Railway Crossing Status- Source Code

Servlet Files:

```
1.AddCrossingServlet
package com.Project;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
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("trainSchedule");
    String personInCharge = request.getParameter("personInCharge");
    String status = request.getParameter("crossing status");
    // Create a new RailwayCrossing object with the form data
    RailwayCrossing crossing = new RailwayCrossing(name, address, landmark,
trainSchedules, personInCharge, status);
    // Save the new crossing to the database using RailwayCrossingDAO
    RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
    crossingDAO.addCrossing(crossing);
    // Redirect to the admin homepage after adding the crossing
    response.sendRedirect("adminHome.jsp");
  }
}
```

```
2.AddToFavoritesServlet
package com.Project;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class AddToFavoritesServlet extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    String crossingName = request.getParameter("crossingName"); // Assuming the parameter
name is "crossingName"
    if (crossingName != null && !crossingName.isEmpty()) {
       // Perform the database operation to add the crossing to favorites
       RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
       crossingDAO.addToFavorites(crossingName); // Implement this method in
RailwayCrossingDAO
    }
    // Redirect back to the userHome.jsp page
    response.sendRedirect("userHome.jsp");
  }
}
3.AdminHomePageServlet
package com.Project;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
```

```
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
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);
}
4.AdminLoginServlet
package com.Project;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
public class AdminLoginServlet extends HttpServlet {
private static final long serialVersionUID = 1L;
private static final String ADMIN ID = "Deepu";
private static final String ADMIN PASSWORD = "Deepu12*";
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);
}
5.DeleteCrossingServlet
package com.Project;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class DeleteCrossingServlet extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    try {
       // Retrieve the crossing name from the request
```

```
String crossingName = request.getParameter("name");
       if (crossingName != null && !crossingName.isEmpty()) {
         // Perform the delete operation
         RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
         crossingDAO.deleteCrossing(crossingName);
         // Redirect to the admin homepage after the deletion
         response.sendRedirect("adminHome.jsp");
       } else {
         // Handle case where crossingName is empty or null
         throw new ServletException("Crossing name is missing.");
       }
    } catch (Exception e) {
       // Handle exceptions
       throw new ServletException("An error occurred during the crossing deletion.", e);
    }
  }
}
6.LoginServlet
package com.Project;
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 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 {
  // JDBC URL, username, and password
  private static final String JDBC URL = "jdbc:mysql://localhost:3306/railway";
  private static final String JDBC USER = "root";
  private static final String JDBC PASSWORD = "Deepu12*";
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
    // Retrieve the form data
    String email = request.getParameter("email");
    String password = request.getParameter("password");
    // Establish database connection
    try (Connection connection = DriverManager.getConnection(JDBC URL, JDBC USER,
JDBC PASSWORD)) {
       // Prepare SQL statement to check user credentials
       String sql = "SELECT * FROM users WHERE email = ? AND password = ?";
       try (PreparedStatement statement = connection.prepareStatement(sql)) {
         statement.setString(1, email);
         statement.setString(2, password);
         // Execute query
         try (ResultSet resultSet = statement.executeQuery()) {
            if (resultSet.next()) {
              // Authentication successful
              // Create User object
              User user = new User(email, password);
```

```
HttpSession session = request.getSession();
               session.setAttribute("user", user);
              // Redirect to user home page
               response.sendRedirect("userHome.jsp");
              return; // End method execution after redirect
            }
          }
       }
    } catch (SQLException e) {
       e.printStackTrace();
    }
     // Authentication failed, redirect to error page
     response.sendRedirect("userRegister.jsp?error=1");
  }
}
7.RemoveFromFavoriteServlet
package com.Project;
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 = "removeFromFavoritesServlet", urlPatterns = { "/removeFromFavorites"})
public class RemoveFromFavoritesServlet extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
```

```
throws ServletException, IOException {
    String crossingName = request.getParameter("crossingName"); // Assuming the parameter
name is "crossingName"
    if (crossingName != null && !crossingName.isEmpty()) {
       // Perform the database operation to remove the crossing from favorites
       RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
       crossingDAO.removeFromFavorites(crossingName); // Implement this method in
RailwayCrossingDAO
    }
    // Redirect back to the userHome.jsp page
    response.sendRedirect("userHome.jsp");
  }
}
8.SearchFromCrossingServlet
package com.Project;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
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
     String searchName = request.getParameter("searchName");
     // Retrieve crossing details by ID from the database
     RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
     RailwayCrossing crossing = crossingDAO.getCrossingByName(searchName);
    // Set the search result in the request attribute
     request.setAttribute("crossing", crossing);
    // Redirect to the appropriate page based on user role
     String role = (String) request.getSession().getAttribute("role");
     if (role != null && role.equals("admin")) {
       request.getRequestDispatcher("adminHome.jsp").forward(request, response);
    } else {
       request.getRequestDispatcher("userHome.jsp").forward(request, response);
    }
  }
9.UpdateCrossingServlet
package com.Project;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class UpdateCrossingServlet extends HttpServlet {
  protected void doPost(HttpServletRequest request, HttpServletResponse response)
```

```
throws ServletException, IOException {
try {
  // Retrieve the crossing name from the request parameter
  String name = request.getParameter("name");
  // Retrieve the updated details for the crossing
  String crossingStatus = request.getParameter("crossingStatus");
  String personInCharge = request.getParameter("personInCharge");
  String trainSchedules = request.getParameter("trainSchedules");
  String landmark = request.getParameter("landmark");
  String address = request.getParameter("address");
  // Create a new RailwayCrossing object with the updated details
  RailwayCrossing updatedCrossing = new RailwayCrossing();
  updatedCrossing.setName(name);
  updatedCrossing.setCrossing Status(crossingStatus);
  updatedCrossing.setPersonInCharge(personInCharge);
  updatedCrossing.setTrainSchedule(trainSchedules);
  updatedCrossing.setLandmark(landmark);
  updatedCrossing.setAddress(address);
  // Perform the update operation
  RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();
  crossingDAO.updateCrossing(updatedCrossing);
  // Redirect to the admin homepage after the update
  response.sendRedirect("adminHome.jsp");
} catch (Exception e) {
  // Handle exceptions
  e.printStackTrace();
  throw new ServletException("An error occurred during the crossing update.", e);
```

```
}
  }
}
10. RegisterServlet
package com.Project;
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 java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
@WebServlet("/register")
public class RegisterServlet extends HttpServlet {
  private static final String JDBC URL = "jdbc:mysql://localhost:3306/railway";
  private static final String JDBC USER = "root";
  private static final String JDBC PASSWORD = "Deepu12*";
  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");
```

```
// Establish database connection
    try (Connection connection = DriverManager.getConnection(JDBC_URL, JDBC_USER,
JDBC PASSWORD)) {
       // Prepare SQL statement to insert user data into the 'users' table
       String sql = "INSERT INTO users (email, password) VALUES (?,?)";
       try (PreparedStatement statement = connection.prepareStatement(sql)) {
         statement.setString(1, email);
         statement.setString(2, password);
         // Execute the SQL statement to insert user data
         statement.executeUpdate();
       }
    } catch (SQLException e) {
       e.printStackTrace();
    }
    // Redirect to login page after successful registration
    response.sendRedirect("userLogin.jsp");
  }
}
Class Files:
   1. User
       package com.Project;
       public class User {
       private String email;
       private String password;
       public User() {
       super();
       }
```

```
public User( String email, String password) {
   this.email = email;
   this.password = password;
   }
   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;
   }
   }
2. UserDAO
   package com.Project;
   import java.sql.Connection;
   import java.sql.DriverManager;
   import java.sql.PreparedStatement;
   import java.sql.ResultSet;
   import java.sql.SQLException;
   public class UserDAO {
          private Connection connection;
      private static final String JDBC URL = "jdbc:mysql://localhost:3306/railway";
      private static final String JDBC_USER = "root";
```

```
private static final String JDBC_PASSWORD = "Deepu12*";
  private static final String AUTHENTICATE USER QUERY = "SELECT * FROM users
WHERE email = ? AND password = ?";
  private static final String REGISTER_USER_QUERY = "INSERT INTO users (name,
email, password) VALUES (?, ?, ?)";
  public User authenticateUser(String email, String password) {
    try (Connection connection = DriverManager.getConnection(JDBC URL,
JDBC USER, JDBC PASSWORD);
       PreparedStatement statement =
connection.prepareStatement(AUTHENTICATE USER QUERY)) {
       statement.setString(1, email);
       statement.setString(2, password);
       try (ResultSet resultSet = statement.executeQuery()) {
         if (resultSet.next())
           return new User( email, password);
    } catch (SQLException e) {
       e.printStackTrace();
    return null;
  }
  public void registerUser(User user) {
    try (Connection connection = DriverManager.getConnection(JDBC URL,
JDBC_USER, JDBC_PASSWORD);
       PreparedStatement statement =
connection.prepareStatement(REGISTER USER QUERY)) {
       statement.setString(1, user.getEmail());
       statement.setString(2, user.getPassword());
       statement.executeUpdate();
    } catch (SQLException e) {
       e.printStackTrace();
    }
  }
  public User getUserByEmail(String email) {
      try {
      String guery = "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.setEmail(resultSet.getString("email"));
          user.setPassword(resultSet.getString("password"));
          return user;
          } catch (SQLException e) {
          e.printStackTrace();
          return null;
          }}
3. RailwayCrossing
   package com.Project;
   public class RailwayCrossing {
          private String name;
          private String address;
          private String landmark;
          private String trainSchedule;
          private String personInCharge;
          private String crossing status;
          public RailwayCrossing() {
          super();
          // TODO Auto-generated constructor stub
          public RailwayCrossing(
                          String name, String address, String
          landmark, String trainSchedule,
          String personInCharge, String status) {
          super();
          this.name = name;
          this.address = address;
          this.landmark = landmark;
          this.trainSchedule = trainSchedule;
          this.personInCharge = personInCharge;
          this.crossing status = status;
          }
          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 getCrossing_Status() {
          return crossing status;
          }
          public void setCrossing_Status(String crossing_status) {
          this.crossing status = crossing status;
          }
4. RailwayCrossingDAO
   package com.Project;
   import java.sql.Connection;
   import java.sql.PreparedStatement;
   import java.sql.ResultSet;
   import java.sql.SQLException;
   import java.util.ArrayList;
   import java.util.List;
```

```
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 crossings";
       PreparedStatement statement = connection.prepareStatement(query);
       ResultSet resultSet = statement.executeQuery();
       while (resultSet.next()) {
         RailwayCrossing crossing = new RailwayCrossing();
         crossing.setName(resultSet.getString("name"));
         crossing.setCrossing Status(resultSet.getString("crossing status"));
         crossing.setPersonInCharge(resultSet.getString("person in charge"));
         crossing.setTrainSchedule(resultSet.getString("train schedule"));
         crossing.setLandmark(resultSet.getString("landmark"));
         crossing.setAddress(resultSet.getString("address"));
         crossings.add(crossing);
    } catch (SQLException e) {
       e.printStackTrace();
    }
    return crossings;
  }
  // Add a railway crossing to the database
  public void addCrossing(RailwayCrossing crossing) {
    try {
       String query = "INSERT INTO railway crossings (name, crossing status,
person in charge, train schedules, landmark, address) VALUES (?, ?, ?, ?, ?, ?)";
       PreparedStatement statement = connection.prepareStatement(query);
       statement.setString(1, crossing.getName());
       statement.setString(2, crossing.getCrossing_Status());
       statement.setString(3, crossing.getPersonInCharge());
       statement.setString(4, crossing.getTrainSchedule());
       statement.setString(5, crossing.getLandmark());
       statement.setString(6, crossing.getAddress());
```

```
statement.executeUpdate();
    } catch (SQLException e) {
       e.printStackTrace();
    }
  }
  public void updateCrossing(RailwayCrossing crossing) {
       String query = "UPDATE railway crossings SET crossing status=?,
person in charge=?, train schedules=?, landmark=?, address=? WHERE name=?";
       PreparedStatement statement = connection.prepareStatement(query);
       statement.setString(1, crossing.getName());
       statement.setString(2, crossing.getCrossing Status());
       statement.setString(3, crossing.getPersonInCharge());
       statement.setString(4, crossing.getTrainSchedule());
       statement.setString(5, crossing.getLandmark());
       statement.setString(6, crossing.getAddress());
       statement.executeUpdate();
    } catch (SQLException e) {
       e.printStackTrace();
    }
  }
  // Delete a railway crossing from the database
  public void deleteCrossing(String crossingName) {
    try {
       String query = "DELETE FROM railway crossings WHERE name = ?";
       PreparedStatement statement = connection.prepareStatement(query);
       statement.setString(1, crossingName);
       statement.executeUpdate();
    } catch (SQLException e) {
       e.printStackTrace();
    }
  }
  // Get favorite railway crossings from the database
  public List<RailwayCrossing> getFavoriteCrossings() {
    List<RailwayCrossing> favoriteCrossings = new ArrayList<>();
    try {
       String query = "SELECT * FROM railway crossings rc JOIN favorite crossings fc
ON rc.name = fc.railway crossing name";
       PreparedStatement statement = connection.prepareStatement(query);
       ResultSet resultSet = statement.executeQuery();
       while (resultSet.next()) {
         RailwayCrossing crossing = new RailwayCrossing();
```

```
crossing.setName(resultSet.getString("name"));
         crossing.setCrossing Status(resultSet.getString("crossing status"));
         crossing.setPersonInCharge(resultSet.getString("person in charge"));
         crossing.setTrainSchedule(resultSet.getString("train schedules"));
         crossing.setLandmark(resultSet.getString("landmark"));
         crossing.setAddress(resultSet.getString("address"));
         favoriteCrossings.add(crossing);
    } catch (SQLException e) {
       e.printStackTrace();
    return favoriteCrossings;
  }
  // Add a railway crossing to favorites
  public void addToFavorites(String crossingName) {
    try {
       String query = "INSERT INTO favorite crossings (railway crossing name)
VALUES (?)";
       PreparedStatement statement = connection.prepareStatement(query);
       statement.setString(1, crossingName);
       statement.executeUpdate();
    } catch (SQLException e) {
       e.printStackTrace();
    }
  }
  // Remove a railway crossing from favorites
  public void removeFromFavorites(String crossingName) {
    try {
       String query = "DELETE FROM favorite crossings WHERE
railway crossing name = ?";
       PreparedStatement statement = connection.prepareStatement(query);
       statement.setString(1, crossingName);
       statement.executeUpdate();
    } catch (SQLException e) {
       e.printStackTrace();
    }
  public RailwayCrossing getCrossingByName(String crossingName) {
    RailwayCrossing crossing = null;
    try {
       String query = "SELECT * FROM railway crossings WHERE name = ?";
       PreparedStatement statement = connection.prepareStatement(query);
       statement.setString(1, crossingName);
```

```
ResultSet resultSet = statement.executeQuery();
              if (resultSet.next()) {
                crossing = new RailwayCrossing();
                 crossing.setName(resultSet.getString("name"));
                 crossing.setCrossing Status(resultSet.getString("crossing status"));
                 crossing.setPersonInCharge(resultSet.getString("person in charge"));
                 crossing.setTrainSchedule(resultSet.getString("train schedule"));
                crossing.setLandmark(resultSet.getString("landmark"));
                 crossing.setAddress(resultSet.getString("address"));
              }
           } catch (SQLException e) {
              e.printStackTrace();
            return crossing;
Database Connection File
package com.Project;
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";
       private static final String USERNAME = "root";
       private static final String PASSWORD = "Deepu12*";
       public static Connection getConnection() {
       Connection connection = null;
       try {
       Class.forName("com.mysql.cj.jdbc.Driver");
       connection = DriverManager.getConnection(URL, USERNAME, PASSWORD);
       } catch (ClassNotFoundException | SQLException e) {
       e.printStackTrace();
       return connection;
       }
}
JSP Files
   1. addRailwayCrossing
<\@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
```

```
<head>
<meta charset="ISO-8859-1">
<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;
}
</style>
</head>
```

```
<body>
<div class="panel">
<h2>Railway Crossings</h2>
<h4>Add Railway Crossing Information</h4>
<form action="AddCrossingServlet" 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"
required><br>
<label for="landmark">Landmark</label> <input type="text"</pre>
id="landmark" name="landmark" required><br> <label
for="trainSchedule">Train Schedules</label> <input
tvpe="text"
id="trainSchedule" name="trainSchedule"
required><br>
<a href="label"><label</a> <a href="ref">Person in Charge</a>/label>
<input
type="text" id="personInCharge"
name="personInCharge" required><br>
<label for="crossing status">Crossing Status/label> <select</pre>
id="crossing status"
name="crossing status">
<option value="Open">Open</option>
<option value="Closed">Closed</option>
</select><br>
<button type="submit">Submit
</form>
</div>
</body>
</html>
   2. adminHome

    page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-

8"%>
<@ page import="com.Project.RailwayCrossing"%>

    page import="com.Project.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 name from the search request parameter
String searchName = request.getParameter("searchName");
// Check if the searchName parameter is provided
if (searchName != null && !searchName.isEmpty()) {
  // Retrieve the crossing by name from the DAO
  RailwayCrossing searchedCrossing = crossingDAO.getCrossingByName(searchName);
  // 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>
  <h3>Railway Crossing[<%=crossings.size()%>]</h3>
  <!-- Buttons -->
  <!-- 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 crossing = (RailwayCrossing) request.getAttribute("crossing");
 %>
   1
     <%=crossing.getName()%>
     <%=crossing.getAddress()%>
     <%=crossing.getLandmark()%>
     <%=crossing.getTrainSchedule()%>
     <%=crossing.getPersonInCharge()%>
     <%=crossing.getCrossing_Status()%>
     <%
 } else { // Display all crossings
   int count = 1;
   for (RailwayCrossing anotherCrossing: crossings) {
 %>
     <%=anotherCrossing.getName()%>
       <%=anotherCrossing.getAddress()%>
       <%=anotherCrossing.getLandmark()%>
       <%=anotherCrossing.getTrainSchedule()%>
```

```
<%=anotherCrossing.getPersonInCharge()%>
             <%=anotherCrossing.getCrossing Status()%>
             <!-- Action buttons for update and delete -->
             <%
          count++;
        }
      }
      %>
    </body>
</html>
   3. adminLogin
<%@ 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="AdminLoginServlet" 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
</form>
</div>
</body>
</html>
4.HomePage

    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/? indian railway,railway crossing");
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">
ul class="navbar-nav custom-ml-auto">
<!-- 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>
<a class="nav-link"</pre>
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/68Sly3Te4Bkz"
crossorigin="anonymous"></script>
```

```
</body>
</html>
5. searchCrossing
<\@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>

    4 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="searchName">Search Name:</label> <input type="text"</pre>
id="searchName" name="searchName" required> <input
type="submit"
value="Search">
</form>
<c:if test="${not empty crossing}">
<h2>Search Result</h2>
Name
Crossing Status
Person in charge
Train Schedules
Landmark
Address
```

```
${crossing.name}
${crossing_status}
${crossing.personInCharge}
${crossing.trainSchedules}
${crossing.landmark}
${crossing.address}
</c:if>
<a href="adminHome.jsp">Back to Admin Homepage</a>
</body>
</html>
6. updateRailwayCrossingForm
<%@ 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">
            <input type="hidden" name="name" value="${crossing.name}">
            <label for="address">Address</label>
            <input type="text" id="address" name="address" value="${crossing.address}"
required><br>
            <label for="landmark">Landmark</label>
            <input type="text" id="landmark" name="landmark" value="${crossing.landmark}"
required><br>
            <a href="label"><label</a> <a href="red">Interview = 100 | Train Schedules</a> <a href="label">Interview = 100 | Train Schedules</a> <a href="label">Intervi
            <input type="text" id="trainSchedules" name="trainSchedules"</pre>
value="${crossing.trainSchedule}" required><br>
            <a href="label"><label</a> <a href="ref">Person in Charge</a>/label>
            <input type="text" id="personInCharge" name="personInCharge"</pre>
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
     </form>
</div>
</body>
</html>
7.userHome

    page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-

    page import="com.Project.RailwayCrossing"%>

<@ page import="com.Project.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"</pre>
style="border-radius: 10px; font-weight: bold;">Home</button>
<!-- Display All button -->
<button onclick="location.href='userHome.jsp"</pre>
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="AddToFavoritesServlet" method="post" style="display:</pre>
inline;">
<input type="hidden" name="crossingId"
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>
8.userHomeFavoritePage
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-
8"%>
<@ page import="com.Project.RailwayCrossing"%>
<@ page import="com.Project.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"
value="<%=crossing.getId()%>">
<button type="submit"
style="border-radius: 10px; font-weight:
bold; margin-top: 10px;">REMOVE
FROM FAVORITES</button>
</form>
</div>
<%
}
%>
</div>
</body>
</html>
9.userlogin
<@ 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" id="email"</pre>
name="email" required><br> <label
for="password">Password:</label>
<input type="password" id="password" name="password"
required><br>
<button type="submit">Login
</form>
<div class="signup-link">
>
Don't have an account? <a
href="userRegister.jsp">Create New
Account</a>
```

```
</div>
</div>
</body>
</html>
10.userRegister
<@ 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"
id="name"
name="name" required><br> <label
for="email">Email:</label>
<input type="text" id="email" name="email" required><br>
<label for="password">Password:<input</pre>
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>
11.userSearchCrossing
<\@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<@ page import="com.Project.RailwayCrossing"%>
<@ page import="com.Project.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'"</pre>
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"
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></body></html>
```