Railway Crossing Status

MYSQL DATA BASE:

```
create database railway_crossing_status;
use railway_crossing_status;
CREATE TABLE user_signup (
id INT PRIMARY KEY AUTO_INCREMENT,
name VARCHAR(255) NOT NULL,
email VARCHAR(255) NOT NULL,
password VARCHAR(255) NOT NULL
);
CREATE TABLE railway_crossing (
id INT PRIMARY KEY AUTO_INCREMENT,
name VARCHAR(255),
address VARCHAR(255),
landmark VARCHAR(255),
train_schedule VARCHAR(255),
person_in_charge VARCHAR(255),
status VARCHAR(50)
);
CREATE TABLE favorite_crossing (
id INT PRIMARY KEY AUTO_INCREMENT,
railway_crossing_id INT,
FOREIGN KEY (railway_crossing_id) REFERENCES railway_crossing(id)
XML FILE:
<?xml version="1.0" encoding="UTF-8"?>
```

```
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="https://jakarta.ee/xml/ns/jakartaee"
xmlns:web="http://xmlns.jcp.org/xml/ns/javaee"
xsi:schemaLocation="https://jakarta.ee/xml/ns/jakartaee
https://jakarta.ee/xml/ns/jakartaee/web-app_5_0.xsd"
id="WebApp_ID" version="5.0">
<display-name>RailwayCrossingStatus</display-name>
<welcome-file-list>
<welcome-file>HomePage.jsp</welcome-file>
<welcome-file>index.jsp</welcome-file>
<welcome-file>index.htm</welcome-file>
<welcome-file>default.html</welcome-file>
<welcome-file>default.jsp</welcome-file>
<welcome-file>default.htm</welcome-file>
</welcome-file-list>
<servlet>
<description></description>
<display-name>GovernmentServlet</display-name>
<servlet-name>GovernmentServlet/servlet-name>
<servlet-class>com.simpli.GovernmentServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>GovernmentServlet/servlet-name>
<url-pattern>/GovernmentServlet</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>LoginServlet</display-name>
<servlet-name>LoginServlet</servlet-name>
```

```
<servlet-class>com.simpli.LoginServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>LoginServlet</servlet-name>
<url-pattern>/LoginServlet</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>RegisterServlet</display-name>
<servlet-name>RegisterServlet/servlet-name>
<servlet-class>com.simpli.RegisterServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>RegisterServlet/servlet-name>
<url-pattern>/RegisterServlet</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>AdminRegisterServlet</display-name>
<servlet-name>AdminRegisterServlet/servlet-name>
<servlet-class>com.simpli.AdminRegisterServlet/servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>AdminRegisterServlet/servlet-name>
<url-pattern>/AdminRegisterServlet</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>AdminLoginServlet</display-name>
```

```
<servlet-name>AdminLoginServlet/servlet-name>
<servlet-class>com.simpli.AdminLoginServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>AdminLoginServlet/servlet-name>
<url-pattern>/AdminLoginServlet</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>AdminHomePageServlet</display-name>
<servlet-name>AdminHomePageServlet/servlet-name>
<servlet-class>com.simpli.AdminHomePageServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>AdminHomePageServlet/servlet-name>
<url-pattern>/AdminHomePageServlet</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>UpdateCrossingServlet</display-name>
<servlet-name>UpdateCrossingServlet</servlet-name>
<servlet-class>com.simpli.UpdateCrossingServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>UpdateCrossingServlet</servlet-name>
<url-pattern>/UpdateCrossingServlet</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
```

```
<display-name>DeleteCrossingServlet</display-name>
<servlet-name>DeleteCrossingServlet/servlet-name>
<servlet-class>com.simpli.DeleteCrossingServlet/servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>DeleteCrossingServlet/servlet-name>
<url-pattern>/DeleteCrossingServlet</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>SearchCrossingServlet</display-name>
<servlet-name>SearchCrossingServlet</servlet-name>
<servlet-class>com.simpli.SearchCrossingServlet/servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>SearchCrossingServlet</servlet-name>
<url-pattern>/searchCrossing</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>AddCrossingServlet</display-name>
<servlet-name>AddCrossingServlet</servlet-name>
<servlet-class>com.simpli.AddCrossingServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>AddCrossingServlet</servlet-name>
<url-pattern>/addCrossing</url-pattern>
</servlet-mapping>
<servlet>
```

```
<description></description>
<display-name>AddToFavoritesServlet</display-name>
<servlet-name>AddToFavoritesServlet</servlet-name>
<servlet-class>com.simpli.AddToFavoritesServlet</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>AddToFavoritesServlet/servlet-name>
<url-pattern>/addToFavorites</url-pattern>
</servlet-mapping>
<servlet>
<description></description>
<display-name>RemoveFromFavoritesServlet</display-name>
<servlet-name>RemoveFromFavoritesServlet</servlet-name>
<servlet-class>com.simpli.RemoveFromFavoritesServlet</servletclass>
</servlet>
<servlet-mapping>
<servlet-name>RemoveFromFavoritesServlet</servlet-name>
<url-pattern>/removeFromFavorites</url-pattern>
</servlet-mapping>
</web-app>
project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
<modelVersion>4.0.0</modelVersion>
<groupId>com.simpli.railwaycrossing
<artifactId>RailwayCrossingStatus</artifactId>
<version>0.0.1-SNAPSHOT</version>
<packaging>war</packaging>
```

```
<name>Building an application to communicate the status of railway
crossings
in advance</name>
cproperties>
<maven.compiler.source>1.8</maven.compiler.source>
<maven.compiler.target>1.8</maven.compiler.target>
</properties>
<dependencies>
<!-- https://mvnrepository.com/artifact/javax.servlet/jstl -->
<dependency>
<groupId>javax.servlet
<artifactId>jstl</artifactId>
<version>1.2</version>
</dependency>
<!-- MySQL Connector -->
<dependency>
<groupId>mysql
<artifactId>mysql-connector-java</artifactId>
<version>8.0.33</version>
</dependency>
<!-- Jakarta Servlet API -->
<dependency>
<groupId>javax.servlet
<artifactId>javax.servlet-api</artifactId>
<version>4.0.0</version>
<scope>provided</scope>
</dependency>
</dependencies>
<build>
```

ADD CROSSING SERVLET

```
package com.simpli;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet(name = "AddCrossingServlet", urlPatterns = { "/addCrossing" })
public class AddCrossingServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse response)
```

```
throws ServletException, IOException {
// Retrieve the form data from the request
String name = request.getParameter("name");
String address = request.getParameter("address");
String landmark = request.getParameter("landmark");
String trainSchedules = request.getParameter("trainSchedules");
String personInCharge = request.getParameter("personInCharge");
String status = request.getParameter("status");
// Create a new RailwayCrossing object with the form data
RailwayCrossing crossing = new RailwayCrossing();
crossing.setName(name);
crossing.setAddress(address);
crossing.setLandmark(landmark);
crossing.setTrainSchedule(trainSchedules);
crossing.setPersonInCharge(personInCharge);
crossing.setStatus(status);
// Save the new crossing to the database
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
crossingDAO.addCrossing(crossing);
// Redirect to the admin homepage after adding the crossing
response.sendRedirect("adminHome.jsp");
package com.simpli;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.IOException;
public class AddToFavoritesServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
```

```
response)

throws ServletException, IOException {

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

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

int railwayCrossingId = Integer.parseInt(crossingId);

// Perform the database operation to add the crossing to favorites

RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();

crossingDAO.addToFavorites(railwayCrossingId); // Implement this

method in RailwayCrossingDAO

}

// Redirect back to the userHome.jsp page

response.sendRedirect("userHome.jsp");

}
```

AdminHomePageServlet

```
package com.simpli;
import java.io.IOException;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/adminHomePage")
public class AdminHomePageServlet extends HttpServlet {
  private RailwayCrossingDAO crossingDAO;
```

```
public void init() {
  crossingDAO = new RailwayCrossingDAO();
}

protected void doGet(HttpServletRequest request, HttpServletResponse
  response)

throws ServletException, IOException {
  // Fetch all railway crossing details from the database
  List<RailwayCrossing> crossings = crossingDAO.getAllCrossings();
  // Pass the crossing details to the JSP page
  request.setAttribute("crossings", crossings);
  request.getRequestDispatcher("adminHome.jsp").forward(request, response);
}
```

AdminLoginServlet

```
package com.simpli;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/adminLogin")
public class AdminLoginServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
  private static final String ADMIN_ID = "chathurya123@gmail.com";
```

```
private static final String ADMIN_PASSWORD = "chinny123";
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
   String email = request.getParameter("email");
   String password = request.getParameter("password");
   if (email != null && email.equals(ADMIN_ID) && password != null && password.equals(ADMIN_PASSWORD)) {
    response.sendRedirect("adminHome.jsp");
   } else {
    request.getRequestDispatcher("adminLogin.jsp").forward(request, response);
   }
}
```

DatabaseConnection

```
package com.simpli;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
public class DatabaseConnection {
  private static final String URL =
  "jdbc:mysql://localhost:3306/railway_crossing_status";
  private static final String USERNAME = "root";
  private static final String PASSWORD = "Ch@thury@$0113";
  public static Connection getConnection() {
    Connection connection = null;
    try {
```

```
Class.forName("com.mysql.jdbc.Driver");
connection = DriverManager.getConnection(URL, USERNAME, PASSWORD);
} catch (ClassNotFoundException | SQLException e) {
e.printStackTrace();
}
return connection;
```

DeleteCrossingServlet

```
package com.simpli;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/deleteCrossing")
public class DeleteCrossingServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
// Retrieve the crossing ID from the request
int crossingId = Integer.parseInt(request.getParameter("id"));
// Perform the delete operation (implement your logic)
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
crossingDAO.deleteCrossing(crossingId);
// Redirect to the admin homepage after the deletion
response.sendRedirect("adminHome.jsp");
}
```

LoginServlet

```
package com.simpli;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
@WebServlet("/login")
public class LoginServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
// Retrieve the form data
String email = request.getParameter("email");
String password = request.getParameter("password");
// Check if the provided credentials are valid
UserDAO userDAO = new UserDAO();
User user = userDAO.getUserByEmail(email);
if (user != null && user.getPassword().equals(password)) {
// Authentication successful
// You can store user details in session for further use
HttpSession session = request.getSession();
session.setAttribute("user", user);
// Redirect to a success page or perform any other necessary
```

```
actions
response.sendRedirect("userHome.jsp");
} else {
// Authentication failed
// Redirect to an error page or display an error message
response.sendRedirect("userRegister.jsp?error=1");
}
}
}
```

RailwayCrossing

```
package com.simpli;
public class RailwayCrossing {
private int id;
private String name;
private String address;
private String landmark;
private String trainSchedule;
private String personInCharge;
private String status;
public RailwayCrossing() {
super();
// TODO Auto-generated constructor stub
public RailwayCrossing(int id, String name, String address, String
landmark, String trainSchedule,
String personInCharge, String status) {
super();
```

```
this.id = id;
this.name = name;
this.address = address;
this.landmark = landmark;
this.trainSchedule = trainSchedule;
this.personInCharge = personInCharge;
this.status = status;
}
public int getId() {
return id;
}
public void setId(int id) {
this.id = id;
}
public String getName() {
return name;
public void setName(String name) {
this.name = name;
}
public String getAddress() {
return address;
}
public void setAddress(String address) {
this.address = address;
}
public String getLandmark() {
return landmark;
```

```
public void setLandmark(String landmark) {
this.landmark = landmark;
public String getTrainSchedule() {
return trainSchedule;
}
public void setTrainSchedule(String trainSchedule) {
this.trainSchedule = trainSchedule;
}
public String getPersonInCharge() {
return personInCharge;
}
public void setPersonInCharge(String personInCharge) {
this.personInCharge = personInCharge;
}
public String getStatus() {
return status;
}
public void setStatus(String status) {
this.status = status;
}
public void setId(String string) {
// TODO Auto-generated method stub
}}
```

RailwayCrossingDAO

```
package com.simpli; import java.sql.Connection;
```

```
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.ArrayList;
import java.util.List;
public class RailwayCrossingDAO {
private Connection connection;
public RailwayCrossingDAO() {
// Initialize the database connection
connection = DatabaseConnection.getConnection();
}
// Fetch all values from the database
public List<RailwayCrossing> getAllCrossings() {
List<RailwayCrossing> crossings = new ArrayList<>();
try {
String query = "SELECT * FROM railway_crossing";
PreparedStatement statement = connection.prepareStatement(query);
ResultSet resultSet = statement.executeQuery();
while (resultSet.next()) {
RailwayCrossing crossing = new RailwayCrossing();
crossing.setId(resultSet.getInt("id"));
crossing.setName(resultSet.getString("name"));
crossing.setAddress(resultSet.getString("address"));
crossing.setLandmark(resultSet.getString("landmark"));
crossing.setTrainSchedule(resultSet.getString("train_schedule"
));
crossing.setPersonInCharge(resultSet.getString("person_in_char
ge"));
crossing.setStatus(resultSet.getString("status"));
```

```
crossings.add(crossing);
}
} catch (SQLException e) {
e.printStackTrace();
}
return crossings;
}
// Search values by id and display it from the database
public RailwayCrossing getCrossingById(int crossingId) {
RailwayCrossing crossing = null;
try {
String query = "SELECT * FROM railway_crossing WHERE id = ?";
PreparedStatement statement = connection.prepareStatement(query);
statement.setInt(1, crossingId);
ResultSet resultSet = statement.executeQuery();
if (resultSet.next()) {
crossing = new RailwayCrossing();
crossing.setId(resultSet.getInt("id"));
crossing.setName(resultSet.getString("name"));
crossing.setAddress(resultSet.getString("address"));
crossing.setLandmark(resultSet.getString("landmark"));
crossing.setTrainSchedule(resultSet.getString("train_schedule"
));
crossing.setPersonInCharge(resultSet.getString("person_in_char
ge"));
crossing.setStatus(resultSet.getString("status"));
}
} catch (SQLException e) {
e.printStackTrace();
```

```
}
return crossing;
}
// update the values in the database
public void updateCrossing(RailwayCrossing crossing) {
try {
String query = "UPDATE railway_crossing SET name=?, address=?,
landmark=?, train_schedule=?, person_in_charge=?, status=? WHERE id=?";
PreparedStatement statement = connection.prepareStatement(query);
statement.setString(1, crossing.getName());
statement.setString(2, crossing.getAddress());
statement.setString(3, crossing.getLandmark());
statement.setString(4, crossing.getTrainSchedule());
statement.setString(5, crossing.getPersonInCharge());
statement.setString(6, crossing.getStatus());
statement.setInt(7, crossing.getId());
statement.executeUpdate();
} catch (SQLException e) {
e.printStackTrace();
}
}
// Delete Railway Crossing
public void deleteCrossing(int crossingId) {
try {
connection.setAutoCommit(false); // Start transaction
// Delete associated favorite crossings
String deleteFavoriteCrossingsQuery = "DELETE FROM
favorite_crossing WHERE railway_crossing_id = ?";
try (PreparedStatement deleteFavoriteCrossingsStatement =
```

```
connection
.prepareStatement(deleteFavoriteCrossingsQuery)) {
deleteFavoriteCrossingsStatement.setInt(1, crossingId);
deleteFavoriteCrossingsStatement.executeUpdate();
}
// Delete the railway crossing
String deleteRailwayCrossingQuery = "DELETE FROM railway_crossing
WHERE id = ?";
try (PreparedStatement deleteRailwayCrossingStatement = connection
.prepareStatement(deleteRailwayCrossingQuery)) {
deleteRailwayCrossingStatement.setInt(1, crossingId);
deleteRailwayCrossingStatement.executeUpdate();
}
connection.commit(); // Commit the transaction
connection.setAutoCommit(true); // Reset auto-commit to true
} catch (SQLException e) {
try {
connection.rollback(); // Rollback the transaction if an error
occurs
} catch (SQLException rollbackException) {
rollbackException.printStackTrace();
}
e.printStackTrace();
}
// Add values to the database
public void addCrossing(RailwayCrossing crossing) {
try {
```

```
String query = "INSERT INTO railway_crossing (name, address,
landmark, train_schedule, person_in_charge, status) VALUES (?, ?, ?, ?, ?,
?)";
PreparedStatement statement = connection.prepareStatement(query);
statement.setString(1, crossing.getName());
statement.setString(2, crossing.getAddress());
statement.setString(3, crossing.getLandmark());
statement.setString(4, crossing.getTrainSchedule());
statement.setString(5, crossing.getPersonInCharge());
statement.setString(6, crossing.getStatus());
statement.executeUpdate();
} catch (SQLException e) {
e.printStackTrace();
}
}
public List<RailwayCrossing> getFavoriteCrossings() {
List<RailwayCrossing> favoriteCrossings = new ArrayList<>();
try (Connection connection = DatabaseConnection.getConnection()) {
String query = "SELECT rc.* FROM railway_crossing rc"
+ "JOIN favorite_crossing fc ON rc.id =
fc.railway crossing id";
PreparedStatement statement = connection.prepareStatement(query);
ResultSet resultSet = statement.executeQuery();
while (resultSet.next()) {
RailwayCrossing crossing = new RailwayCrossing();
crossing.setId(resultSet.getInt("id"));
crossing.setName(resultSet.getString("name"));
crossing.setAddress(resultSet.getString("address"));
crossing.setLandmark(resultSet.getString("landmark"));
```

```
crossing.setTrainSchedule(resultSet.getString("train_schedule"
));
crossing.set PersonIn Charge (result Set.get String ("person\_in\_charge)) and the person of the per
ge"));
crossing.setStatus(resultSet.getString("status"));
favoriteCrossings.add(crossing);
}
} catch (SQLException e) {
e.printStackTrace();
}
return favoriteCrossings;
}
public void addToFavorites(int crossingId) {
try (Connection connection = DatabaseConnection.getConnection()) {
String sql = "INSERT INTO favorite_crossing (railway_crossing_id)
VALUES (?)";
PreparedStatement statement = connection.prepareStatement(sql);
statement.setInt(1, crossingId);
statement.executeUpdate();
} catch (SQLException e) {
e.printStackTrace();
// Handle the exception as needed
}
public void removeFromFavorites(int crossingId) {
try (Connection connection = DatabaseConnection.getConnection()) {
String sql = "DELETE FROM favorite_crossing WHERE
railway_crossing_id = ?";
PreparedStatement statement = connection.prepareStatement(sql);
```

```
statement.setInt(1, crossingId);
statement.executeUpdate();
} catch (SQLException e) {
e.printStackTrace();
// Handle the exception as needed
}
}
}
RegisterServlet
package com.simpli;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
* Servlet implementation class RegisterServlet
*/
@WebServlet("/register")
public class RegisterServlet extends HttpServlet {
private static final long serialVersionUID = 1L;
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
// Retrieve the form data
String name = request.getParameter("name");
```

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

```
String password = request.getParameter("password");
// Create a new User object
User user = new User(name, email, password);
// Store the user in the database
UserDAO userDAO = new UserDAO();
userDAO.registerUser(user);
// Redirect to a success page or perform any other necessary actions
response.sendRedirect("userLogin.jsp");
}
}
package com.simpli;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
* Servlet implementation class RemoveFromFavoritesServlet
*/
public class RemoveFromFavoritesServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
// TODO Auto-generated method stub
String crossingId = request.getParameter("crossingId");
if (crossingId != null && !crossingId.isEmpty()) {
int railwayCrossingId = Integer.parseInt(crossingId);
// Perform the database operation to remove the crossing from
favorites
```

```
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
crossingDAO.removeFromFavorites(railwayCrossingId); // Implement
this method in RailwayCrossingDAO
}
// Redirect back to the userHome.jsp page
response.sendRedirect("userHome.jsp");
}
```

SearchCrossingServlet

```
package com.simpli;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet(name = "SearchCrossingServlet", urlPatterns = { "/searchCrossing"
})
public class SearchCrossingServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
// Retrieve the search ID from the request
int searchId = Integer.parseInt(request.getParameter("searchId"));
// Implement your logic to search for the crossing by ID and retrieve
its
// details from the database
```

```
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
RailwayCrossing crossing = crossingDAO.getCrossingById(searchId);
// Set the search result in the request attribute
request.setAttribute("crossing", crossing);
// Redirect to the admin homepage with the search results
request.getRequestDispatcher("adminHome.jsp").forward(request, response)
}

UpdateCrossingServlet
```

```
package com.simpli;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/updateCrossing")
public class UpdateCrossingServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
try {
// Retrieve the crossing ID from the hidden field
String idParam = request.getParameter("crossingId");
if (idParam != null && !idParam.isEmpty()) {
int crossingId = Integer.parseInt(idParam);
// Retrieve the updated details for the crossing
```

```
String name = request.getParameter("name");
String address = request.getParameter("address");
String landmark = request.getParameter("landmark");
String trainSchedules =
request.getParameter("trainSchedules");
String personInCharge =
request.getParameter("personInCharge");
String status = request.getParameter("status");
// Create a new RailwayCrossing object with the updated
details
RailwayCrossing updatedCrossing = new RailwayCrossing();
updatedCrossing.setId(crossingId);
updatedCrossing.setName(name);
updatedCrossing.setAddress(address);
updatedCrossing.setLandmark(landmark);
updatedCrossing.setTrainSchedule(trainSchedules);
updatedCrossing.setPersonInCharge(personInCharge);
updatedCrossing.setStatus(status);
// Perform the update operation
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
crossingDAO.updateCrossing(updatedCrossing);
// Redirect to the admin homepage after the update
response.sendRedirect("adminHome.jsp");
} else {
// Handle case where idParam is empty or null
throw new ServletException("Crossing ID is missing.");
}
} catch (NumberFormatException e) {
// Handle case where idParam is not a valid integer
```

```
throw new ServletException("Invalid Crossing ID format.", e);
} catch (Exception e) {
// Handle other exceptions
throw new ServletException("An error occurred during the crossingupdate.", e);
}
```

User Class

```
package com.simpli;
public class User {
private String name;
private String email;
private String password;
public User() {
super();
}
public User(String name, String email, String password) {
this.name = name;
this.email = email;
this.password = password;
}
public String getName() {
return name;
public void setName(String name) {
this.name = name;
public String getEmail() {
```

```
return email;
public void setEmail(String email) {
this.email = email;
}
public String getPassword() {
return password;
}
public void setPassword(String password) {
this.password = password;
}
UserDAO Class
package com.simpli;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
public class UserDAO {
private Connection connection;
public UserDAO() {
// Initialize the database connection
connection = DatabaseConnection.getConnection();
public void registerUser(User user) {
try {
String query = "INSERT INTO user_signup (name, email, password)
VALUES (?, ?, ?)";
```

```
PreparedStatement statement = connection.prepareStatement(query);
statement.setString(1, user.getName());
statement.setString(2, user.getEmail());
statement.setString(3, user.getPassword());
statement.executeUpdate();
} catch (SQLException e) {
e.printStackTrace();
}
public boolean loginUser(String email, String password) {
try {
String query = "SELECT * FROM user_signup WHERE email=? AND
password=?";
PreparedStatement statement = connection.prepareStatement(query);
statement.setString(1, email);
statement.setString(2, password);
ResultSet resultSet = statement.executeQuery();
return resultSet.next();
} catch (SQLException e) {
e.printStackTrace();
}
return false;
}
public User getUserByEmail(String email) {
try {
String query = "SELECT * FROM user_signup WHERE email=?";
PreparedStatement statement = connection.prepareStatement(query);
statement.setString(1, email);
ResultSet resultSet = statement.executeQuery();
```

```
if (resultSet.next()) {
    User user = new User();
    user.setName(resultSet.getString("name"));
    user.setEmail(resultSet.getString("email"));
    user.setPassword(resultSet.getString("password"));
    return user;
}
} catch (SQLException e) {
    e.printStackTrace();
}
return null;
}
```

Add Railway Crossing.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Add Railway Crossing</title>
<style>
body {
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
```

```
text-align: center;
background-color: #f2f2f2;
}
.panel {
width: 500px;
padding: 40px;
background-color: #ffffff;
border-radius: 5px;
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}
.panel label {
display: block;
margin-bottom: 10px;
text-align: left;
}
.panel input[type="text"], .panel select {
width: 100%;
padding: 8px;
border: 1px solid #ccc;
border-radius: 4px;
}
.panel button[type="submit"] {
width: 100%;
padding: 10px;
background-color: #4CAF50;
color: white;
border: none;
border-radius: 4px;
cursor: pointer; } .panel button[type="submit"]:hover { background-color: #45a049; }
```

```
cursor: pointer;
.panel button[type="submit"]:hover {
background-color: #45a049;
</style>
</head>
<body>
<div class="panel">
<h2>Railway Crossings</h2>
<h4>Add Railway Crossing Information</h4>
<form action="addCrossing" method="post">
<label for="name">Enter Name</label> <input type="text"</pre>
id="name"
name="name" required><br> <label
for="address">Address</label>
<input type="text" id="address" name="address"</pre>
required><br>
<label for="landmark">Landmark</label> <input type="text"</pre>
id="landmark" name="landmark" required><br> <label
for="trainSchedules">Train Schedules</label> <input
type="text"
id="trainSchedules" name="trainSchedules"
required><br>
<label for="personInCharge">Person in Charge</label>
<input
type="text" id="personInCharge"
name="personInCharge" required><br>
<label for="status">Crossing Status</label> <select
id="status"
name="status">
<option value="Open">Open</option>
<option value="Closed">Closed</option>
</select><br>
<button type="submit">Submit</button>
</form>
</div>
</body>
</html>
```

RailwayCrossingDAO.jsp

```
<% @ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<% @ page import="com.simpli.RailwayCrossing"%>
```

```
<%@ page import="com.simpli.RailwayCrossingDAO"%>
<%@ page import="java.util.List"%>
<%
// Create an instance of RailwayCrossingDAO
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
// Retrieve all crossings from the DAO
List<RailwayCrossing> crossings = crossingDAO.getAllCrossings();
// Get the ID from the search request parameter
String searchId = request.getParameter("searchId");
// Check if the searchId parameter is provided
if (searchId != null && !searchId.isEmpty()) {
// Parse the searchId as an int
int crossingId = Integer.parseInt(searchId);
// Retrieve the crossing by ID from the DAO
RailwayCrossing searchedCrossing =
crossingDAO.getCrossingById(crossingId);
// Set the crossing as an attribute to be displayed in the table
request.setAttribute("crossing", searchedCrossing);
%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Admin Home Page</title>
<style>
/* Button Styles */
.button-container {
display: flex;
justify-content: flex-start;
margin-bottom: 10px;
margin-left: 5px;
.button-container form {
margin-right: 100px;
.button-container input[type="text"] {
margin-right: 5px;
padding: 5px;
border-radius: 4px;
border: 1px solid #ccc;
.button-container button[type="submit"] {
padding: 10px 20px;
border-radius: 4px;
border: none:
```

```
background-color: #B6B6B6;
font-weight: bold;
color: black;
cursor: pointer;
.button-container button[type="submit"]:hover {
background-color: #45a049;
.update-button, .delete-button {
display: inline-block;
vertical-align: middle;
margin-right: 10px;
padding: 7px;
width: 80px;
height: 30px;
/* Table Styles */
table {
border-collapse: collapse;
width: 100%;
th, td {
text-align: left;
padding: 8px;
border-bottom: 1px solid #ddd;
}
th {
background-color: #f2f2f2;
/* Responsive Styles */
@media only screen and (max-width: 768px) {
.button-container form {
margin-right: 5px;
.update-button, .delete-button {
float: none;
margin-right: 5px;
margin-bottom: 5px;
}
</style>
</head>
<body>
<h1>Admin Home Page</h1>
Railway Crossing[<%=crossings.size()%>]
```

```
</h3>
<!-- Buttons -->
<div class="button-container">
<form action="HomePage.jsp" method="post">
<button type="submit">Home</button>
</form>
<form action="addRailCrossingForm.jsp" method="post">
<button type="submit">Add Railway Crossing</button>
</form>
<form action="searchCrossing" method="post">
<input type="text" name="searchId" placeholder="Enter</pre>
ID">
<button type="submit">Search Crossing</button>
</form>
<form action="adminHome.jsp" method="post">
<button type="submit">Display All Railway
Crossings</button>
</form>
<!-- Logout Button -->
<form action="adminRegister.jsp" method="post">
<button type="submit">Logout</button>
</form>
</div>
<!-- Table -->
<thead>
Sr.No
Name
Address
Landmark
Train Schedule
Person In-Charge
Status
Action
</thead>
<%
if (request.getAttribute("crossing") != null) { // Check
if a specific crossing is found
RailwayCrossing = (RailwayCrossing)
request.getAttribute("crossing");
%>
<</td>
```

```
<%=crossing.getName()%>
<<mercessing.getAddress()%>
<<td>
<%=crossing.getTrainSchedule()%>
<<mercerosing.getPersonInCharge()%>
<%=crossing.getStatus()%>
<%
} else { // Display all crossings
for (RailwayCrossing anotherCrossing : crossings) {
%>
<%=anotherCrossing.getId()%>
<%=anotherCrossing.getName()%>
<%=anotherCrossing.getAddress()%>
<%=anotherCrossing.getLandmark()%>
<%=anotherCrossing.getTrainSchedule()%>
<%=anotherCrossing.getPersonInCharge()%>
<%=anotherCrossing.getStatus()%>
<form action="updateRailCrossingForm.jsp"</pre>
method="post">
<input type="hidden" name="id"</pre>
value="<%=anotherCrossing.getId()%>">
<button type="submit" class="updatebutton">Update</button>
</form>
<form action="deleteCrossing" method="post">
<input type="hidden" name="id"
value="<%=anotherCrossing.getId()%>">
<button type="submit" class="deletebutton">Delete</button>
</form>
<%
}
}
%>
</body>
</html>
```

Admin Login.JSP

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Admin Login</title>
<style>
body {
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
text-align: center;
background-color: #f2f2f2;
.panel {
width: 400px;
padding: 40px;
background-color: #ffffff;
border-radius: 5px;
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
.panel label {
display: block;
margin-bottom: 10px;
text-align: left;
.panel input[type="text"], .panel input[type="password"] {
width: 100%;
padding: 10px;
border: 1px solid #ccc;
border-radius: 4px;
.panel button[type="submit"] {
width: 100%;
padding: 10px;
background-color: #4CAF50;
color: white;
border: none;
border-radius: 4px;
cursor: pointer;
.panel button[type="submit"]:hover {
background-color: #45a049;
```

```
.panel .signup-link {
display: block;
margin-top: 20px;
</style>
</head>
<body>
<div class="panel">
<h2>Railway Crossing</h2>
<h4>Admin Login</h4>
<form action="adminLogin" method="post">
<label for="email">Email:</label> <input type="text"</pre>
id="email"
name="email" required><br> <label
for="password">Password:</label>
<input type="password" id="password" name="password"
required><br>
<button type="submit">Login</button>
</form>
</div>
</body>
</html>
```

Railway Crossing Status.JSP

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<!doctype html>
<html lang="en">
<head>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>Railway Crossing Status</title>
link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap
.min.css"
rel="stylesheet"
integrity="sha384-
9ndCyUaIbzAi2FUVXJi0CjmCapSmO7SnpJef0486qhLnuZ2cdeRhO02iuK6FUUVM"
crossorigin="anonymous">
<style>
body {
background-image:
url("https://source.unsplash.com/1000x1000/?nature,mountain");
background-repeat: no-repeat;
```

```
background-size: cover;
.navbar-brand span.quiz-text {
color: red;
.navbar-nav.custom-ml-auto {
margin-left: auto;
.navbar-nav.custom-ml-auto .nav-item {
margin-left: 10px;
}
</style>
</head>
<body>
<nav
class="navbar navbar-expand-lg bg-body-tertiary navbar-dark
border-bottom border-bottom-dark"
data-bs-theme="dark">
<div class="container-fluid">
<a class="navbar-brand" href="#">Railway Crossing
Status</a>
<button class="navbar-toggler" type="button"</pre>
data-bs-toggle="collapse" data-bstarget="#navbarSupportedContent"
aria-controls="navbarSupportedContent" ariaexpanded="false"
aria-label="Toggle navigation">
<span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse"</pre>
id="navbarSupportedContent">
<!-- Move the "Home", "Quiz", "Login/Signup"
links to the right using custom CSS -->
<a class="nav-link"</pre>
active"
aria-current="page"
href="#">Home</a>
<a class="nav-link"</pre>
href="adminLogin.jsp">Admin-Login/Signup</a>
cli class="nav-item"><a class="nav-link"</li>
href="userLogin.jsp">User-Login/Signup</a>
</div>
</div>
</nav>
<script
```

```
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.b undle.min.js" integrity="sha384-geWF76RCwLtnZ8qwWowPQNguL3RmwHVBC9FhGdlKrxdiJJigb/j/68SIy3Te4Bkz" crossorigin="anonymous"></script> </body> </html>
```

Search Crossing.JSP

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
< @ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Search Crossing</title>
</head>
<body>
<h1>Search Crossing</h1>
<form action="searchCrossing" method="post">
<label for="searchId">Search ID:</label> <input type="number"</pre>
id="searchId" name="searchId" required> <inputtype="submit"
value="Search">
value="Search">
</form>
<c:if test="${not empty crossing}">
<h2>Search Result</h2>
<th>ID</th>
Name
Address
Landmark
Train Schedule
Person in Charge
Status
${crossing.id}
${crossing.name}
${crossing.address}
${crossing.landmark}
${crossing.trainSchedule}
${crossing.personInCharge}
```

```
$\{crossing.status}

</c:if>
<a href="adminHome.jsp">Back to Admin Homepage</a>
</body>
</html>
```

Update Railway Crossing.JSP

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Update Railway Crossing</title>
<style>
body {
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
text-align: center;
background-color: #f2f2f2;
.panel {
width: 500px;
padding: 40px;
background-color: #ffffff;
border-radius: 5px;
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
.panel label {
display: block;
margin-bottom: 10px;
text-align: left;
.panel input[type="text"], .panel select {
width: 100%;
padding: 8px;
border: 1px solid #ccc;
border-radius: 4px;
.panel button[type="submit"] {
width: 100%;
```

```
padding: 10px;
background-color: #4CAF50;
color: white;
border: none;
border-radius: 4px;
cursor: pointer;
.panel button[type="submit"]:hover {
background-color: #45a049;
</style>
</head>
<body>
<div class="panel">
<h2>Railway Crossings</h2>
<h4>Update Railway Crossing Information</h4>
<form action="updateCrossing" method="post">
<label for="crossingId">Crossing ID</label> <input</pre>
type="text"
id="crossingId" name="crossingId"
value="${crossing.crossingId}"
required><br> <label for="name">Enter Name</label>
<input
type="text" id="name" name="name"
value="${crossing.name}" required><br>
<label for="address">Address</label> <input type="text"</pre>
id="address"
name="address" value="${crossing.address}"
required><br>
<label for="landmark">Landmark</label> <input type="text"</pre>
id="landmark" name="landmark"
value="${crossing.landmark}" required><br>
<label for="trainSchedules">Train Schedules</label>
<input
type="text" id="trainSchedules"
name="trainSchedules"
value="${crossing.trainSchedule}" required><br>
<label
for="personInCharge">Person in Charge</label>
<input type="text"
id="personInCharge" name="personInCharge"
value="${crossing.personInCharge}" required><br>
<label
for="status">Crossing Status</label> <select
id="status"
```

```
name="status">
<option value="Open" ${crossing.status == 'Open' ?
'selected' : "}>Open</option>
<option value="Closed"
${crossing.status == 'Closed' ? 'selected' :
"}>Closed</option>
</select><br>
<button type="submit">Submit</button>
</form>
</div>
</body>
</html>
```

User Home Page.JSP

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<%@ page import="com.simpli.RailwayCrossing"%>
< @ page import="com.simpli.RailwayCrossingDAO"%>
<%@ page import="java.util.List"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Railway Crossings - User Home Page</title>
<style>
body {
font-family: Arial, sans-serif;
margin: 0;
padding: 20px;
.container {
border: 1px solid #ccc;
border-radius: 10px;
padding: 20px;
margin-bottom: 20px;
margin-top: 20px;
.container h3 {
margin-top: 0;
.container p {
margin: 0;
.crossing {
margin-bottom: 10px;
```

```
.crossing button {
margin-left: 10px;
.status {
display: inline-block;
padding: 5px;
font-weight: bold;
.status-open {
color: white;
border-radius: 30%;
background-color: green;
.status-closed {
color: white;
background-color: red;
</style>
</head>
<body>
<h1 style="font-weight: bold;">User Home Page</h1>
<!-- Display Search Crossings button -->
<button onclick="location.href='HomePage.jsp"
style="border-radius: 10px; font-weight: bold;">Home</button>
<!-- Display All button -->
<button onclick="location.href='userHome.jsp"
style="border-radius: 10px; margin-left: 50px; font-weight:
bold;">All
Crossings</button>
<!-- Display Favorite Crossings button -->
<button onclick="location.href='userHomeFavoriteCrossing.jsp"</pre>
style="border-radius: 10px; margin-left: 50px; font-weight:
bold;">Favorite
Crossings</button>
<!-- Display Search Crossings button -->
<button onclick="location.href='userSearchCrossing.jsp"</pre>
style="border-radius: 10px; margin-left: 50px; font-weight:
bold;">Search
Crossings</button>
<!-- Logout button -->
<button onclick="location.href='userLogin.jsp"</pre>
style="border-radius: 10px; margin-left: 800px; font-weight:
bold;">Logout</button>
<%-- Create an instance of RailwayCrossingDAO --%>
<%
```

```
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
List<RailwayCrossing> allCrossings = crossingDAO.getAllCrossings();
for (RailwayCrossing crossing : allCrossings) {
String status = crossing.getStatus();
String statusClass = status.equalsIgnoreCase("Open") ? "statusopen" : "status-closed";
%>
<div class="container">
<h3><%=crossing.getName()%></h3>
>
Status: <strong><span class="status"
<%=statusClass%>"><%=crossing.getStatus()%></span></strong>
>
Person in Charge:
<strong><%=crossing.getPersonInCharge()%></strong>
>
Train Schedules:
<strong><%=crossing.getTrainSchedule()%></strong>
>
Landmark: <strong><%=crossing.getLandmark()%></strong>
>
Address: <strong><%=crossing.getAddress()%></strong>
<form action="addToFavorites" method="post" style="display:</pre>
inline:">
<input type="hidden" name="crossingId"</pre>
value="<%=crossing.getId()%>">
<button type="submit"
style="border-radius: 10px; font-weight: bold;
margin-top: 10px; margin-left: 0px;">ADD
TO FAVORITES</button>
</form>
</div>
<%
}
%>
</body>
</html>
Favorite Crossings.JSP
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<%@ page import="com.simpli.RailwayCrossing"%>
```

```
<%@ page import="com.simpli.RailwayCrossingDAO"%>
<%@ page import="java.util.List"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Railway Crossings - Favorite Crossings</title>
<style>
body {
font-family: Arial, sans-serif;
margin: 0;
padding: 20px;
.container {
border: 1px solid #ccc;
border-radius: 10px;
padding: 20px;
margin-bottom: 20px;
margin-top: 20px;
.container h3 {
margin-top: 0;
.container p {
margin: 0;
.status {
display: inline-block;
padding: 5px;
color: white;
font-weight: bold;
.status-open {
background-color: green;
.status-closed {
background-color: red;
</style>
</head>
<body>
<h2>User Home Page</h2>
<!-- Display All button -->
<button onclick="location.href='userHome.jsp"">All Crossings</button>
<!-- Favorite Crossings Container -->
<div class="favorites">
```

```
<%
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
List<RailwayCrossing> favoriteCrossings =
crossingDAO.getFavoriteCrossings();
for (RailwayCrossing crossing : favoriteCrossings) {
String status = crossing.getStatus();
String statusClass = status.equalsIgnoreCase("Open")?
"status-open": "status-closed";
%>
<div class="container">
<h3><%=crossing.getName()%></h3>
Status: <strong><span class="status"
<%=statusClass%>"><%=status%></span></strong>
>
Person in Charge:
<strong><%=crossing.getPersonInCharge()%></strong>
>
Train Schedules:
<strong><%=crossing.getTrainSchedule()%></strong>
>
Landmark:
<strong><%=crossing.getLandmark()%></strong>
>
Address:
<strong><%=crossing.getAddress()%></strong>
<form action="removeFromFavorites" method="post"</pre>
style="display: inline;">
<input type="hidden" name="crossingId"</pre>
value="<%=crossing.getId()%>">
<button type="submit"
style="border-radius: 10px; font-weight:
bold; margin-top: 10px;">REMOVE
FROM FAVORITES</button>
</form>
</div>
<%
}
%>
</div>
</body>
```

UserLogin.JSP

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>User Login</title>
<style>
body {
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
text-align: center;
background-color: #f2f2f2;
.panel {
width: 400px;
padding: 40px;
background-color: #ffffff;
border-radius: 5px;
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
.panel label {
display: block;
margin-bottom: 10px;
text-align: left;
.panel input[type="text"], .panel input[type="password"] {
width: 100%;
padding: 10px;
border: 1px solid #ccc;
border-radius: 4px;
.panel button[type="submit"] {
width: 100%;
padding: 10px;
background-color: #4CAF50;
color: white;
border: none;
border-radius: 4px;
cursor: pointer;
```

```
.panel button[type="submit"]:hover {
background-color: #45a049;
.panel .signup-link {
display: block;
margin-top: 20px;
</style>
</head>
<body>
<div class="panel">
<h2>Railway Crossing</h2>
<h4>User Login</h4>
<form action="login" method="post">
<label for="email">Email:</label> <input type="text"</pre>
id="email"
name="email" required><br> <label
for="password">Password:</label>
<input type="password" id="password" name="password"</pre>
required><br>
<button type="submit">Login</button>
</form>
<div class="signup-link">
>
Don't have an account? <a
href="userRegister.jsp">Create New
Account</a>
</div>
</div>
</body>
</html>
User Registration.JSP
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>User Registration</title>
<style>
body {
display: flex;
```

```
justify-content: center;
align-items: center;
height: 100vh;
text-align: center;
background-color: #f2f2f2;
.panel {
width: 500px;
padding: 40px;
background-color: #ffffff;
border-radius: 5px;
box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
.panel label {
display: block;
margin-bottom: 10px;
text-align: left;
.panel input[type="text"], .panel input[type="password"] {
width: 100%;
padding: 10px;
border: 1px solid #ccc;
border-radius: 4px;
.panel button[type="submit"] {
width: 100%;
padding: 10px;
background-color: #4CAF50;
color: white;
border: none;
border-radius: 4px;
cursor: pointer;
.panel button[type="submit"]:hover {
background-color: #45a049;
.panel .signup-link {
display: block;
margin-top: 20px;
}
</style>
</head>
<body>
<div class="panel">
<h2>Railway Crossing</h2>
<h4>User Register</h4>
```

```
<form action="register" method="post">
<label for="name">Name:</label> <input type="text"</pre>
id="name"
name="name" required><br> <label
for="email">Email:</label>
<input type="text" id="email" name="email" required><br>
<label for="password">Password:</label> <input
type="password"
id="password" name="password" required><br>
<button type="submit">Register</button>
</form>
<div class="signup-link">
Already have an account? <a
href="userLogin.jsp">Sign in</a>
</div>
</div>
</body>
</html>
```

Search Crossings.JSP

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
<%@ page import="com.simpli.RailwayCrossing"%>
<%@ page import="com.simpli.RailwayCrossingDAO"%>
<%@ page import="java.util.List"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Railway Crossings - Search Crossings</title>
<style>
body {
font-family: Arial, sans-serif;
margin: 0;
padding: 20px;
.container {
border: 1px solid #ccc;
border-radius: 10px;
padding: 20px;
margin-bottom: 20px;
margin-top: 20px;
```

```
.container h3 {
margin-top: 0;
.container p {
margin: 0;
.search-container {
margin-top: 60px;
margin-bottom: 20px;
.search-container input[type="text"] {
padding: 10px;
width: 200px;
.logout-button {
position: absolute;
padding: 10px;
top: 50px;
right: 30px;
border-radius: 10px;
font-weight: bold;
top: 50px;
.allCrossing-button {
position: absolute;
padding: 5px;
top: 75px;
left: 10px;
.favouriteCrossing-button {
position: absolute;
padding: 5px;
top: 75px;
left: 130px;
.status {
display: inline-block;
padding: 5px;
font-weight: bold;
.status-open {
color: white;
border-radius: 30%;
background-color: green;
.status-closed {
```

```
color: white;
background-color: red;
.crossing {
margin-bottom: 10px;
.crossing button {
margin-left: 10px;
</style>
<script>
function searchCrossings() {
var input = document.getElementById("searchInput");
var filter = input.value.toUpperCase();
var crossings = document.getElementsByClassName("crossing");
for (var i = 0; i < crossings.length; i++) {
var crossing = crossings[i];
var name =
crossing.getElementsByTagName("h3")[0].innerText;
if (name.toUpperCase().indexOf(filter) > -1) {
crossing.style.display = "";
} else {
crossing.style.display = "none";
}
</script>
</head>
<body>
<h2>Search Crossings</h2>
<!-- Display All button -->
<button onclick="location.href='userHome.jsp"
class="allCrossing-button"
style="border-radius: 10px; font-weight: bold;">All
Crossings</button>
<!-- Display Favorite Crossings button -->
<button onclick="location.href='userHomeFavoriteCrossing.jsp"</pre>
class="favouriteCrossing-button"
style="border-radius: 10px; font-weight: bold;">Favorite
Crossings</button>
<!-- Search input -->
<div class="search-container">
<input type="text" id="searchInput" placeholder="Search by
name"
onkeyup="searchCrossings()">
<!-- Logout button -->
```

```
<button onclick="location.href='userLogin.jsp" class="logoutbutton"</pre>
style="border-radius: 10px; font-weight:
bold;">Logout</button>
</div>
<!-- Search Results Container -->
<div class="search-results">
RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
List<RailwayCrossing> allCrossings =
crossingDAO.getAllCrossings();
for (RailwayCrossing crossing : allCrossings) {
String status = crossing.getStatus();
String statusClass = status.equalsIgnoreCase("Open")?
"status-open": "status-closed";
%>
<div class="container crossing">
<h3><%=crossing.getName()%></h3>
Status: <strong><span class="status"
<%=statusClass%>"><%=crossing.getStatus()%></span></strong>
>
Person in Charge:
<strong><%=crossing.getPersonInCharge()%></strong>
>
Train Schedules:
<strong><%=crossing.getTrainSchedule()%></strong>
>
Landmark:
<strong><%=crossing.getLandmark()%></strong>
>
Address:
<strong><%=crossing.getAddress()%></strong>
<form action="addToFavorites" method="post"</pre>
style="display: inline;">
<input type="hidden" name="crossingId"</pre>
value="<%=crossing.getId()%>">
<button type="submit"
style="border-radius: 10px; font-weight:
bold; margin-top: 10px; margin-left: 0px;">ADD
TO FAVORITES</button>
</form>
```

```
</div><%
}
%>
</div>
</div>
</body>
</html>
```