**Source Code For the Railway Crossing Status**

**LoginServlet.java**

package com.railway;

import java.io.IOException;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import jakarta.servlet.ServletException;

import jakarta.servlet.annotation.WebServlet;

import jakarta.servlet.http.HttpServlet;

import jakarta.servlet.http.HttpServletRequest;

import jakarta.servlet.http.HttpServletResponse;

@WebServlet("/login")

public class LoginServlet extends HttpServlet {

static {

try {

Class.forName("com.mysql.cj.jdbc.Driver");

} catch (ClassNotFoundException e) {

e.printStackTrace();

}

}

private static final long serialVersionUID = 1L;

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String username = request.getParameter("username");

String password = request.getParameter("password");

if (checkAdminCredentials(username, password)) {

response.sendRedirect("admin-dashboard.jsp");

} else {

request.setAttribute("errorMessage", "Invalid credentials. Please try again.");

request.getRequestDispatcher("login.jsp").forward(request, response);

}

}

private boolean checkAdminCredentials(String username, String password) {

String jdbcUrl = "jdbc:mysql://localhost:3306/railwayproject";

String dbUsername = "root";

String dbPassword = "password";

String query = "SELECT \* FROM admin WHERE username = ? AND password = ?";

try (Connection connection = DriverManager.getConnection(jdbcUrl, dbUsername, dbPassword);

PreparedStatement statement = connection.prepareStatement(query)) {

statement.setString(1, username);

statement.setString(2, password);

try (ResultSet resultSet = statement.executeQuery()) {

return resultSet.next();

}

} catch (SQLException e) {

e.printStackTrace();

return false;

}

}

}

**Train.java(class)**

package com.railway;

public class Train {

private String trainName;

private String crossingStatus;

private String personInCharge;

private String trainSchedule;

private String landmark;

private String address;

public Train(String trainName, String crossingStatus, String personInCharge, String trainSchedule, String landmark, String address) {

this.trainName = trainName;

this.crossingStatus = crossingStatus;

this.personInCharge = personInCharge;

this.trainSchedule = trainSchedule;

this.landmark = landmark;

this.address = address;

}

public String getTrainName() {

return trainName;

}

public void setTrainName(String trainName) {

this.trainName = trainName;

}

public String getCrossingStatus() {

return crossingStatus;

}

public void setCrossingStatus(String crossingStatus) {

this.crossingStatus = crossingStatus;

}

public String getPersonInCharge() {

return personInCharge;

}

public void setPersonInCharge(String personInCharge) {

this.personInCharge = personInCharge;

}

public String getTrainSchedule() {

return trainSchedule;

}

public void setTrainSchedule(String trainSchedule) {

this.trainSchedule = trainSchedule;

}

public String getLandmark() {

return landmark;

}

public void setLandmark(String landmark) {

this.landmark = landmark;

}

public String getAddress() {

return address;

}

public void setAddress(String address) {

this.address = address;

}

}

**UserLoginServlet.java**

package com.railway;

import java.io.IOException;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

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 jakarta.servlet.http.HttpSession;

@WebServlet("/user-login")

public class UserLoginServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String username = request.getParameter("username");

String password = request.getParameter("password");

if (isValidUser(username, password)) {

String userId = getUserIdFromDatabase(username);

HttpSession session = request.getSession(true);

session.setAttribute("userId", userId);

response.sendRedirect("user-dashboard.jsp");

} else {

request.setAttribute("errorMessage", "Invalid credentials. Please try again.");

request.getRequestDispatcher("user-login.jsp").forward(request, response);

}

}

private boolean isValidUser(String username, String password) {

try {

String jdbcUrl = "jdbc:mysql://localhost:3306/railwayproject";

String dbUsername = "root";

String dbPassword = "password";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection connection = DriverManager.getConnection(jdbcUrl, dbUsername, dbPassword);

String sql = "SELECT \* FROM user WHERE username = ? AND password = ?";

try (PreparedStatement statement = connection.prepareStatement(sql)) {

statement.setString(1, username);

statement.setString(2, password);

ResultSet resultSet = statement.executeQuery();

return resultSet.next();

}

} catch (ClassNotFoundException | SQLException e) {

e.printStackTrace();

return false;

}

}

private String getUserIdFromDatabase(String username) {

try {

String jdbcUrl = "jdbc:mysql://localhost:3306/railwayproject";

String dbUsername = "root";

String dbPassword = "password";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection connection = DriverManager.getConnection(jdbcUrl, dbUsername, dbPassword);

String sql = "SELECT user\_id FROM user WHERE username = ?";

try (PreparedStatement statement = connection.prepareStatement(sql)) {

statement.setString(1, username);

ResultSet resultSet = statement.executeQuery();

if (resultSet.next()) {

return resultSet.getString("user\_id");

}

}

} catch (ClassNotFoundException | SQLException e) {

e.printStackTrace();

}

return null;

}

}

**addToFavorite.jsp**

<%@ **page** import=*"java.sql.Connection, java.sql.DriverManager, java.sql.PreparedStatement, java.sql.SQLException"* %>

<%@**page** import = *"jakarta.servlet.http.HttpSession"* %>

<%@ **page** contentType=*"text/html;charset=UTF-8"* language=*"java"* %>

<%

// Retrieve the train ID from the request parameter

String trainId = request.getParameter("trainId");

// Check if the train ID is not null or empty

if (trainId != null && !trainId.isEmpty()) {

try {

// Retrieve user ID from the session

HttpSession userSession = request.getSession(false);

if (userSession == null || userSession.getAttribute("userId") == null) {

// Handle the case where the user is not logged in

response.getWriter().write("User not logged in.");

return;

}

String userId = userSession.getAttribute("userId").toString();

// Database connection details

String jdbcUrl = "jdbc:mysql://localhost:3306/railwayproject";

String dbUsername = "root";

String dbPassword = "password";

// Establish the database connection

Class.forName("com.mysql.cj.jdbc.Driver");

Connection connection = DriverManager.getConnection(jdbcUrl, dbUsername, dbPassword);

// Insert the favorite train details into the user\_favorite table

String insertSql = "INSERT INTO user\_favorite (user\_id, train\_id) VALUES (?, ?)";

try (PreparedStatement insertStatement = connection.prepareStatement(insertSql)) {

insertStatement.setString(1, userId);

insertStatement.setString(2, trainId);

insertStatement.executeUpdate();

}

// Redirect back to user-dashboard.jsp after adding to favorite

response.sendRedirect("user-dashboard.jsp");

} catch (ClassNotFoundException | SQLException e) {

e.printStackTrace(); // Handle the exception appropriately in your application

}

} else {

// Handle the case where the train ID is not provided

response.getWriter().write("Train ID is missing or invalid.");

}

%>

**add-train.jsp**

<%@ **page** language=*"java"* contentType=*"text/html; charset=UTF-8"* pageEncoding=*"UTF-8"*%>

<!**DOCTYPE** html>

<**html**>

<**head**>

<**title**>Login</**title**>

</**head**>

<**body**>

<**h2**>Admin Login</**h2**>

<**form** action=*"login"* method=*"post"*>

<**label** for=*"username"*>Username:</**label**>

<**input** type=*"text"* id=*"username"* name=*"username"* required><**br**>

<**label** for=*"password"*>Password:</**label**>

<**input** type=*"password"* id=*"password"* name=*"password"* required><**br**>

<**input** type=*"submit"* value=*"Login"*>

</**form**>

<**p**>Not Admin? <**a** href=*"user-login.jsp"*>User Login</**a**></**p**>

<% String errorMessage = (String)request.getAttribute("errorMessage");

if(errorMessage != null) { %>

<**p** style="color: *red*;"><%= errorMessage %></**p**>

<% } %>

</**body**>

</**html**>

**add-train-handler.jsp**

<%@ **page** import=*"java.io.IOException"* %>

<%@ **page** contentType=*"text/html;charset=UTF-8"* language=*"java"* %>

<%@ **page** import=*"java.sql.Connection"* %>

<%@ **page** import=*"java.sql.DriverManager"* %>

<%@ **page** import=*"java.sql.PreparedStatement"* %>

<%@ **page** import=*"java.sql.SQLException"* %>

<%@ **page** import=*"java.io.PrintWriter"* %>

<%

String trainName = request.getParameter("trainName");

String crossingStatus = request.getParameter("crossingStatus");

String personInCharge = request.getParameter("personInCharge");

String trainSchedule = request.getParameter("trainSchedule");

String landmark = request.getParameter("landmark");

String address = request.getParameter("address");

String url = "jdbc:mysql://localhost:3306/railwayproject";

String user = "root";

String password = "password";

try {

Class.forName("com.mysql.cj.jdbc.Driver");

Connection connection = DriverManager.getConnection(url, user, password);

String insertQuery = "INSERT INTO trains (train\_name, crossing\_status, person\_in\_charge, train\_schedule, landmark, address) VALUES (?, ?, ?, ?, ?, ?)";

try (PreparedStatement preparedStatement = connection.prepareStatement(insertQuery)) {

preparedStatement.setString(1, trainName);

preparedStatement.setString(2, crossingStatus);

preparedStatement.setString(3, personInCharge);

preparedStatement.setString(4, trainSchedule);

preparedStatement.setString(5, landmark);

preparedStatement.setString(6, address);

preparedStatement.executeUpdate();

}

connection.close();

response.sendRedirect("admin-dashboard.jsp");

} catch (ClassNotFoundException | SQLException | IOException e) {

e.printStackTrace();

response.sendRedirect("admin-dashboard.jsp");

}

%>

**admin-dashboard.jsp**

<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<title>Login</title>

</head>

<body>

<h2>Admin Login</h2>

<form action="login" method="post">

<label for="username">Username:</label>

<input type="text" id="username" name="username" required><br>

<label for="password">Password:</label>

<input type="password" id="password" name="password" required><br>

<input type="submit" value="Login">

</form>

<p>Not Admin? <a href="user-login.jsp">User Login</a></p>

<% String errorMessage = (String)request.getAttribute("errorMessage");

if(errorMessage != null) { %>

<p style="color: red;"><%= errorMessage %></p>

<% } %>

</body>

</html>

**delete.jsp**

<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>

<%@page import="java.sql.\*,java.util.\*"%>

<%

String id=request.getParameter("id");

try

{

Class.forName("com.mysql.jdbc.Driver");

Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/railwayproject", "root", "password");

Statement st=conn.createStatement();

int i=st.executeUpdate("DELETE FROM trains WHERE id="+id);

out.println("Data Deleted Successfully!");

response.sendRedirect("admin-dashboard.jsp");

}

catch(Exception e)

{

System.out.print(e);

e.printStackTrace();

}

%>

**favorite.jsp**

<%@ page import="java.sql.Connection" %>

<%@ page import="java.sql.DriverManager" %>

<%@ page import="java.sql.PreparedStatement" %>

<%@ page import="java.sql.ResultSet" %>

<%@ page import="java.sql.SQLException" %>

<%@ page contentType="text/html;charset=UTF-8" language="java" %>

<%

// Retrieve the user ID from the session

String userId = (String) session.getAttribute("userId");

if (userId != null && !userId.isEmpty()) {

try {

// Database connection details

String jdbcUrl = "jdbc:mysql://localhost:3306/railwayproject";

String dbUsername = "root";

String dbPassword = "password";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection connection = DriverManager.getConnection(jdbcUrl, dbUsername, dbPassword);

// Query to retrieve favorite trains for the logged-in user

String sql = "SELECT t.\* FROM user\_favorite uf INNER JOIN trains t ON uf.train\_id = t.id WHERE uf.user\_id = ?";

try (PreparedStatement statement = connection.prepareStatement(sql)) {

statement.setString(1, userId);

try (ResultSet resultSet = statement.executeQuery()) {

%>

<!DOCTYPE html>

<html>

<head>

<title>Favorite Train Details</title>

</head>

<body>

<form action="user-dashboard.jsp" method="get" style="position: absolute; top: 10px; right: 150px;">

<input type="submit" value="User Dashboard">

</form>

<h1>Favorite Train Details</h1>

<table border="1">

<thead>

<tr>

<th>Train Name</th>

<th>Status</th>

<th>Person in Charge</th>

<th>Schedule</th>

<th>Landmark</th>

<th>Address</th>

<th>Action</th>

</tr>

</thead>

<tbody>

<%

while (resultSet.next()) {

String trainId = resultSet.getString("id");

String trainName = resultSet.getString("train\_name");

String status = resultSet.getString("crossing\_status");

String personInCharge = resultSet.getString("person\_in\_charge");

String schedule = resultSet.getString("train\_schedule");

String landmark = resultSet.getString("landmark");

String address = resultSet.getString("address");

%>

<tr>

<td><%= trainName %></td>

<td><%= status %></td>

<td><%= personInCharge %></td>

<td><%= schedule %></td>

<td><%= landmark %></td>

<td><%= address %></td>

<td>

<form action="remove-favorite.jsp" method="post">

<input type="hidden" name="trainId" value="<%=trainId%>">

<input type="submit" value="Remove">

</form>

</td>

</tr>

<%

}

}

}

} catch (SQLException e) {

e.printStackTrace(); // Handle the exception appropriately in your application

}

}

else {

// Handle the case where the user is not logged in

response.sendRedirect("user-login.jsp");

}

%>

</tbody>

</table>

</body>

</html>

**login.jsp**

<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<title>Login</title>

</head>

<body>

<h2>Admin Login</h2>

<form action="login" method="post">

<label for="username">Username:</label>

<input type="text" id="username" name="username" required><br>

<label for="password">Password:</label>

<input type="password" id="password" name="password" required><br>

<input type="submit" value="Login">

</form>

<p>Not Admin? <a href="user-login.jsp">User Login</a></p>

<% String errorMessage = (String)request.getAttribute("errorMessage");

if(errorMessage != null) { %>

<p style="color: red;"><%= errorMessage %></p>

<% } %>

</body>

</html>

**logout.jsp**

<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>

<%@ page import="jakarta.servlet.http.\*" %>

<%

// Invalidate the current session

HttpSession userSession = request.getSession(false);

if (userSession != null) {

userSession.invalidate();

}

// Redirect to the login page or any other appropriate page after logout

response.sendRedirect("login.jsp");

%>

**register.jsp**

<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>

<%@ page import="java.sql.\*" %>

<%@ page import="java.util.\*" %>

<%@ page import=" jakarta.servlet.\*" %>

<%@ page import=" jakarta.servlet.http.\*" %>

<%@ page import=" jakarta.servlet.annotation.\*" %>

<%@ page import="java.io.\*" %>

<%

// Load the JDBC driver

try {

Class.forName("com.mysql.cj.jdbc.Driver");

} catch (ClassNotFoundException e) {

e.printStackTrace(); // Handle the exception appropriately in your application

}

%>

<!DOCTYPE html>

<html>

<head>

<title>Register</title>

</head>

<body>

<h2>Register</h2>

<form action="register.jsp" method="post">

<label for="username">Username:</label>

<input type="text" id="username" name="username" required><br>

<label for="password">Password:</label>

<input type="password" id="password" name="password" required><br>

<input type="submit" value="Register">

</form>

<p>Already have an account? <a href="user-login.jsp">Login here</a></p>

<% String errorMessage = (String)request.getAttribute("errorMessage");

if(errorMessage != null) { %>

<p style="color: red;"><%= errorMessage %></p>

<% } else if ("POST".equals(request.getMethod())) {

// Process the form submission (register the user)

String username = request.getParameter("username");

String password = request.getParameter("password");

// Provide your actual database connection details

String jdbcUrl = "jdbc:mysql://localhost:3306/railwayproject";

String dbUsername = "root";

String dbPassword = "password";

// SQL query to insert user details

String insertQuery = "INSERT INTO user (username, password) VALUES (?, ?)";

try (Connection connection = DriverManager.getConnection(jdbcUrl, dbUsername, dbPassword);

PreparedStatement statement = connection.prepareStatement(insertQuery)) {

statement.setString(1, username);

statement.setString(2, password);

int rowsAffected = statement.executeUpdate();

if (rowsAffected > 0) {

response.sendRedirect("user-login.jsp");

return; // Redirect immediately after successful registration

} else {

out.println("<p style='color: red;'>Registration failed. Please try again.</p>");

}

} catch (SQLException e) {

e.printStackTrace(); // Handle the exception appropriately in your application

out.println("<p style='color: red;'>Registration failed. Please try again.</p>");

}

} %>

</body>

</html>

**remove-favorite.jsp**

<%@ page import="java.sql.Connection" %>

<%@ page import="java.sql.DriverManager" %>

<%@ page import="java.sql.PreparedStatement" %>

<%@ page import="java.sql.SQLException" %>

<%@ page contentType="text/html;charset=UTF-8" language="java" %>

<%

// Retrieve the user ID from the session

String userId = (String) session.getAttribute("userId");

// Check if the user is logged in

if (userId != null && !userId.isEmpty()) {

try {

// Database connection details

String jdbcUrl = "jdbc:mysql://localhost:3306/railwayproject";

String dbUsername = "root";

String dbPassword = "password";

Class.forName("com.mysql.cj.jdbc.Driver");

Connection connection = DriverManager.getConnection(jdbcUrl, dbUsername, dbPassword);

// Retrieve the train ID from the request parameter

String trainId = request.getParameter("trainId");

// Check if the train ID is not null or empty

if (trainId != null && !trainId.isEmpty()) {

// Remove the train from the user\_favorite table

String removeSql = "DELETE FROM user\_favorite WHERE user\_id = ? AND train\_id = ?";

try (PreparedStatement removeStatement = connection.prepareStatement(removeSql)) {

removeStatement.setString(1, userId);

removeStatement.setString(2, trainId);

removeStatement.executeUpdate();

}

// Redirect back to favorite.jsp

response.sendRedirect("favorite.jsp");

} else {

out.println("Train ID is missing or invalid.");

}

} catch (ClassNotFoundException | SQLException e) {

e.printStackTrace(); // Handle the exception appropriately in your application

}

} else {

// Handle the case where the user is not logged in

response.sendRedirect("user-login.jsp");

}

%>

**update.jsp**

<%@page import="java.sql.DriverManager"%>

<%@page import="java.sql.ResultSet"%>

<%@page import="java.sql.Statement"%>

<%@page import="java.sql.Connection"%>

<%

String id = request.getParameter("id");

String driver = "com.mysql.jdbc.Driver";

String connectionUrl = "jdbc:mysql://localhost:3306/";

String database = "railwayproject";

String userid = "root";

String password = "password";

try {

Class.forName(driver);

} catch (ClassNotFoundException e) {

e.printStackTrace();

}

Connection connection = null;

Statement statement = null;

ResultSet resultSet = null;

%>

<%

try{

connection = DriverManager.getConnection(connectionUrl+database, userid, password);

statement=connection.createStatement();

String sql ="select \* from trains where id="+id;

resultSet = statement.executeQuery(sql);

while(resultSet.next()){

%>

<!DOCTYPE html>

<html>

<body>

<h1>Update Train Status</h1>

<form method="post" action="update-process.jsp">

<input type="hidden" name="id" value="<%=resultSet.getString("id") %>">

<input type="text" name="id" value="<%=resultSet.getString("id") %>" readonly>

<br>

<label for="trainName">Train Name:</label>

<input type="text" id="trainName" name="trainName" value="<%=resultSet.getString("train\_name") %>" required><br>

<label for="crossingStatus">Crossing Status:</label>

<input type="radio" id="openStatus" name="crossingStatus" value="Open"<% if ("Open".equals(resultSet.getString("crossing\_status"))) { %>checked<% } %>>

<label for="openStatus">Open</label>

<input type="radio" id="closedStatus" name="crossingStatus" value="Closed"<% if ("Closed".equals(resultSet.getString("crossing\_status"))) { %>checked<% } %>>

<label for="closedStatus">Closed</label><br>

<label for="personInCharge">Person in Charge:</label>

<input type="text" id="personInCharge" name="personInCharge" value="<%=resultSet.getString("person\_in\_Charge") %>" required><br>

<label for="trainSchedule">Train Schedule:</label>

<input type="text" id="trainSchedule" name="trainSchedule" value="<%=resultSet.getString("train\_schedule") %>"required><br>

<label for="landmark">Landmark:</label>

<input type="text" id="landmark" name="landmark" value="<%=resultSet.getString("landmark") %>" required><br>

<label for="address">Address:</label>

<input type="text" id="address" name="address" value="<%=resultSet.getString("address") %>" required><br>

<input type="submit" value="Update">

</form>

<%

}

connection.close();

} catch (Exception e) {

e.printStackTrace();

}

%>

</body>

</html>

**Update-process.jsp**

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"

pageEncoding="ISO-8859-1"%>

<%@ page import="java.sql.\*" %>

<%! String driverName = "com.mysql.jdbc.Driver";%>

<%!String url = "jdbc:mysql://localhost:3306/railwayproject";%>

<%!String user = "root";%>

<%!String psw = "password";%>

<%

String id = request.getParameter("id");

String trainName = request.getParameter("trainName");

String crossingStatus = request.getParameter("crossingStatus");

String personInCharge = request.getParameter("personInCharge");

String trainSchedule = request.getParameter("trainSchedule");

String landmark = request.getParameter("landmark");

String address = request.getParameter("address");

if(id != null)

{

Connection con = null;

PreparedStatement ps = null;

int personID = Integer.parseInt(id);

try

{

Class.forName(driverName);

con = DriverManager.getConnection(url,user,psw);

String sql="Update trains set train\_name=?,crossing\_status=?,person\_in\_charge=?,train\_schedule=?,landmark=?,address=? where id="+id;

ps = con.prepareStatement(sql);

ps.setString(1, trainName);

ps.setString(2, crossingStatus);

ps.setString(3, personInCharge);

ps.setString(4, trainSchedule);

ps.setString(5, landmark);

ps.setString(6, address);

int i = ps.executeUpdate();

if(i > 0)

{

out.print("Record Updated Successfully");

response.sendRedirect("admin-dashboard.jsp");

}

else

{

out.print("There is a problem in updating Record.");

response.sendRedirect("admin-dashboard.jsp");

}

}

catch(SQLException sql)

{

request.setAttribute("error", sql);

out.println(sql);

}

}

%>

**User-dashboard.jsp**

<%@ page import="java.sql.Connection" %>

<%@ page import="java.sql.DriverManager" %>

<%@ page import="java.sql.PreparedStatement" %>

<%@ page import="java.sql.ResultSet" %>

<%@ page import="java.sql.SQLException" %>

<%@ page contentType="text/html;charset=UTF-8" language="java" %>

<%

// Check if the user is logged in

HttpSession userSession = request.getSession(false);

if (userSession == null || userSession.getAttribute("userId") == null) {

// Redirect to the login page if not logged in

response.sendRedirect("login.jsp");

return;

}

// Continue rendering the page for a logged-in user

%>

<!DOCTYPE html>

<html>

<head>

<title>User Dashboard</title>

</head>

<body>

<h1>Welcome to the User Dashboard</h1>

<form action="favorite.jsp" method="get" style="position: absolute; top: 10px; right: 190px;">

<input type="submit" value="My Favorite">

</form>

<form action="userlogout.jsp" method="get" style="position: absolute; top: 10px; right: 100px;">

<input type="submit" value="Log Out">

</form>

<h2>Train Details</h2>

<table border="1">

<thead>

<tr>

<th>Train Name</th>

<th>Status</th>

<th>Person in Charge</th>

<th>Schedule</th>

<th>Landmark</th>

<th>Address</th>

<th>Action</th>

</tr>

</thead>

<tbody>

<%

try {

// Database connection details

String jdbcUrl = "jdbc:mysql://localhost:3306/railwayproject";

String dbUsername = "root";

String dbPassword = "password";

// Establish the database connection

Class.forName("com.mysql.cj.jdbc.Driver");

Connection connection = DriverManager.getConnection(jdbcUrl, dbUsername, dbPassword);

// Query to retrieve available trains

String sql = "SELECT \* FROM trains";

try (PreparedStatement statement = connection.prepareStatement(sql);

ResultSet resultSet = statement.executeQuery()) {

while (resultSet.next()) {

String trainName = resultSet.getString("train\_name");

String status = resultSet.getString("crossing\_status");

String personInCharge = resultSet.getString("person\_in\_charge");

String schedule = resultSet.getString("train\_schedule");

String landmark = resultSet.getString("landmark");

String address = resultSet.getString("address");

// Display train details in the table

%>

<tr>

<td><%= trainName %></td>

<td><%= status %></td>

<td><%= personInCharge %></td>

<td><%= schedule %></td>

<td><%= landmark %></td>

<td><%= address %></td>

<td>

<a href="addToFavorite.jsp?trainId=<%=resultSet.getString("id")%>">

<button type="button" class="favorite">Add to Favorite</button>

</a>

</td>

</tr>

<%

}

}

} catch (ClassNotFoundException | SQLException e) {

e.printStackTrace(); // Handle the exception appropriately in your application

}

%>

</tbody>

</table>

</body>

</html>

**User-login.jsp**

<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>

<%@ page import="java.io.\*, java.util.\*, jakarta.servlet.\*, jakarta.servlet.http.\*, jakarta.servlet.annotation.\*" %>

<!DOCTYPE html>

<html>

<head>

<title>User Login</title>

</head>

<body>

<h2>User Login</h2>

<form action="user-login" method="post">

<label for="username">Username:</label>

<input type="text" id="username" name="username" required><br>

<label for="password">Password:</label>

<input type="password" id="password" name="password" required><br>

<input type="submit" value="Login">

</form>

<p>Don't Have an Account ? <a href="register.jsp">Register Here</a></p>

<% String errorMessage = (String)request.getAttribute("errorMessage");

if(errorMessage != null) { %>

<p style="color: red;"><%= errorMessage %></p>

<% } %>

</body>

</html>

**Userlogout.jsp**

<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"%>

<%@ page import="jakarta.servlet.http.\*" %>

<%

// Invalidate the current session

HttpSession userSession = request.getSession(false);

if (userSession != null) {

userSession.invalidate();

}

// Redirect to the login page or any other appropriate page after logout

response.sendRedirect("user-login.jsp");

%>