Reliable internet connection

3.2 Assumptions and Dependencies

1. **Assumptions:**
   - The users have access to the internet with a stable connection.
   - The target audience is familiar with basic web navigation and online shopping.
   - The platform will initially target a small to medium user base but should be scalable to accommodate growth.
2. **Dependencies:**
   - The project relies on the Apache Tomcat server for running Servlets and JSP.
   - MySQL is used as the primary database; any issues with MySQL could impact the platform's functionality.
   - The project is dependent on the Java runtime environment for executing the backend logic.
   - External libraries and frameworks (e.g., JDBC, JSTL) are required to facilitate development and must be compatible with the chosen Java version.

3.4 Imlementation Details

1. **Frontend Development:**
    - **HTML/CSS/JavaScript:** The frontend interface will be developed using HTML5 for structure, CSS3 for styling, and JavaScript for interactivity. Bootstrap will be employed to ensure responsive design across various screen sizes.
    - **JSP Pages:** JSP will be used to generate dynamic content on the server side. Each JSP page will correspond to different functionalities, such as the home page, book listing, product details, shopping cart, and user account management.
2. **Backend Development:**
    - **Servlets:** Java Servlets will handle the core business logic, including processing user requests, managing sessions, and interacting with the database. For example, when a user searches for a book, a Servlet will process the query, fetch the results from the MySQL database, and forward them to the appropriate JSP page.
    - **JavaBeans:** JavaBeans will be used to encapsulate data models, such as user details, book information, and order data. These beans will be accessible across various components, ensuring a consistent data flow throughout the application.
3. **Database Management:**
    - **Schema Design:** The MySQL database schema will be designed to accommodate tables for users, books, orders, categories, reviews, and inventory. Relationships between these tables will be defined to maintain data integrity.
    - **Data Access:** JDBC will be employed to execute SQL queries for CRUD (Create, Read, Update, Delete) operations. Stored procedures or prepared statements may be used to enhance security and performance.

3.5 Snapshots of Webpages and codes

Sample -- > 1

User Registration Page-

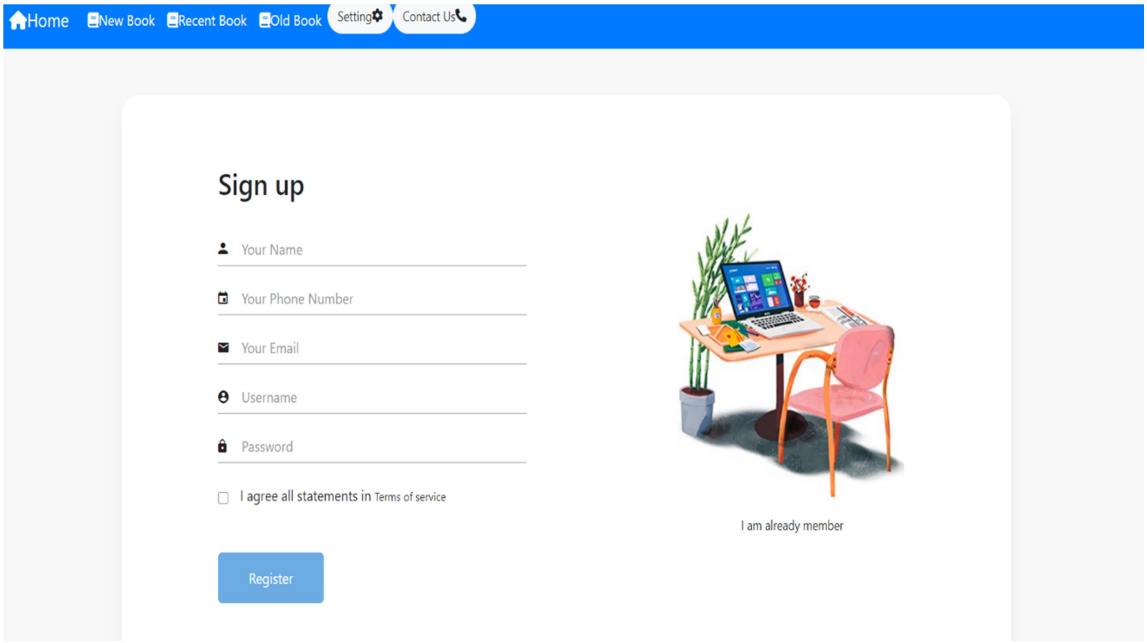

Fig-3.1.1

code screenshot

```
public static int Register(StudentBean sb) {
    try {
        con = Connect.getConnection();
      String sql = "insert into user values(?,?,?,?,?);";
      ps = con.prepareStatement(sql);

      ps.setString(1, sb.getName());
      ps.setString(2, sb.getPhnumber());
      ps.setString(3, sb.getEmail());
      ps.setString(4, sb.getUname());
      ps.setString(5, sb.getPassword());

      rowCount = ps.executeUpdate();
  } catch (Exception e) {
      e.printStackTrace();
  }
    return rowCount;
}
```

Fig-3.1.2

```
<%
  int status = StudentDAO.Register(obj);
 if(status > 0)
 {
//  out.print("<br> Registration Success...");

out.print("<script> alert('Registration Success....'); "+
" window.open('login.jsp','_self')</script>");
 }
 else
 {
    //  out.print("<br> Registration Failed...");

out.print("<script> alert('Registration Failed....'); "+
" window.open('index.jsp','_self')</script>");
 }
%>
```

Fig-3.1.3

Sample -- > 2

User Login page-

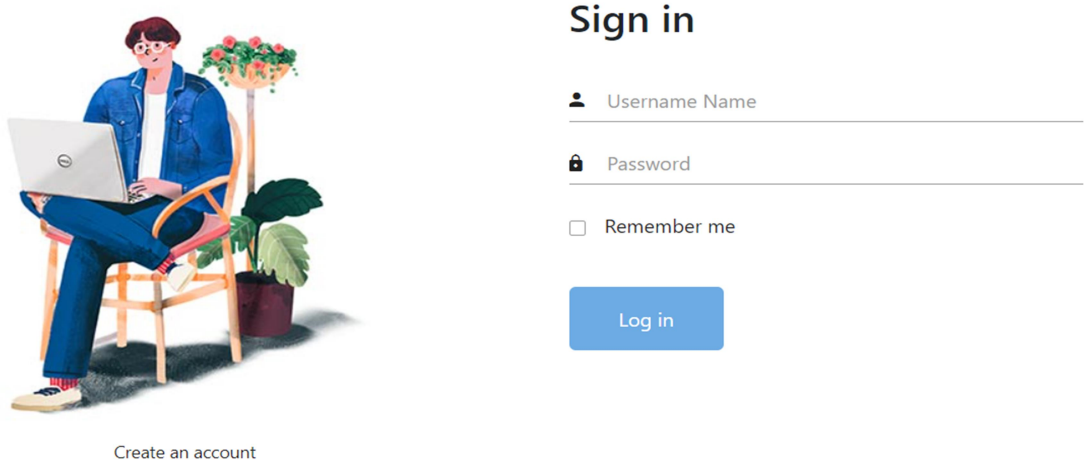

Fig-3.2.1

Code Screenshot-

```
public static int Login(StudentBean sb) {
    try {
        con = Connect.getConnection();
      String sql = "select * from user where username=? and password=?;";
      ps = con.prepareStatement(sql);

      ps.setString(1, sb.getUname());
      ps.setString(2, sb.getPassword());

      rs = ps.executeQuery();

      if(rs.next())
           rowCount = 1;
      else
          rowCount = 0;

  } catch (Exception e) {
      e.printStackTrace();
  }
    return rowCount;
}
```

Fig-3.2.2

```
<jsp:useBean id="obj" class="com.net.Bean.StudentBean"></jsp:useBean>
<jsp:setProperty property="*" name="obj" />
<%
int status = StudentDAO.Login(obj);
if (status > 0) {
    //  out.print("<br> Registration Success...");
    session.setAttribute("adminun", obj.getUname());
    out.print("<script> alert('Login Success....'); " + " window.open('index.jsp','_self')</script>");
} else {
    //  out.print("<br> Registration Failed...");

    out.print("<script> alert('Login Failed....'); " + " window.open('login.jsp','_self')</script>");
}
%>
```

Fig-3.2.3

Sample -- > 3

Cart Page-

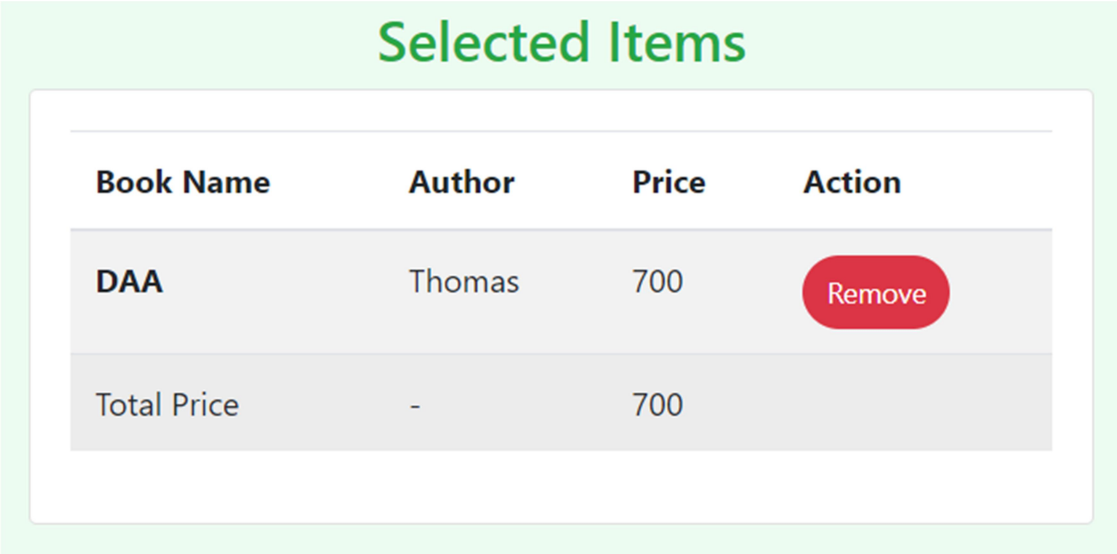

Fig-3.3.1

Code Screenshot-

```
<%
String uname = (String) session.getAttribute("adminun");
cartDAOimpl dao = new cartDAOimpl(Connect.getConnection(
List<Cart> list = dao.getBookByUser(uname);
int totalPrice = 0;
for (Cart c : list) {
    totalPrice = c.getTotal_price();
%>
<tr>
    <th scope="row"><%=c.getBookName()%></th>
    <td><%=c.getAuthor()%></td>
    <td><%=c.getPrice()%></td>
    <td><a href="./deletecart?id=<%=c.getCid()%>"
        class="btn btn-sm btn-danger">Remove</a></td>
</tr>

<%
}
%>

<tr>
    <td>Total Price</td>
    <td>-</td>
    <td><%=totalPrice%></td>
    <td></td>
</tr>
```

Fig-3.3.2

```
public List<Cart> getBookByUser(String uname) {
    List<Cart> list=new ArrayList<Cart>();
    Cart c=null;
    boolean f=false;
    int total_price=0;
    try {
        String sql="select * from cart where uname=?";
        PreparedStatement ps=con.prepareStatement(sql);
        ps.setString(1, uname);

        ResultSet rs=ps.executeQuery();

        while(rs.next()) {
            c=new Cart();
            c.setCid(rs.getInt(1));
            c.setBid(rs.getInt(2));
            c.setUname(rs.getString(3));
            c.setBookName(rs.getString(4));
            c.setAuthor(rs.getString(5));
            c.setPrice(rs.getInt(6));

            total_price=total_price+rs.getInt(7);
            c.setTotal_price(total_price);

            list.add(c);
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
    return list;
}
```

Fig-3.3.3

Sample -- > 4

User View order page-

Your Orders

Order ID	Name	Book Name	Author	Price	Payment Type
001	Aman Chauhan	DAA	Thomas	700	COD
002	Aman Chauhan	Data Structures	Anuradha	650	COD

Fig-3.4.1

Code Screenshot-

```
<%
String uname = (String) session.getAttribute("adminun");
bookOrderimpl dao = new bookOrderimpl(Connect.getConnection());
List<bookorder> blist = dao.getBook(uname);
for(bookorder b:blist){%>

<tr>
    <td><%=b.getOrderid() %></td>
    <td><%=b.getUsername() %></td>
    <td><%=b.getBname() %></td>
    <td><%=b.getAuthor() %></td>
    <td><%=b.getPrice() %></td>
    <td><%=b.getPayment() %></td>
</tr>
<%
}
%>
```

Fig-3.4.2

```
public List<bookorder> getBook(String uname) {
    List<bookorder> list=new ArrayList<bookorder>();
    bookorder o=null;

    try {
        String sql="select username,email,address,bookname,author,price,payement,pincode,order_id from bookorder where uname=?";
        PreparedStatement ps=con.prepareStatement(sql);
        ps.setString(1, uname);
        ResultSet rs=ps.executeQuery();
        while(rs.next()) {
            o=new bookorder();
            o.setUsername(rs.getString(1));
            o.setEmail(rs.getString(2));
            o.setFulladd(rs.getString(3));
            o.setBname(rs.getString(4));
            o.setAuthor(rs.getString(5));
            o.setPrice(rs.getInt(6));
            o.setPayment(rs.getString(7));
            o.setPincode(rs.getString(8));
            o.setOrderid(rs.getString(9));
            list.add(o);

        }
    } catch (Exception e) {
        e.printStackTrace();
    }

    return list;
}
```

Fig-3.4.3

Sample -- > 5

Admin Login page-

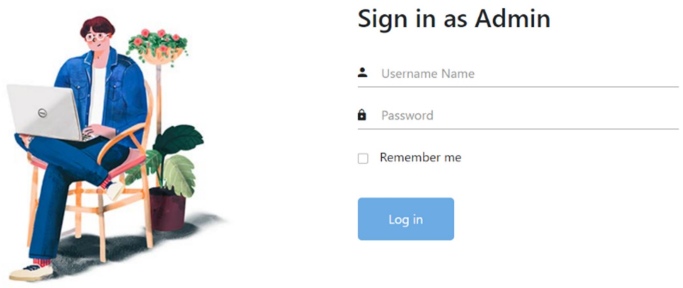

Fig-3.5.1

Code Screenshot-

```
<jsp:useBean id="obj" class="com.net.Bean.AdminBean"></jsp:useBean>
 <jsp:setProperty property="*" name="obj"/>
<%
  int status = adminDAO.Login(obj);
 if(status > 0)
 {
//  out.print("<br> Registration Success...");
session.setAttribute("adminun", obj.getAuname());
out.print("<script> alert('Login Success....'); "+
" window.open('admin.jsp','_self')</script>");
 }
 else
 {
    //  out.print("<br> Registration Failed...");

out.print("<script> alert('Login Failed....'); "+
" window.open('adminlogin.jsp','_self')</script>");
 }
%>
```

Fig-3.5.2

```
public static int Login(AdminBean sb) {
    try {
        con = Connect.getConnection();
      String sql = "select * from admin where admin_uname=? and admin_pass=?;";
      ps = con.prepareStatement(sql);

      ps.setString(1, sb.getAuname());
      ps.setString(2, sb.getApass());

      rs = ps.executeQuery();

      if(rs.next())
           rowCount = 1;
      else
          rowCount = 0;

  } catch (Exception e) {
      e.printStackTrace();
  }
    return rowCount;
}
```

Fig-3.5.3

Sample -- > 6

Admin Add Book page-

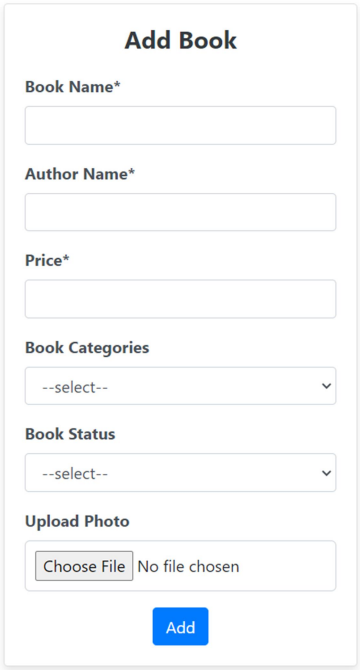

Fig-3.6.1

```
public boolean addBook(AddBookBean b) {
    boolean f = false;
    try {
        String sql = "INSERT INTO books(book_name, author_name, price, book_categories, book_status, book_photo) VALUES(?, ?, ?, ?, ?, ?)";
        PreparedStatement ps = conn.prepareStatement(sql);
        ps.setString(1, b.getBname());
        ps.setString(2, b.getAuname());
        ps.setString(3, b.getBprice());
        ps.setString(4, b.getBcategories());
        ps.setString(5, b.getBstatus());
        ps.setString(6, b.getBphoto());

        int i = ps.executeUpdate();
        if (i == 1) {
            f = true;
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
    return f;
}
```

Fig-3.6.2

Sample -- > 7

Admin Book Edit And Delete page-

All Books :

Book Id	Image	Book Name	Author Name	Price	Book Categories	Status	Action
22		Hellen Keller	Hellen Keller	500	Old	Active	Edit Delete
23		Java	Joshua	600	New	Active	Edit Delete
24		C++ prog	Bjarne	600	New	Active	Edit Delete
25		DAA	Thomas	700	New	Active	Edit Delete
26		Data Structures	Anuradha	650	New	Active	Edit Delete

Fig-3.7.1

Code Screenshot-

```
<%
addBooksDAO dao = new addBooksDAO(Connect.getConnection());
List<AddBookBean> list = dao.getAllbook();
for (AddBookBean b : list) {
%>
<tr>
    <th scope="row"><%=b.getBid()%></th>
    <td><img src="../book/<%=b.getBphoto()%>" style="width: 50px; height: 50px;"></td>
    <td><%=b.getBname()%></td>
    <td><%=b.getAuname()%></td>
    <td><%=b.getBprice()%></td>
    <td><%=b.getBcategories()%></td>
    <td><%=b.getBstatus()%></td>
    <td>
        <a href="editBook.jsp?id=<%=b.getBid()%>" class="btn btn-primary">Edit</a>
        <a href="../delete?id=<%=b.getBid()%>" class="btn btn-danger">Delete</a>
    </td>
</tr>
<%
}
%>
```

Fig-3.7.2

```
public List<AddBookBean> getAllbook() {
    List<AddBookBean> list = new ArrayList<AddBookBean>();
    try {
        String sql = "SELECT * FROM books";
        PreparedStatement ps = conn.prepareStatement(sql);
        ResultSet rs = ps.executeQuery();
        while (rs.next()) {
            AddBookBean b = new AddBookBean();
            b.setBid(rs.getInt(1));
            b.setBname(rs.getString(2));
            b.setAuname(rs.getString(3));
            b.setBprice(rs.getString(4));
            b.setBcategories(rs.getString(5));
            b.setBstatus(rs.getString(6));
            b.setBphoto(rs.getString(7));
            list.add(b);
        }
    } catch (Exception e) {
        e.printStackTrace();
    }
    return list;
}
```

Fig-3.7.3

Sample -- > 8

Admin All Orders page-

All Orders :

Order Id	Name	Email	Address	Phone No.	Book Name	Author	Price	Payement Type
001	Aman Chauhan	aman@gmail	Crossing Republic,Ghaziabad,Uttar Pradesh,201016	7668053626	DAA	Thomas	700	COD
002	Aman Chauhan	aman@gmail	Crossing Republic,Ghaziabad,Uttar Pradesh,201016	7668053626	Data Structures	Anuradha	650	COD

Fig-3.8.1

Code Screenshot-

```
<%
bookOrderimpl dao = new bookOrderimpl(Connect.getConnection());
List<bookorder> blist = dao.getBook();
for (bookorder b : blist) {
%>
<tr>
    <th scope="row"><%=b.getOrderid()%></th>
    <td><%=b.getUsername() %></td>
    <td><%=b.getEmail() %></td>
    <td><%=b.getFulladd() %></td>
    <td><%=b.getPhno()%></td>
    <td><%=b.getBname() %></td>
    <td><%=b.getAuthor() %></td>
    <td><%=b.getPrice() %></td>
    <td><%=b.getPayment() %></td>
</tr>
<%
}
%>
```

Fig-3.8.2

```
public List<bookorder> getBook() {
    List<bookorder> list=new ArrayList<bookorder>();
    bookorder o=null;

    try {
        String sql="select username,email,address,bookname,author,price,payement,pincode,order_id,phone from bookorder ";
        PreparedStatement ps=con.prepareStatement(sql);

        ResultSet rs=ps.executeQuery();
        while(rs.next()) {
            o=new bookorder();
            o.setUsername(rs.getString(1));
            o.setEmail(rs.getString(2));
            o.setFulladd(rs.getString(3));
            o.setBname(rs.getString(4));
            o.setAuthor(rs.getString(5));
            o.setPrice(rs.getInt(6));
            o.setPayment(rs.getString(7));
            o.setPincode(rs.getString(8));
            o.setOrderid(rs.getString(9));
            o.setPhno(rs.getString(10));
            list.add(o);

        }
    } catch (Exception e) {
        e.printStackTrace();
    }

    return list;
}
```

Fig-3.8.3

Chapter-4

CONCLUSION

The development of the "Online Reading Platform" has been a significant learning experience, involving both technical and project management challenges. Throughout this project, I gained a deep understanding of web application development, particularly in integrating various technologies such as Java Servlets, JSP, JavaBeans, and MySQL. One of the key learning outcomes was mastering the MVC (Model-View-Controller) architecture, which played a crucial role in structuring the application for scalability and maintainability.

Challenges Faced:

1. **Database Management and Optimization:**
   - **Challenge:** One of the primary challenges was designing and optimizing the database schema to efficiently handle various operations, including complex queries for searching, filtering, and recommendations.
   - **Solution:** This was addressed by carefully normalizing the database tables, using indexed columns for frequently searched fields, and implementing optimized SQL queries and stored procedures to enhance performance.
2. **Session Management and Security:**
   - **Challenge:** Managing user sessions securely and ensuring that user data, especially sensitive information, is protected from common web vulnerabilities such as SQL injection and session hijacking.
   - **Solution:** Implementing HTTPS for secure data transmission, using prepared statements in SQL queries to prevent injection attacks, and managing sessions with appropriate timeouts and token-based authentication techniques.
3. **User Experience Design:**
   - **Challenge:** Creating an intuitive and responsive user interface that caters to both desktop and mobile users.
   - **Solution:** Utilizing Bootstrap for responsive design and conducting user testing to gather feedback, which was then used to refine the interface for a better user experience.
4. **Integration of Recommendation Engine:**
   - **Challenge:** Developing and integrating a recommendation engine that provides personalized book suggestions based on user preferences and purchase history.
   - **Solution:** Leveraging collaborative filtering techniques and implementing a recommendation algorithm that analyzes user behavior to suggest relevant books.

Future Directions

The "Online Book Delivery Platform" lays a solid foundation, but there are numerous possibilities for future enhancements and research. Future developers could explore the following directions to improve and expand the platform:

1. **Enhanced Recommendation System:**
   - The current recommendation engine could be improved by incorporating machine learning algorithms that learn from user interactions in real-time, offering even more personalized recommendations.
2. **Integration with E-book Providers:**
   - Future work could involve integrating with e-book providers and publishers to offer both physical and digital book options, catering to the growing demand for e-books.
3. **Advanced Search and Filter Capabilities:**
   - Enhancing the search functionality to include advanced filters based on user ratings, publication date, and author popularity would improve the user experience and help users find exactly what they are looking for.
4. **Mobile Application Development:**
   - Developing a native mobile application for both Android and iOS platforms would make the platform more accessible and convenient, especially for users who prefer shopping on their mobile devices.

Practical Implications

The work carried out in this project has significant practical implications for the online book retail industry. By focusing on a user-centric design and leveraging modern web technologies, the "Online Book Delivery Platform" addresses several pain points faced by consumers in existing platforms. The successful implementation of a specialized platform like this could inspire further innovations in niche e-commerce, offering tailored experiences that large, generalist platforms often overlook. Additionally, the scalable architecture of the platform ensures that it can grow alongside the user base, adapting to future trends and technological advancements.

In conclusion, this project not only serves as a proof of concept for a specialized book delivery platform but also highlights the importance of user experience and technical robustness in the rapidly evolving world of e-commerce. With the foundations laid and the challenges overcome, this platform is well-positioned for future developments that could further enhance its value to book enthusiasts worldwide.

References

This section lists the sources and references cited throughout the project. It includes books, research papers, articles, and other resources that provided valuable information and insights during the development of the "Online Reading Platform."

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