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Servlet & JSP Lab Assessment

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Question:

Q6) Library Management System

Property	Type
BookID	Int
BookName	String
Author	String
Publisher	String
Price	Float
Edition	Int

Answers:

Database: lms_db

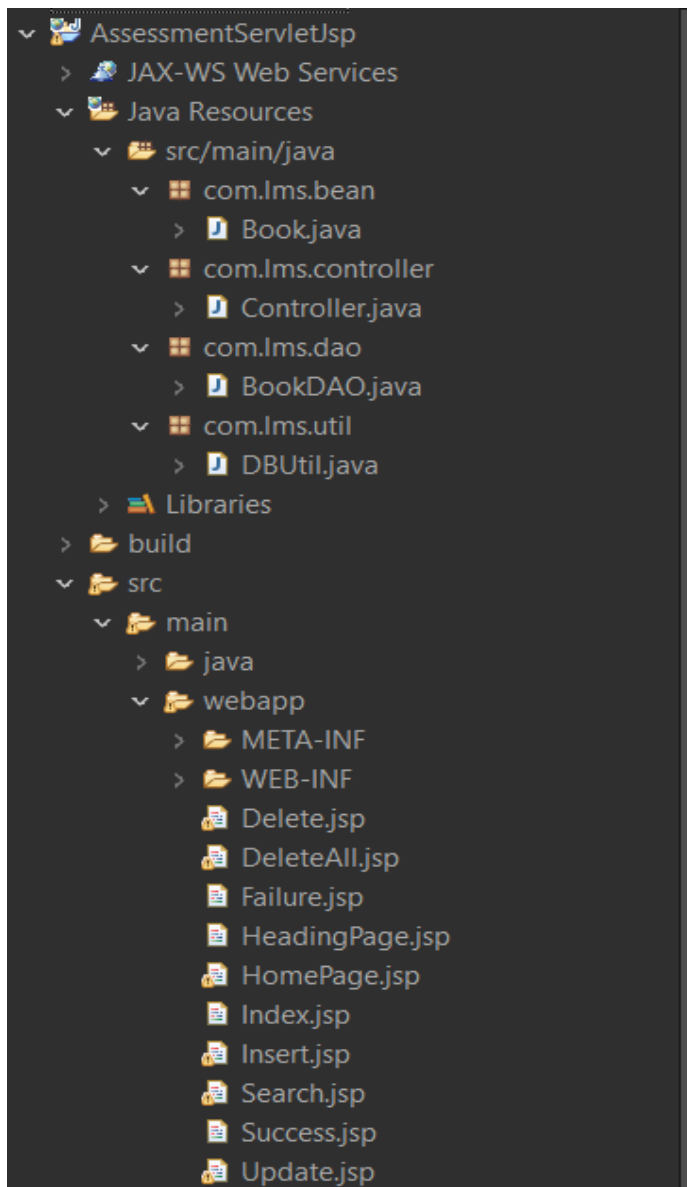
```
MySQL 8.0 Command Line Client
mysql> create database lms_db;
Query OK, 1 row affected (0.00 sec)

mysql> use lms_db;
Database changed
mysql> create table tbl_book(book_id int primary key,book_name varchar(100) not null,author varchar(100) not null,
publisher varchar(200) not null,price float not null,edition int not null);
Query OK, 0 rows affected (0.02 sec)

mysql> desc tbl_book;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| book_id    | int           | NO   | PRI | NULL    |       |
| book_name  | varchar(100)  | NO   |     | NULL    |       |
| author     | varchar(100)  | NO   |     | NULL    |       |
| publisher  | varchar(200)  | NO   |     | NULL    |       |
| price      | float         | NO   |     | NULL    |       |
| edition    | int           | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql>
```

Folder Structure: MVC Pattern



Coding: View Part

Index.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Library Management System</title>
<style type="text/css">
body{
background-color: black;
}</style>
</head>
<body>
<iframe src="HeadingPage.jsp" width="100%" height="200px"
style="border:none"></iframe>
<iframe src="<%=request.getContextPath()%>/home" width="100%" height="510px"
name="Operation" style="border:none"></iframe>
</body>
</html>
```

HeadingPage.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Library Management System</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWFSpd3yD65VohhpuaCOMLASjC"
crossorigin="anonymous">
<style>
body{
background-image:
url('https://static.vecteezy.com/system/resources/previews/003/031/763/non_2x/blue-
wide-background-with-radial-blurred-gradient-free-vector.jpg');
background-size: cover;
}
#title{
box-shadow: 5px 5px 5px 5px rgba(0,0,0,0.5);
text-align:center;
font-size: 36px;
```

```
font-weight: bold;  
margin-left: 400px;
```

```

margin-top: 10px;
}
#links{
margin-top: 33px;
}
li{
margin-left: 10px;
}
#form{
margin-left: 700px;
width: 300px;
}
</style>
</head>
<body>
<div class="card card-body w-50" id="title">Library Management System</div>
<nav class="navbar navbar-expand-lg navbar-light bg-light" id="links">
<div class="container-fluid">
<div class="collapse navbar-collapse">
<ul class="navbar-nav">
<li class="nav-item">
<a class="nav-link active" href="<%=request.getContextPath()%>/home"
target="Operation"><button class="btn btn-outline-success">Home</button></a>
</li>
<li class="nav-item">
<a class="nav-link" href="<%=request.getContextPath()%>/insert"
target="Operation"><button class="btn btn-outline-success">Insert</button></a>
</li>
<li class="nav-item">
<a class="nav-link" href="<%=request.getContextPath()%>/update"
target="Operation"><button class="btn btn-outline-success">Update</button></a>
</li>
<li class="nav-item">
<a class="nav-link" href="<%=request.getContextPath()%>/delete"
target="Operation"><button class="btn btn-outline-danger">Delete</button></a>
</li>
<li class="nav-item">
<a class="nav-link" href="<%=request.getContextPath()%>/deleteAll"
target="Operation"><button class="btn btn-outline-danger">DeleteAll</button></a>
</li>
</ul>
<form class="d-flex" id="form" action="search" target="Operation" >
<input class="form-control me-3" type="text" placeholder="Enter Id" aria-
label="Search" name="bookId" autocomplete="off" required >
<button class="btn btn-outline-success" type="submit" name="button"
value="Search">Search</button>
</form>
</div>
</div>
</div>
</nav>
</body>
</html>

```


HomePage.jsp :

```
<%@page import="com.lms.bean.Book"%>
<%@page import="java.util.LinkedList"%>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Home Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWfSpd3yD65VohhpuuCOmLASjC"
crossorigin="anonymous">
<style>
body{
background-image:
url('https://w.forfun.com/fetch/99/999169bfd8ecc7d22cceb9c5adb80141.jpeg');
background-size: cover;
}
#display{
margin: 30px 0px 0px 180px;
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-75" id="display">
<div class="card-header text-center h1">Book Record List</div>
<% LinkedList<Book> list =
(LinkedList<Book>)request.getSession().getAttribute("list"); %>
<div class="card-body">
<div class="card-text h4 mb-4">No of Record : <%=list.size()%></div>
<table class="table table-bordered table-hover text-center">
<thead>
<tr class="table-primary">
<th scope="col">Book Id</th>
<th scope="col">Book Name</th>
<th scope="col">Author</th>
<th scope="col">Publisher</th>
<th scope="col">Price</th>
<th scope="col">Edition</th>
</tr>
</thead>
<tbody>
<% for(Book b : list){ %>
```

```
<%= "<tr><td>" + b.getBookId() + "</td><td>" + b.getBookName() + "</td><td>" + b.getAuthor() +  
" </td><td>" + b.getPublisher() + "</td><td>" + b.getPrice() + "</td><td>" + b.getEdition() +  
</td></tr>" %>  
<%} %>  
</tbody>
```

```

</table>
</div>
</div>
</body></html>

```

Insert.jsp:

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image:
url('https://w.forfun.com/fetch/99/999169bfd8ecc7d22cceb9c5adb80141.jpeg');
background-size: cover;
margin-left: 30%;
margin-top: 10px;
font-weight: bold;
}
td{
padding: 10px 14px;
}
#card{
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-50 " id="card">
<div class="card-header text-center"><h5>Enter the Book Details to Insert :
</h5></div>
<div class="card-body ">
<form action="Controller" method="post">
<table style="border:none;">
<tr><td>Enter Book Id </td><td>: <input type="text" name="bookId"
autocomplete="off" placeholder="Enter book id" required/> </td></tr>
<tr><td>Enter Book Name </td><td>: <input type="text" name="bookName"
autocomplete="off" placeholder="Enter book name" required/> </td></tr>
<tr><td>Enter Author Name </td><td>: <input type="text" name="author"
autocomplete="off" placeholder="Enter author name" required/> </td></tr>
<tr><td>Enter Publisher Name </td><td>: <input type="text" name="publisher"
autocomplete="off" placeholder="Enter publisher name" required/> </td></tr>
<tr><td>Enter Price </td><td>: <input type="text" name="price" autocomplete="off"
placeholder="Enter price" required/></td></tr>
<tr><td>Enter Edition </td><td>: <input type="text" name="edition"
autocomplete="off" placeholder="Enter edition" required/> </td></tr>

```

```
<tr><td colspan="2" style="text-align: right;"><input type="submit" class="btn btn-primary btn-md" name="button" value="Insert"/> </td></tr>
```

```

</table>
</form>
</div>
</div>
</body></html>

```

Delete.jsp:

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Delete Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image:
url('https://w.forfun.com/fetch/99/999169bfd8ecc7d22cceb9c5adb80141.jpeg');
background-size: cover;
font-size: 16px;
margin-left: 30%;
margin-top: 110px;
font-weight: bold;
}
td{
padding: 10px 14px;
}
#card{
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-50 " id="card">
<div class="card-header text-center"><h5>Enter the Book Id to Delete : </h5></div>
<div class="card-body ">
<form action="Controller" method="post">
<table style="border:none;">
<tr><td>Enter Book Id </td><td>: <input type="text" name="bookId"
autocomplete="off" placeholder="Enter book id" required/> </td></tr>
<tr><td colspan="2" style="text-align: right;"><input type="submit" class="btn
btn-primary btn-md" name="button" value="Delete"/> </td></tr>
</table>
</form>
</div>
</div>
</body>
</html>

```

Update.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Update Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image:
url('https://w.forfun.com/fetch/99/999169bfd8ecc7d22cceb9c5adb80141.jpeg');
background-size: cover;
margin-left: 30%;
margin-top: 10px;
font-weight: bold;
}
td{
padding: 10px 14px;
}
#card{
box-shadow: 8px 8px 10px 10px rgba(0,0,0,0.6);
}
</style>
</head>
<body>
<div class="card w-50 " id="card">
<div class="card-header text-center"><h5>Enter the Book Details to Update :
</h5></div>
<div class="card-body ">
<form action="Controller" method="post">
<table style="border:none;">
<tr><td>Enter Book Id </td><td>: <input type="text" name="bookId"
autocomplete="off" placeholder="Enter book id" required/> </td></tr>
<tr><td>Enter Book Name </td><td>: <input type="text" name="bookName"
autocomplete="off" placeholder="Enter book name" required/> </td></tr>
<tr><td>Enter Author Name </td><td>: <input type="text" name="author"
autocomplete="off" placeholder="Enter author name" required/> </td></tr>
<tr><td>Enter Publisher Name </td><td>: <input type="text" name="publisher"
autocomplete="off" placeholder="Enter publisher name" required/> </td></tr>
<tr><td>Enter Price </td><td>: <input type="text" name="price" autocomplete="off"
placeholder="Enter price" required/></td></tr>
<tr><td>Enter Edition </td><td>: <input type="text" name="edition"
autocomplete="off" placeholder="Enter edition" required/> </td></tr>
<tr><td colspan="2" style="text-align: right;"><input type="submit" class="btn
btn-primary btn-md" name="button" value="Update"/> </td></tr>
</table>
```

```
</form>  
</div>
```

```
</div>
</body></html>
```

Search.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Search Page</title>
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
<style type="text/css">
body{
background-image:
url('https://w.forfun.com/fetch/99/999169bfd8ecc7d22cceb9c5adb80141.jpeg');
background-size: cover;
font-size: 16px;
margin-left: 20%;
margin-top: 110px;
font-weight: bold;
}
td{
padding: 10px 14px;
}

</style>
</head>
<body>

</body>
</html>
```

Failure.jsp:

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Failure Page</title>
</head>
<body>
<%
String action = request.getParameter("action");

if(action.equals("Insert")){
```



```
%>  
<%@include file="Insert.jsp" %>
```

```

<%= "<div class=\"card card-body w-50 text-center mt-2\"><h4>Insertion
Failure</h4></div>"%>
<%
} else if (action.equals("Delete")) {
%>
<%@include file="Delete.jsp" %>
<%= "<br><div class=\"card card-body w-50 text-center \"><h4>Deletion
Failure</h4></div>"%>
<%
} else if (action.equals("Update")) {
%>
<%@include file="Update.jsp" %>
<%= "<div class=\"card card-body w-50 text-center mt-2\"><h4>Updation
Failure</h4></div>"%>
<%
} else if (action.equals("Search")) {
%>
<%@include file="Search.jsp" %>
<%= "<br><div class=\"card card-body w-75 text-center\" ><h4>No Record
Found</h4></div>" %>
<%
} else if (action.equals("DeleteAll")) {
%>
<%@include file="DeleteAll.jsp" %>
<%= "<br><div class=\"card card-body w-50 text-center\"><h4>Password Incorrect or
Deletion Failure</h4></div>" %>
<%
}
%>

</body>
</html>

```

Success.jsp:

```

<%@page import="com.Lms.bean.Book"%>
<%@page import="java.util.ArrayList"%>
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Success page</title>
</head>
<body>
<%
String action = request.getParameter("action");

if (action.equals("Insert")) {
%>

```

```
<%@include file="Insert.jsp" %>
```

```

<%= "<div class=\"card card-body w-50 text-center mt-2\"><h4>Record Inserted
Successfully</h4></div>"%>
<%
} else if (action.equals("Delete")) {
%>
<%@include file="Delete.jsp" %>
<%= "<br><div class=\"card card-body w-50 text-center\"><h4>Record Deleted
Successfully</h4></div>"%>
<%
} else if (action.equals("Update")) {
%>
<%@include file="Update.jsp" %>
<%= "<div class=\"card card-body w-50 text-center mt-2\"><h4>Record Updated
Successfully</h4></div>"%>
<%
} else if (action.equals("Search")) {
%>
<%@include file="Search.jsp" %>
<%
Book b = (Book) request.getSession().getAttribute("bean");
%>
<%= "<br><div class=\"card w-75\"><div class=\"card-header text-center h5\">Record
Found</div><div class=\"card-body\"><table class=\"table table-border text-
center\"><tr class=\"table-primary\" style=\"font-weight:bold\"><td>Book
Id</td><td>Book
Name</td><td>Author</td><td>Publisher</td><td>Price</td><td>Edition</td></tr>" %>
<%= "<tr><td>" + b.getBookId() + "</td><td>" + b.getBookName() + "</td><td>" + b.getAuthor() +
"</td><td>" + b.getPublisher() + "</td><td>" + b.getPrice() + "</td><td>" + b.getEdition() +
"</td></tr></table></div></div>" %>
<%
} else if (action.equals("DeleteAll")) {
%>
%>
<%@include file="DeleteAll.jsp" %>
<%= "<br><div class=\"card card-body w-50 text-center\"><h4>All Record Deleted
Successfully</h4></div>"%>
<%}%>
</body>
</html>

```

Com.lms.bean: Book.java

```
package com.lms.bean;

public class Book {

    private int bookId;
    private String bookName;
    private String author;
    private String publisher;
    private float price;
    private int edition;

    public Book(int bookId, String bookName, String author, String publisher, float price, int edition) {
        super();
        this.bookId = bookId;
        this.bookName = bookName;
        this.author = author;
        this.publisher = publisher;
        this.price = price;
        this.edition = edition;
    }

    public int getBookId() {
        return bookId;
    }

    public void setBookId(int bookId) {
        this.bookId = bookId;
    }

    public String getBookName() {
        return bookName;
    }

    public void setBookName(String bookName) {
        this.bookName = bookName;
    }

    public String getAuthor() {
        return author;
    }

    public void setAuthor(String author) {
        this.author = author;
    }

    public String getPublisher() {
        return publisher;
    }
}
```

```
public void setPublisher(String publisher) {
```

```

this.publisher = publisher;
}

public float getPrice() {
return price;
}

public void setPrice(float price) {
this.price = price;
}

public int getEdition() {
return edition;
}

public void setEdition(int edition) {
this.edition = edition;
}

}

```

Com.lms.util: DBUtil.java

```

package com.lms.util;

import java.sql.*;

public class DBUtil {

private static final String url = "jdbc:mysql://localhost:3306/lms_db";
private static final String user = "root";
private static final String password = "sam@6383587926";

public static Connection getDBConnection() {
Connection con = null;

try {
Class.forName("com.mysql.cj.jdbc.Driver");
con= DriverManager.getConnection(url, user, password);
}catch(Exception e) {
e.printStackTrace();
}
return con;
}

}

```

Com.lms.dao: BookDAO.java

```
package com.lms.dao;

import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.LinkedList;
import com.lms.util.DBUtil;
import com.lms.bean.Book;

public class BookDAO {

    private static Connection con = DBUtil.getDBConnection();
    private static LinkedList<Book> list;

    public int insertBook(Book b) {
        int n=0;
        try {
            String q = "insert into tbl_book value(?,?,?, ?, ?, ?, ?)";
            PreparedStatement ps = con.prepareStatement(q);
            ps.setInt(1, b.getBookId());
            ps.setString(2, b.getBookName());
            ps.setString(3, b.getAuthor());
            ps.setString(4, b.getPublisher());
            ps.setFloat(5, b.getPrice());
            ps.setInt(6, b.getEdition());
            n = ps.executeUpdate();
        } catch (SQLException e) {
            e.printStackTrace();
        }
        return n;
    }

    public int updateBook(Book b) {
        int n=0;
        try {
            String q = "update tbl_book set book_name = ?,author = ?,publisher = ?, price = ?,
            edition = ? where book_id = ? ";
            PreparedStatement ps = con.prepareStatement(q);
            ps.setInt(6, b.getBookId());
            ps.setString(1, b.getBookName());
            ps.setString(2, b.getAuthor());
            ps.setString(3, b.getPublisher());
            ps.setFloat(4, b.getPrice());
            ps.setInt(5, b.getEdition());
            n= ps.executeUpdate();
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }
}
```



```
return n;  
}
```

```

public int deleteBook(int id) {
    int n=0;
    try {
        String q = "delete from tbl_book where book_id=?";
        PreparedStatement ps = con.prepareStatement(q);
        ps.setInt(1, id);
        n = ps.executeUpdate();
    } catch (SQLException e) {
        e.printStackTrace();
    }
    return n;
}

public boolean deleteAllBook(String password) {
    boolean flag= true;
    try {
        String q = "delete from tbl_book";
        Statement st = con.createStatement();
        if(DBUtil.password.equals(password))
            flag = st.execute(q);
    } catch (SQLException e) {
        e.printStackTrace();
    }
    return flag;
}

public Book searchBook(int id) {
    try {
        String q = "select * from tbl_book where book_id = ?";
        PreparedStatement ps = con.prepareStatement(q);
        ps.setInt(1, id);
        ResultSet rs = ps.executeQuery();
        if(rs.next())
            return new Book(rs.getInt(1), rs.getString(2), rs.getString(3), rs.getString(4),
                rs.getFloat(5), rs.getInt(6));
    } catch (SQLException e) {
        e.printStackTrace();
    }

    return null;
}

public LinkedList<Book> veiwAllBook(){
    List = new LinkedList<Book>();
    try {
        String q = "select * from tbl_book";
        PreparedStatement ps = con.prepareStatement(q);
        ResultSet rs = ps.executeQuery();
        while(rs.next())
            List.add(new Book(rs.getInt(1), rs.getString(2), rs.getString(3),
                rs.getString(4), rs.getFloat(5), rs.getInt(6)));
    }
}

```

```
} catch (SQLException e) {  
e.printStackTrace();  
}
```

```
return list;
}

}
```

Com.lms.controller: Controller.java (Servlet file)

```
package com.lms.controller;

import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
import java.io.IOException;
import java.util.LinkedList;
import com.lms.dao.BookDAO;
import com.lms.bean.Book;

@WebServlet("/")
public class Controller extends HttpServlet {
    private static final long serialVersionUID = 1L;
    private static BookDAO dao = new BookDAO();

    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        String action = request.getServletPath();

        switch(action) {
            case "/insert":insert(request,response);break;
            case "/delete":delete(request,response);break;
            case "/update":update(request,response);break;
            case "/home" :viewAll(request, response);break;
            case "/deleteAll":deleteAll(request, response);break;
            case "/search":search(request, response);break;
            default:viewAll(request, response);
        }

    }

    private void search(HttpServletRequest request, HttpServletResponse response)
        throws IOException, ServletException {
        doPost(request, response);
    }

    private void deleteAll(HttpServletRequest request, HttpServletResponse response)
        throws IOException {
```

```
response.sendRedirect("DeleteAll.jsp");
```

```
}
```

```
private void update(HttpServletRequest request, HttpServletResponse response)
throws IOException {
response.sendRedirect("Update.jsp");
}
```

```
private void delete(HttpServletRequest request, HttpServletResponse response)
throws IOException {
response.sendRedirect("Delete.jsp");
}
```

```
private void insert(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
response.sendRedirect("Insert.jsp");
}
```

```
private void viewAll(HttpServletRequest request, HttpServletResponse response)
throws IOException {
```

```
LinkedList<Book> list = dao.veiwAllBook();
if(list != null) {
request.getSession().setAttribute("list", list);
response.sendRedirect("HomePage.jsp");
}
}
```

```
@Override
```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
int n=0;
String action = request.getParameter("button");
```

```
if(action.equals("Insert")) {
Book b = new Book(Integer.parseInt(request.getParameter("bookId")),
request.getParameter("bookName"),request.getParameter("author"),request.getParamet
er("publisher"),Float.parseFloat(request.getParameter("price")),Integer.parseInt(r
equest.getParameter("edition")));
n = dao.insertBook(b);
if(n==1) {
response.sendRedirect("Success.jsp?action=Insert");
}else {
response.sendRedirect("Failure.jsp?action=Insert");
}
}
```

```
else if(action.equals("Delete")) {  
int id = Integer.parseInt(request.getParameter("bookId"));
```

```

n = dao.deleteBook(id);
if(n==1) {
response.sendRedirect("Success.jsp?action=Delete");
}else {
response.sendRedirect("Failure.jsp?action=Delete");
}
}

else if(action.equals("Update")) {
Book b = new Book(Integer.parseInt(request.getParameter("bookId")),
request.getParameter("bookName"),request.getParameter("author"),request.getParamet
er("publisher"),Float.parseFloat(request.getParameter("price")),Integer.parseInt(r
equest.getParameter("edition")));
n =dao.updateBook(b);
if(n==1) {
response.sendRedirect("Success.jsp?action=Update");

}else {
response.sendRedirect("Failure.jsp?action=Update");
}
}

else if(action.equals("Search")) {
int id = Integer.parseInt(request.getParameter("bookId"));
Book b = dao.searchBook(id);
if(b==null) {
response.sendRedirect("Failure.jsp?action=Search");
}else {
request.getSession().setAttribute("bean", b);
response.sendRedirect("Success.jsp?action=Search");
}
}

else if(action.equals("DeleteAll")) {
String pass = request.getParameter("pass");
boolean flag = dao.deleteAllBook(pass);
if(flag) {
response.sendRedirect("Failure.jsp?action=DeleteAll");
}else {
response.sendRedirect("Success.jsp?action=DeleteAll");
}
}

}
}

```


--	--

Output:

Home page:

The screenshot displays the 'Library Management System' interface. At the top, there is a navigation bar with buttons for 'Home', 'Insert', 'Update', 'Delete', and 'DeleteAll'. A search bar labeled 'Enter Id' and a 'Search' button are also present. The main content area, titled 'Book Record List', shows 'No of Record : 5'. Below this is a table with the following data:

Book Id	Book Name	Author	Publisher	Price	Edition
1	Harray Potter	J K Rowling	Bloomsbury	1200.56	1
2	A Tale of Two Cities	Charles Dickens	Simon & Schuster	1000.0	3
3	And Then There Were None	Agatha Christie	HarperCollin	1500.0	2
4	Ponniyin Selvan	Kalki Krishnamurthy	Vanathi Pathippagam	999.9	3
5	Thirukkural	Thiruvalluvar	Richa prakashan	700.0	10

Insert Operation:

Insert page:

The screenshot shows the 'Library Management System' interface with the 'Insert' button highlighted. A modal form titled 'Enter the Book Details to Insert :' is displayed, containing the following fields:

- Enter Book Id : 6
- Enter Book Name : The Tempest
- Enter Author Name : William Shakespeare
- Enter Publisher Name : Peacock Books
- Enter Price : 1300.50
- Enter Edition : 5

An 'Insert' button is located at the bottom right of the form.

Insert success case:

Library Management System

Home

Insert

Update

Delete

DeleteAll

Enter Id

Search

Enter the Book Details to Insert :

Enter Book Id

Enter book id

Enter Book Name

Enter book name

Enter Author Name

Enter author name

Enter Publisher Name

Enter publisher name

Enter Price

Enter price

Enter Edition

Enter edition

Insert

Record Inserted Successfully

Insert failure case:

Library Management System

Home

Insert

Update

Delete

DeleteAll

Enter Id

Search

Enter the Book Details to Insert :

Enter Book Id

Enter book id

Enter Book Name

Enter book name

Enter Author Name

Enter author name

Enter Publisher Name

Enter publisher name

Enter Price

Enter price

Enter Edition

Enter edition

Insert

Insertion Failure

After Insertion:

Library Management System

Home

Insert

Update

Delete

DeleteAll

Enter Id

Search

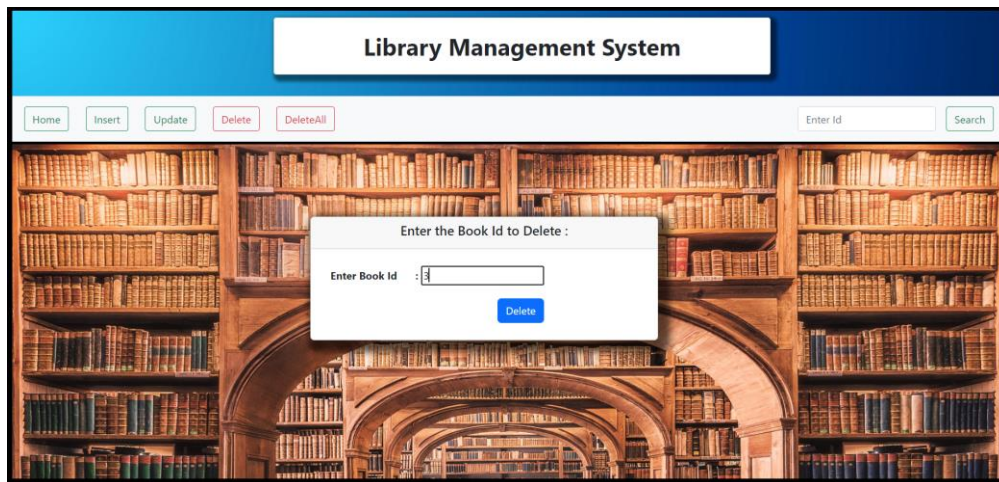
Book Record List

No of Record : 6

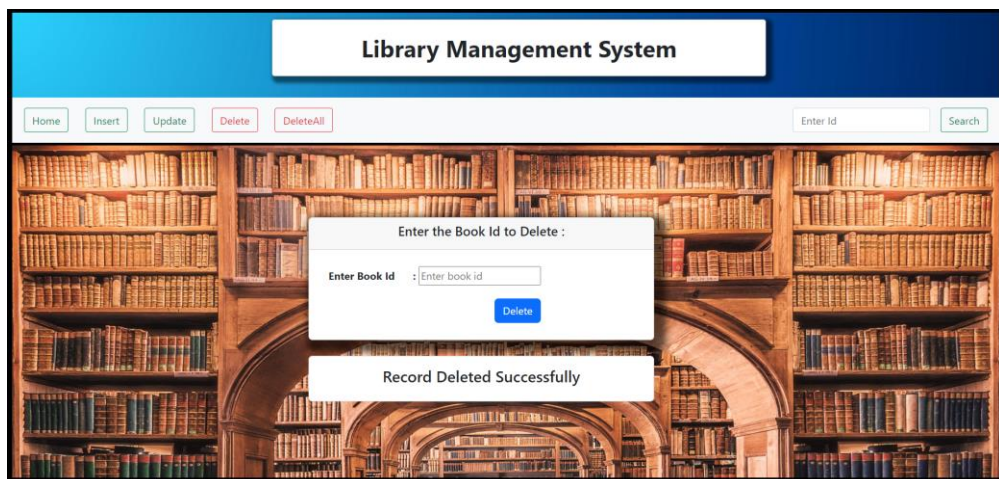
Book Id	Book Name	Author	Publisher	Price	Edition
1	Harry Potter	J K Rowling	Bloomsbury	1200.56	1
2	A Tale of Two Cities	Charles Dickens	Simon & Schuster	1000.0	3
3	And Then There Were None	Agatha Christie	HarperCollin	1500.0	2
4	Ponniyin Selvan	Kalki Krishnamurthy	Vanathi Pathippagam	999.9	3
5	Thirukkural	Thiruvalluvar	Richa prakashan	700.0	10
6	The Tempest	William Shakespeare	Peacock Books	1300.5	5

Delete Operation:

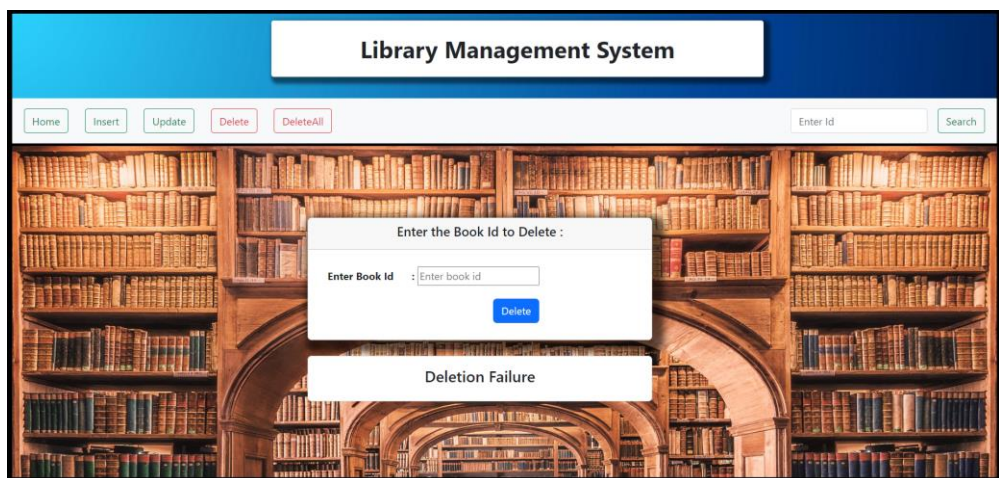
Delete page:



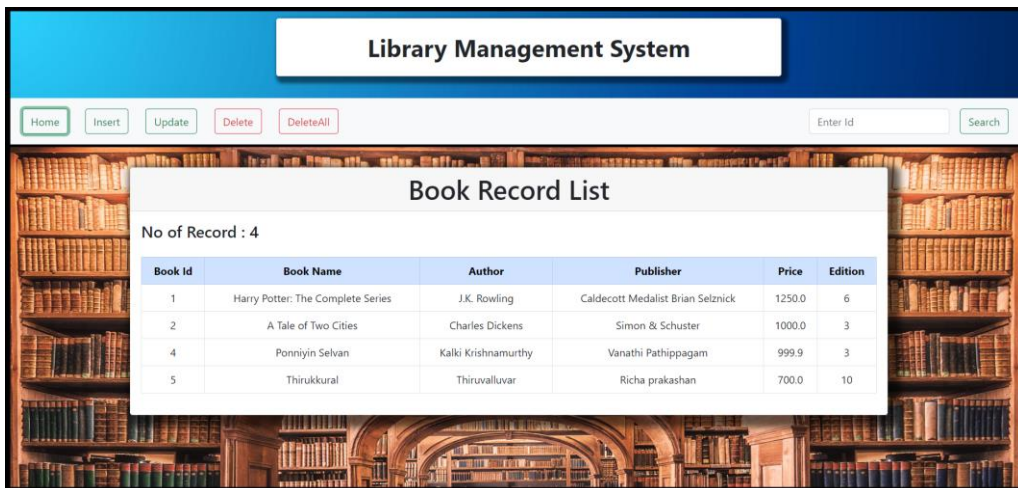
Delete success case:



Delete failure case:



After Deletion:

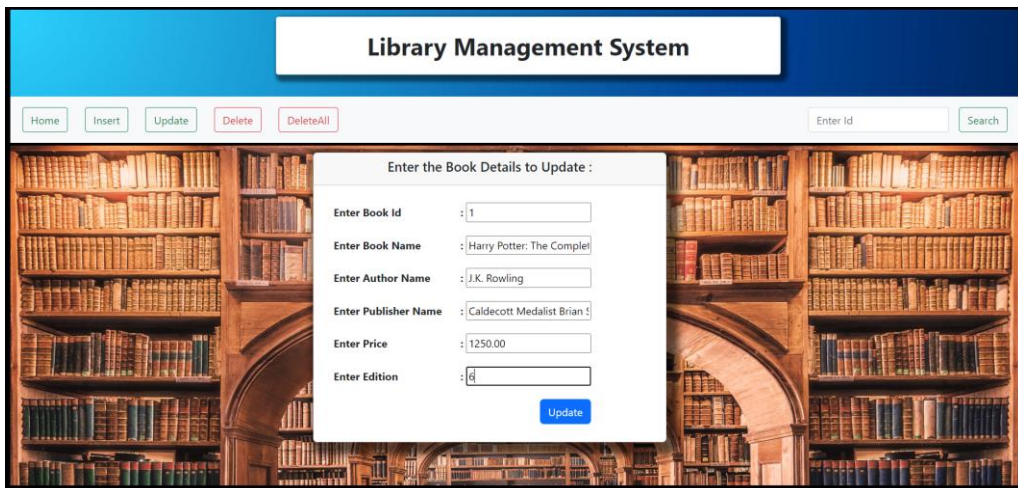


The screenshot shows the 'Library Management System' interface. At the top, there's a navigation bar with buttons: Home, Insert, Update, Delete, and DeleteAll. A search bar with 'Enter Id' and a 'Search' button is on the right. The main content area is titled 'Book Record List' and displays 'No of Record : 4'. Below this is a table with 6 columns: Book Id, Book Name, Author, Publisher, Price, and Edition. The table contains 4 records.

Book Id	Book Name	Author	Publisher	Price	Edition
1	Harry Potter: The Complete Series	J.K. Rowling	Caldecott Medalist Brian Selznick	1250.0	6
2	A Tale of Two Cities	Charles Dickens	Simon & Schuster	1000.0	3
4	Ponniyin Selvan	Kalki Krishnamurthy	Vanathi Pathippagam	999.9	3
5	Thirukkural	Thiruvalluvar	Richa prakashan	700.0	10

Update Operation

Update page:



The screenshot shows the 'Library Management System' interface with the 'Update' button highlighted. A modal form titled 'Enter the Book Details to Update :' is displayed. It contains input fields for Book Id, Book Name, Author Name, Publisher Name, Price, and Edition, each with a label and a value. An 'Update' button is at the bottom right of the form.

Enter the Book Details to Update :

Enter Book Id : 1

Enter Book Name : Harry Potter: The Comple

Enter Author Name : J.K. Rowling

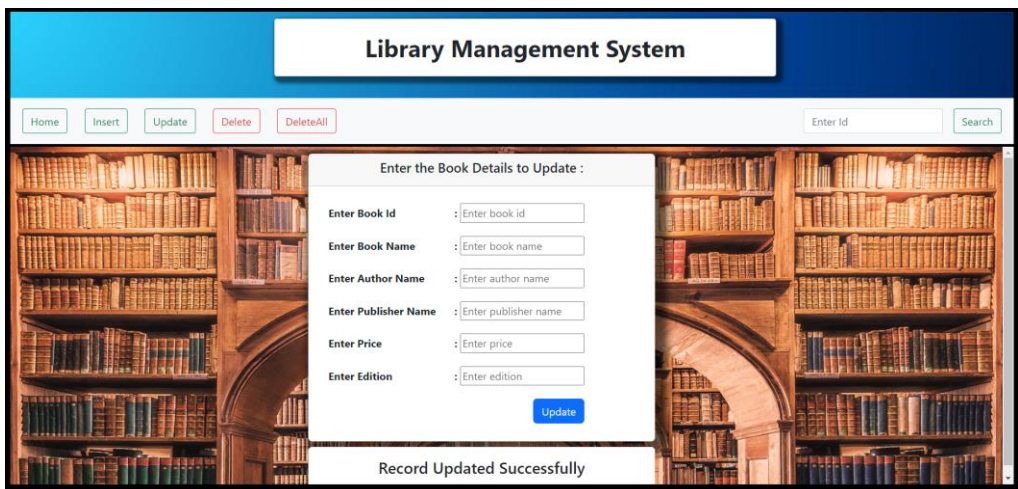
Enter Publisher Name : Caldecott Medalist Brian S

Enter Price : 1250.00

Enter Edition : 6

Update

Update success case:



The screenshot shows the 'Library Management System' interface with the 'Update' button highlighted. A modal form titled 'Enter the Book Details to Update :' is displayed. It contains input fields for Book Id, Book Name, Author Name, Publisher Name, Price, and Edition, each with a label and a value. An 'Update' button is at the bottom right of the form. Below the form, a message 'Record Updated Successfully' is displayed.

Enter the Book Details to Update :

Enter Book Id : Enter book id

Enter Book Name : Enter book name

Enter Author Name : Enter author name

Enter Publisher Name : Enter publisher name

Enter Price : Enter price

Enter Edition : Enter edition

Update

Record Updated Successfully

Update failure case:

Library Management System

Home Insert Update Delete DeleteAll Enter Id Search

Enter the Book Details to Update :

Enter Book Id :

Enter Book Name :

Enter Author Name :

Enter Publisher Name :

Enter Price :

Enter Edition :

Update

Updation Failure

After Updating:

Library Management System

Home Insert Update Delete DeleteAll Enter Id Search

Book Record List

No of Record : 5

Book Id	Book Name	Author	Publisher	Price	Edition
1	Harry Potter: The Complete Series	J.K. Rowling	Caldecott Medalist Brian Selznick	1250.0	6
2	A Tale of Two Cities	Charles Dickens	Simon & Schuster	1000.0	3
3	And Then There Were None	Agatha Christie	HarperCollin	1500.0	2
4	Ponniyin Selvan	Kalki Krishnamurthy	Vanathi Pathippagam	999.9	3
5	Thirukkural	Thiruvalluvar	Richa prakashan	700.0	10

Search Operation:

Search page:

Library Management System

Home Insert Update Delete DeleteAll 4 Search

Book Record List

No of Record : 9

Book Id	Book Name	Author	Publisher	Price	Edition
1	Harry Potter: The Complete Series	J.K. Rowling	Caldecott Medalist Brian Selznick	1250.0	6
2	A Tale of Two Cities	Charles Dickens	Simon & Schuster	1000.0	3
4	Ponniyin Selvan	Kalki Krishnamurthy	Vanathi Pathippagam	999.9	3
5	Thirukkural	Thiruvalluvar	Richa prakashan	700.0	10
6	Udayar	Bala Kumaran	Thirumagal Nilayam	400.0	3
7	Sivagamiyin Sapatham	Kalki Krishnamurthy	?Createspace Independent Pub	850.0	3
8	Lolita	Vladimir Nabokov	Olympia Press	1000.0	6

Search success case:

The screenshot shows the 'Library Management System' interface. At the top, there's a navigation bar with buttons: Home, Insert, Update, Delete, and DeleteAll. A search bar on the right contains the number '4' and a 'Search' button. Below the navigation bar is a large background image of a library with bookshelves. A white modal box titled 'Record Found' is centered on the screen. It contains a table with the following data:

Book Id	Book Name	Auhtor	Publisher	Price	Edition
4	Ponniyin Selvan	Kalki Krishnamurthy	Vanathi Pathippagam	999.9	3

Search Failure case:

The screenshot shows the 'Library Management System' interface. The navigation bar and search bar are the same as in the previous screenshot, but the search bar now contains the number '3'. A white modal box titled 'No Record Found' is centered on the screen, indicating that no record was found for the entered ID.

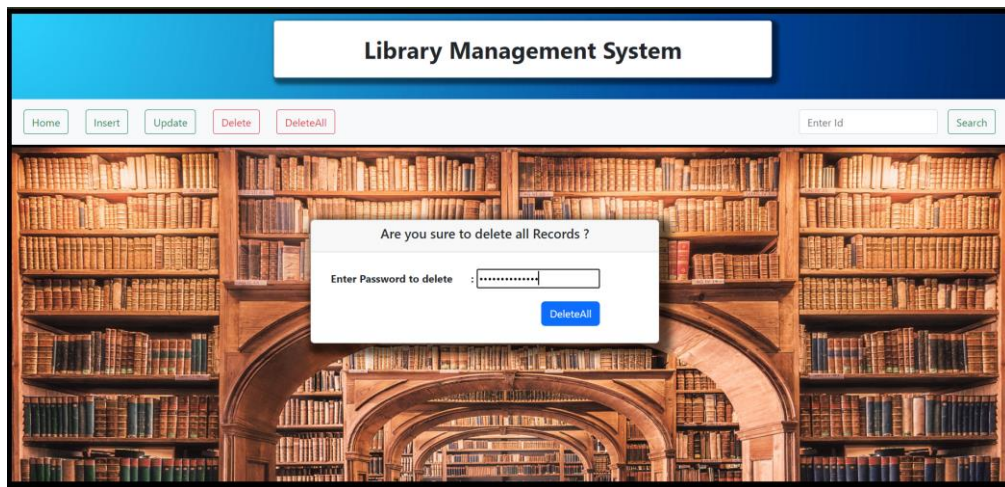
View All:

The screenshot shows the 'Library Management System' interface. The navigation bar is the same, but the search bar is empty and labeled 'Enter Id'. A 'Search' button is present. Below the navigation bar is a large background image of a library with bookshelves. A white modal box titled 'Book Record List' is centered on the screen. It displays the total number of records as 'No of Record : 10' and a table with the following data:

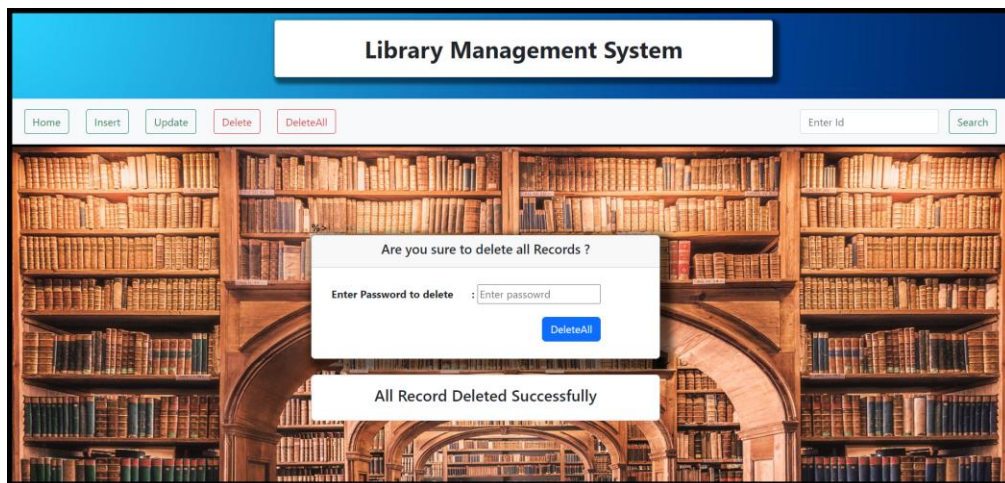
Book Id	Book Name	Author	Publisher	Price	Edition
1	Harray Potter	J K Rowling	Bloomsbury	1200.56	1
2	A Tale of Two Cities	Charles Dickens	Simon & Schuster	1000.0	3
3	And Then There Were None	Agatha Christie	HarperCollin	1500.0	2
4	Ponniyin Selvan	Kalki Krishnamurthy	Vanathi Pathippagam	999.9	3
5	Thirukkural	Thiruvalluvar	Richa prakashan	700.0	10
6	Udayar	Bala Kumaran	Thirumagal Nilayam	400.0	3
7	Sivagamiyin Sapatham	Kalki Krishnamurthy	?Createspace Independent Pub	850.0	3

Delete All Operation:

Delete All page:



Delete All success case:



After Deletion: Home page

