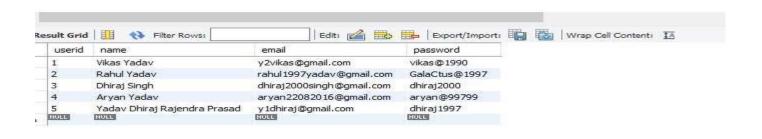
## **Phase 2 Assessment Project**

# RAILWAY CROSSING STATUS

```
Creating Database and table for Project
create database railway_crossing_status;
use railway_crossing_status;
CREATE TABLE railway_crossing (
  railway_crossing_id INT PRIMARY KEY auto_increment,
  name varchar(255),
  address varchar(255),
  landmark varchar(100),
  train_schedule varchar(50),
  person_in_charge varchar(50),
  status varchar(10)
);
 Edit: 🕍 👺 👺 Export/Import: 🌇 🐚 Wrap Cell Content: 🔼
    railway_crossing_id
                                                                                            train schedule
                                                                                                                 person_in_charge
                                                                                                                                status
                    Allahabad Junction Crossing
                                         Station Road, Prayagraj
                                                                  Allahabad Junction Railway Station
                                                                                           Daily 6:00 AM and 9:00 PM
                                                                                                                Rajesh Verma
                                                                                                                                Open
                                                                 Triveni Sangam
    10
                   Sangam Marg Crossing
                                         Sangam Marg, Prayagraj
                                                                                           Weekends 8:00 AM
                                                                                                                 Priya Singh
                                                                                                                               Closed
    12
                   Yamuna Bridge Crossing
                                         Yamuna Bridge Road, Prayagraj
                                                                 Yamuna Bridge
                                                                                            Mondays 3:30 PM
                                                                                                                 Amit Patel
                                                                                                                                Open
                   Civil Lines Crossing
                                         Civil Lines, Prayagraj
                                                                 Civil Lines Market
                                                                                            Daily 7:30 AM and 5:30 PM
                                                                                                                Neha Gupta
                                                                                                                               Closed
                                                                 Kanakia Zillion Business Point
    17
                   Kurla Crossing
                                         LBS Road
                                                                                            Daily 5:15 PM
                                                                                                                 Adil Khan
                                                                                                                               Closed
                                                                                                                               12000
vay_crossing 1 ×
CREATE TABLE user_signup(
  userid INT PRIMARY KEY auto_increment,
  name varchar(255),
  email varchar(50),
  password varchar(50)
);
           SELECT * FROM railway_crossing_status.user_signup;
```



```
CREATE TABLE user_signup(
  id INT PRIMARY KEY auto_increment,
  railway_crossing_id INT
  userid INT,
  FOREIGN KEY (railway_crossing_id) REFERENCES railway_crossing(railway_crossing_id)
);
```

## pom.xml (Maven):

```
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.railwaycrossing.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>
           <maven.compiler.target>1.8</maven.compiler.target>
     </properties>
     <dependencies>
                 <groupId>javax.servlet
                 <artifactId>jstl</artifactId>
                 <groupId>mysql</groupId>
                 <artifactId>mysql-connector-java</artifactId>
                 <version>8.0.33
            </dependency>
                 <groupId>javax.servlet
                 <artifactId>javax.servlet-api</artifactId>
                 <version>4.0.0
                 <scope>provided</scope>
           </dependency>
     </dependencies>
     <build>
                       <artifactId>maven-compiler-plugin</artifactId>
```

## AddCrossingServlet.java

```
package com.railwaycrossing;
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 {
       private static final long serialVersionUID = 1L;
       protected void doPost(HttpServletRequest request, HttpServletResponse response)
               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");
               RailwayCrossing crossing = new RailwayCrossing();
               crossing.setName(name);
               crossing.setAddress(address);
               crossing.setLandmark(landmark);
               crossing.setTrainSchedule(trainSchedules);
               crossing.setPersonInCharge(personInCharge);
               crossing.setStatus(status);
               RailwayCrossingDatabaseOp crossingDAO = new RailwayCrossingDatabaseOp();
               crossingDAO.addCrossing(crossing);
               response.sendRedirect("adminHome.jsp");
       }
```

```
package com.railwaycrossing;
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 {
      private static final long serialVersionUID = 1L;
      protected void doPost(HttpServletRequest request, HttpServletResponse response)
             String crossingId = request.getParameter("crossingId");
             if (crossingId != null && !crossingId.isEmpty()) {
                   int railwayCrossingId = Integer.parseInt(crossingId);
                   RailwayCrossingDatabaseOp crossingDAO = new RailwayCrossingDatabaseOp();
                   crossingDAO.addToFavorites(railwayCrossingId);
             response.sendRedirect("userHome.jsp");
      }
```

#### AdminHomePageServlet.java

```
package com.railwaycrossing;
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 static final long serialVersionUID = 1L;
      private RailwayCrossingDatabaseOp crossingDAO;
      public void init() {
             crossingDAO = new RailwayCrossingDatabaseOp();
      }
      protected void doGet(HttpServletRequest request, HttpServletResponse response)
                    throws ServletException, IOException {
             List<RailwayCrossing> crossings = crossingDAO.getAllCrossings();
             request.setAttribute("crossings", crossings);
             request.getRequestDispatcher("adminHome.jsp").forward(request, response);
      }
```

## AdminLoginServlet.java

```
package com.railwaycrossing;
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;
```

#### DatabaseConnection.java

```
package com.railwaycrossing;
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 = "Dhiraj@1997";
      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.java

#### LoginServlet.java

```
package com.railwaycrossing;
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 {
      private static final long serialVersionUID = 1L;
      protected void doPost(HttpServletRequest request, HttpServletResponse response)
             String email = request.getParameter("email");
             String password = request.getParameter("password");
             UserDatabaseOp userDatabaseOp = new UserDatabaseOp();
             User user = userDatabaseOp.getUserByEmail(email);
             if (user != null && user.getPassword().equals(password)) {
                   HttpSession session = request.getSession();
                    session.setAttribute("user", user);
                   response.sendRedirect("userHome.jsp");
             } else {
                    response.sendRedirect("userRegister.jsp?error=1");
             }
      }
```

## RegisterServlet.java

```
package com.railwaycrossing;
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;
```

#### RemoveFromFavouritesServlet.java

```
package com.railwaycrossing;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
oublic class RemoveFromFavoritesServlet extends HttpServlet {
      private static final long serialVersionUID = 1L;
      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);
                   RailwayCrossingDatabaseOp crossingDAO = new RailwayCrossingDatabaseOp();
                   crossingDAO.removeFromFavorites(railwayCrossingId);
             }
             response.sendRedirect("userHome.jsp");
      }
```

### SearchCrossingServlet.java

```
package com.railwaycrossing;
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;
```

#### **UpdateCrossingServlet.java**

```
package com.railwaycrossing;
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 {
      private static final long serialVersionUID = 1L;
      protected void doPost(HttpServletRequest request, HttpServletResponse response)
             try {
                    String idParam = request.getParameter("crossingId");
                    if (idParam != null && !idParam.isEmpty()) {
                           int crossingId = Integer.parseInt(idParam);
                           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");
                           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);
                           RailwayCrossingDatabaseOp crossingDAO = new
RailwayCrossingDatabaseOp();
                           crossingDAO.updateCrossing(updatedCrossing);
```

## RailwayCrossing.java

```
package com.railwaycrossing;
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
}
```

## RailwayCrossingDatabaseOp.java

```
package com.railwaycrossing;
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 RailwayCrossingDatabaseOp {
    private Connection connection;

    public RailwayCrossingDatabaseOp() {
```

```
connection = DatabaseConnection.getConnection();
      public List<RailwayCrossing> getAllCrossings() {
             List<RailwayCrossing> crossings = new ArrayList<>();
                    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("railway_crossing_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_charge"));
crossing.setStatus(resultSet.getString("status"));
                           crossings.add(crossing);
             } catch (SQLException e) {
                    e.printStackTrace();
             return crossings;
      }
      public RailwayCrossing getCrossingById(int crossingId) {
             RailwayCrossing crossing = null;
             try {
                    String query = "SELECT * FROM railway crossing WHERE railway crossing id =
                    PreparedStatement statement = connection.prepareStatement(query);
                    statement.setInt(1, crossingId);
                    ResultSet resultSet = statement.executeQuery();
                    if (resultSet.next()) {
                           crossing = new RailwayCrossing();
                           crossing.setId(resultSet.getInt("railway_crossing_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_charge"));
                           crossing.setStatus(resultSet.getString("status"));
             } catch (SQLException e) {
                    e.printStackTrace();
             return crossing;
      }
      public void updateCrossing(RailwayCrossing crossing) {
                    String query = "UPDATE railway_crossing SET name=?, address=?, landmark=?,
train_schedule=?, person_in_charge=?, status=? WHERE railway_crossing_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();
      }
      public void deleteCrossing(int crossingId) {
             try {
                   connection.setAutoCommit(false);
                   String deleteFavoriteCrossingsQuery = "DELETE FROM favorite_crossing WHERE
railway crossing id = ?";
                   try (PreparedStatement deleteFavoriteCrossingsStatement = connection
                                 .prepareStatement(deleteFavoriteCrossingsQuery)) {
                          deleteFavoriteCrossingsStatement.setInt(1, crossingId);
                          deleteFavoriteCrossingsStatement.executeUpdate();
                   String deleteRailwayCrossingQuery = "DELETE FROM railway_crossing WHERE
railway crossing id = ?";
                   try (PreparedStatement deleteRailwayCrossingStatement = connection
                                 .prepareStatement(deleteRailwayCrossingQuery)) {
                          deleteRailwayCrossingStatement.setInt(1, crossingId);
                          deleteRailwayCrossingStatement.executeUpdate();
                   }
                   connection.commit();
                   connection.setAutoCommit(true);
             } catch (SQLException e) {
                   try {
                          connection.rollback();
                    } catch (SQLException rollbackException) {
                          rollbackException.printStackTrace();
                   e.printStackTrace();
      public void addCrossing(RailwayCrossing crossing) {
             try {
                   String query = "INSERT INTO railway_crossing (name, address, landmark,
                   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.railway crossing 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("railway_crossing_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_charge"));
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();
       }
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();
}
```

## <u>User.java</u>

```
package com.railwaycrossing;

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;
}
```

## UserDatabaseOp.java

```
package com.railwaycrossing;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
      private Connection connection;
      public UserDatabaseOp() {
             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) {
                   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();
```

```
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;
}
```

## addRailCrossingForm.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
      pageEncoding="UTF-8"%>
<!DOCTYPE html>
<meta charset="UTF-8">
<title>Add Railway Crossing</title>
body {
      align-items: center;
      height: 100vh;
      text-align: center;
      background-color: #f2f2f2;
      width: 500px;
      padding: 40px;
      background-color: #ffffff;
      box-shadow: 0 2px 5px rgba(1 , 1, 1, 1);
.panel label {
      text-align: left;
.panel input[type="text"], .panel select {
.panel button[type="submit"] {
      width: 50%;
      padding: 10px;
```

```
background-color: gray;
      color: white;
      border: none;
      cursor: pointer;
.panel button[type="submit"]:hover {
      background-color: #000000;
</style>
      <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" id="name"</pre>
                           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</pre>
                           for="trainSchedules">Train Schedules</label> <input type="text"</pre>
                           id="trainSchedules" name="trainSchedules" required><br>
                    <label for="personInCharge">Person in Charge</label> <input</pre>
                           type="text" id="personInCharge" name="personInCharge" required><br>
                    <label for="status">Crossing Status</label> <select id="status"</pre>
                           name="status">
                           <option value="Open">Open</option>
                           <option value="Closed">Closed</option>
                    <button type="submit">Submit</button>
/html>
```

## adminHome.jsp

```
<meta charset="UTF-8">
<title>Admin Home Page</title>
.button-container {
      margin-left: 1px;
.button-container form {
      margin-right: 100px;
button-container input[type="text"] {
      margin-right: 5px;
.button-container button[type="submit"] {
      padding: 10px 20px;
      border: none;
      background-color: #B6B6B6;
      font-weight: bold;
      cursor: pointer;
.button-container button[type="submit"]:hover {
      background-color: #45a049;
.update-button, .delete-button {
      display: inline-block;
      width: 80px;
      height: 30px;
table {
      border-collapse: collapse;
th, td {
      text-align: left;
      border-bottom: 1px solid #ddd;
th {
      background-color: #f2f2f2;
.inline {
    }
```

```
</style>
      <h1 style="font-family: Times New Roman;" align=center>Admin Home Page</h1>
            Number of Railway Crossing : <%=crossings.size()%>
      <button onclick="location.href='HomePage.jsp'" style="border-radius: 5px; font-weight:</pre>
bold; padding: 5px 10px;">
     Home</button>
      <button onclick="location.href='adminHome.jsp'"</pre>
            style="border-radius: 5px; margin-left: 50px; font-weight: bold; padding: 5px
10px;">
            Display All Railway Crossings
      <button onclick="location.href='addRailCrossingForm.jsp'" style="border-radius: 5px;</pre>
      margin-left: 50px; font-weight: bold; padding: 5px 10px;">Add Railway Crossing</button>
      <button onclick="location.href='adminLogin.jsp'"</pre>
            style="border-radius: 5px; margin-left: 700px; font-weight: bold; padding: 5px
10px;">Logout</button><br><br><br><br>
      <form action="searchCrossing" method="post">
                  <button type="submit" style="border-radius: 5px; font-weight: bold;</pre>
                  Search Crossing
                  <input type="text" name="searchId" placeholder="Enter ID" style="padding:</pre>
5px 10px" required>
      </form><br>
                        Sr.No
                        Name
                        Address
                        Landmark
                        Train Schedule
                        Person In-Charge
                        Status
                        Action
                  </thead>
            <%
                  if (request.getAttribute("crossing") != null) {
                        RailwayCrossing crossing = (RailwayCrossing)
request.getAttribute("crossing");
                  %>
                        <%=crossing.getId()%>
                        <%=crossing.getName()%>
                        <%=crossing.getAddress()%>
                        <%=crossing.getLandmark()%>
                        <%=crossing.getTrainSchedule()%>
                        <%=crossing.getPersonInCharge()%>
                        <%=crossing.getStatus()%>
                        <%
```

```
for (RailwayCrossing anotherCrossing : crossings) {
                 %>
                 <%=anotherCrossing.getId()%>
                        <%=anotherCrossing.getName()%>
                        <%=anotherCrossing.getAddress()%>
                        <%=anotherCrossing.getLandmark()%>
                        <%=anotherCrossing.getTrainSchedule()%>
                       <%=anotherCrossing.getPersonInCharge()%>
                        <%=anotherCrossing.getStatus()%>
                              <form action="updateRailCrossingForm.jsp" method="post">
                                    <input type="hidden" name="id"</pre>
                                         value="<%=anotherCrossing.getId()%>">
                                    <button type="submit" class="update-
button">Update</button>
                              </form>
                              <form action="deleteCrossing" method="post">
                                    <input type="hidden" name="id"</pre>
                                         value="<%=anotherCrossing.getId()%>">
                                    <button type="submit" class="delete-
button">Delete
                  <%
                 %>
```

### adminLogin.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
      pageEncoding="UTF-8"%>
<!DOCTYPE html>
<meta charset="UTF-8">
<title>Admin Login</title>
body {
      justify-content: center;
      align-items: center;
      text-align: center;
      background-color: #f2f2f2;
      background-image:url("https://source.unsplash.com/1000x1000/?nature,mountain");
      background-size: cover;
      align-items: center;
panel {
      width: 500px;
      opacity:0.8;
      background-color: #ffffff;
      border-radius: 10px;
      box-shadow: 0 2px 5px rgba(1, 1, 1, 1);
```

```
panel label {
      margin-bottom: 10px;
      text-align: left;
.panel input[type="text"], .panel input[type="password"] {
      border: 1px solid #ccc;
}
panel button[type="submit"] {
      width: 100%;
      background-color: gray;
      border: none;
      cursor: pointer;
panel button[type="submit"]:hover {
      background-color: #000000;
.panel .signup-link {
      display: block;
      margin-top: 20px;
      <div class="panel">
             <h2 >Railway Crossing</h2>
             <h4>Admin Login</h4>
             <form action="adminLogin" 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><br></pr>
                    <button type="submit">Login
             </form><br>
             <form action="HomePage.jsp" method="post">
                    <button type="submit">Home Page</button>
             </form>
</body>
```

#### HomePage.jsp

```
background-repeat: no-repeat;
      background-size: cover;
      justify-content: center;
      text-align: center;
      width: 500px;
      background-color: white;
      box-shadow: 0 2px 5px rgba(100, 10, 10, 1000);
.panel button[type="submit"] {
      width: 60%;
      background-color: black;
      color: white;
      border: none;
      cursor: pointer;
.panel button[type="submit"]:hover {
      background-color: #000000;
      opacity: 0.9;
</style>
             <div class="panel">
             <h2>Railway Crossings Status</h2>
             <h4>Developed by Yadav Dhiraj Rajendra Prasad</h4><br>
             <form action="adminLogin.jsp" method="post">
                   <button type="submit">Government-Admin
             </form><br>
             <form action="userLogin.jsp" method="post">
                   <button type="submit">User</button>
             </form>
</body>
```

#### searchCrossing.jsp

```
<h1>Search Crossing</h1>
     <form action="searchCrossing" method="post">
          <label for="searchId">Search ID:</label> <input type="number"</pre>
                id="searchId" name="searchId" required> <input type="submit"</pre>
                value="Search">
     </form>
     <c:if test="${not empty crossing}">
          <h2>Search Result</h2>
                     ID
                     Name
                     Address
                     Landmark
                     Train Schedule
                     Person in Charge
                     Status
                ${crossing.id}
                     ${crossing.name}
                     ${crossing.address}
                     ${crossing.landmark}
                     ${crossing.trainSchedule}
                     ${crossing.personInCharge}
                     ${crossing.status}
     <a href="adminHome.jsp">Back to Admin Homepage</a>
</body>
/html>
```

#### updateRailCrossingForm.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
      pageEncoding="UTF-8"%>
<!DOCTYPE html>
<meta charset="UTF-8">
<title>Update Railway Crossing</title>
body {
      justify-content: center;
      align-items: center;
      background-color: #f2f2f2;
      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 {
.panel button[type="submit"] {
      background-color: #4CAF50;
      color: white;
      border: none;
      cursor: pointer;
.panel button[type="submit"]:hover {
      background-color: #45a049;
      <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 type="text"</pre>
                           id="crossingId" name="crossingId" value="${crossing.crossingId}"
                           required><br> <label for="name">Enter Name</label> <input</pre>
                           type="text" id="name" name="name" value="${crossing.name}"
required><br>
                    <label for="address">Address</label> <input type="text" id="address"</pre>
                           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</pre>
                           type="text" id="trainSchedules" name="trainSchedules"
                           value="${crossing.trainSchedule}" required><br> <label</pre>
                           for="personInCharge">Person in Charge</label> <input type="text"</pre>
                           id="personInCharge" name="personInCharge"
                           value="${crossing.personInCharge}" required><br> <label</pre>
                           for="status">Crossing Status</label> <select id="status"</pre>
                           name="status">
                           <option value="Open" ${crossing.status == 'Open' ? 'selected' :</pre>
''}>Open</option>
                           <option value="Closed"</pre>
                                  ${crossing.status == 'Closed' ? 'selected' :
''}>Closed</option>
                    </select><br>
                    <button type="submit">Submit</button>
</body>
:/html>
```

## userHome.jsp

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

```
<%@ page import="com.railwaycrossing.RailwayCrossing"%>
<%@ page import="com.railwaycrossing.RailwayCrossingDatabaseOp"%>
<%@ page import="java.util.List"%>
<!DOCTYPE html>
<meta charset="UTF-8">
<title>Railway Crossings - User Home Page</title>
body {
      font-family: Arial, sans-serif;
      margin: 0;
}
container {
      padding: 20px;
      margin-bottom: 20px;
      margin-top: 20px;
      box-shadow: 0 2px 5px rgba(0, 1, 1, 1);
.container h3 {
      margin-top: 0;
.container p {
      margin: 0;
.crossing {
      margin-bottom: 10px;
.crossing button {
      display: inline-block;
      font-weight: bold;
.status-open {
.status-closed {
      color: white;
      background-color: red;
      <h1 style="font-weight: bold; font-family: Times New Roman;" align=center>User Home
Page</h1>
```

```
<button onclick="location.href='HomePage.jsp'" style="border-radius: 5px; font-weight:</pre>
bold; padding: 5px 10px;">Home</button>
      <button onclick="location.href='userHome.jsp'" style="border-radius: 5px; margin-left:</pre>
50px; font-weight: bold; padding: 5px 10px;">All
             Crossings</button>
      <button onclick="location.href='userHomeFavoriteCrossing.jsp'"</pre>
             style="border-radius: 5px; margin-left: 50px; font-weight: bold; padding: 5px
10px;">Favorite
             Crossings</button>
      <button onclick="location.href='userSearchCrossing.jsp'"</pre>
             style="border-radius: 5px; margin-left: 50px; font-weight: bold; padding: 5px
10px;">SearchCrossings</button>
      <button onclick="location.href='userLogin.jsp'"</pre>
             style="border-radius: 5px; margin-left: 600px; font-weight: bold; padding: 5px
10px; ">Logout</button>
      RailwayCrossingDatabaseOp crossingDAO = new RailwayCrossingDatabaseOp();
             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">
             <h3 style="font-family: Times New Roman;"><%=crossing.getName()%></h3>
                    Status: <strong><span class="status"</pre>
<%=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: inline;">
                    <input type="hidden" name="crossingId" value="<%=crossing.getId()%>">
                    <button type="submit"
                          style="border-radius: 5px; font-weight: bold; margin-top: 10px;
margin-left: 0px; padding: 3px 7px;">ADD
                          TO FAVORITES</button>
      </div>
      <%
      %>
</body>
 /html>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
      pageEncoding="UTF-8"%>
<%@ page import="com.railwaycrossing.RailwayCrossing"%>
<%@ page import="com.railwaycrossing.RailwayCrossingDatabaseOp"%>
<%@ page import="java.util.List"%>
<!DOCTYPE html>
<meta charset="UTF-8">
<title>Railway Crossings - Favorite Crossings</title>
body {
      font-family: Arial, sans-serif;
      margin: 0;
.container {
      margin-bottom: 20px;
      box-shadow: 0 2px 5px rgba(0, 1, 1, 1);
.container h3 {
      margin-top: 0;
.container p {
      margin: 0;
.status {
      color: white;
      font-weight: bold;
.status-open {
      color: white;
      background-color: green;
.status-closed {
      color: white;
      background-color: red;
      <h1 style="font-family: Times New Roman;" align=center>User Home Page</h1>
      <button onclick="location.href='userHome.jsp'" style="border-radius: 5px; font-weight:</pre>
bold;
      margin-top: 10px; padding: 5px 10px;">All Crossings</button>
      <div class="favorites">
```

```
RailwayCrossingDatabaseOp crossingDAO = new RailwayCrossingDatabaseOp();
                           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 style="font-family: Times New Roman;"><%=crossing.getName()%></h3>
                           Status: <strong><span class="status"</pre>
<%=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: 5px; font-weight: bold; margin-top:
10px; padding: 5px 10px;">REMOVE
                                 FROM FAVORITES</button>
                    </form>
             </div>
             <%
             }
%>
</body>
</html>
```

## userLogin.jsp

```
background-color: #f2f2f2;
.panel {
      opacity:0.9;
      background-color: #ffffff;
      border-radius: 10px;
      box-shadow: 0 2px 5px rgba(1, 1, 1, 1);
.panel label {
      margin-bottom: 10px;
      text-align: left;
.panel input[type="text"], .panel input[type="password"] {
      width: 100%;
.panel button[type="submit"] {
      width: 100%;
      background-color: gray;
      border: none;
      cursor: pointer;
.panel button[type="submit"]:hover {
      background-color: #000000;
.panel .signup-link {
      display: block;
      margin-top: 20px;
      <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><br></pr>
                   <button type="submit">Login</button>
             </form><br>
             <form action="HomePage.jsp" method="post">
                   <button type="submit">Home Page</button>
             </form>
             <div class="signup-link">
                          Don't have an account? <a href="userRegister.jsp">Create New
                                 Account</a>
             </div>
      </div>
```

```
</body>
```

## userRegister.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
      pageEncoding="UTF-8"%>
<!DOCTYPE html>
<meta charset="UTF-8">
<title>User Registration</title>
body {
      display: flex;
      justify-content: center;
      align-items: center;
      text-align: center;
      background-color: #f2f2f2;
      background-size: cover;
      align-items: center;
      height: 90vh;
      background-color: #f2f2f2;
      width: 500px;
      opacity:0.9;
      background-color: #ffffff;
      border-radius: 10px;
.panel label {
      margin-bottom: 10px;
      text-align: left;
.panel input[type="text"], .panel input[type="password"] {
      width: 100%;
      border: 1px solid #ccc;
.panel button[type="submit"] {
      width: 100%;
      padding: 10px;
      background-color: gray;
      border: none;
      cursor: pointer;
.panel button[type="submit"]:hover {
      background-color: #000000;
.panel .signup-link {
      margin-top: 20px;
 /head>
```

```
<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"</pre>
                          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"</pre>
                          id="password" name="password" required><br><br>>
                   <button type="submit">Register
             </form>
             <div class="signup-link">
                          Already have an account? <a href="userLogin.jsp">Sign in</a>
      </div>
</body>
</html>
```

#### userSearchCrossing.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"</pre>
      pageEncoding="UTF-8"%>
<%@ page import="com.railwaycrossing.RailwayCrossing"%>
<%@ page import="com.railwaycrossing.RailwayCrossingDatabaseOp"%>
<%@ page import="java.util.List"%>
<!DOCTYPE html>
<meta charset="UTF-8">
<title>Railway Crossings - Search Crossings</title>
body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 20px;
      width: 500px;
      border: 1px solid #ccc;
      border-radius: 10px;
      padding: 20px;
      margin-bottom: 20px;
      box-shadow: 0 2px 5px rgba(0, 1, 1, 1);
.container h3 {
      margin-top: θ;
container p {
      margin: 0;
.search-container {
      margin-bottom: 20px;
.search-container input[type="text"] {
      width: 200px;
```

```
logout-button {
      position: absolute;
      font-weight: bold;
.allCrossing-button {
      position: absolute;
      left: 10px;
.favouriteCrossing-button {
      padding: 5px;
      left: 130px;
.status {
status-open {
      color: white;
status-closed {
      color: white;
      background-color: red;
.crossing {
.crossing button {
<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++) {</pre>
                   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>
      <h1 style="font-family: Times New Roman; margin-top: 5px;" align=center >Search
Crossings</h1>
      <button onclick="location.href='userHome.jsp'"</pre>
             class="allCrossing-button"
             style="border-radius: 5px; font-weight: bold; padding: 5px 10px;">All
Crossings
      <button onclick="location.href='userHomeFavoriteCrossing.jsp'"</pre>
             class="favouriteCrossing-button"
             style="border-radius: 5px; font-weight: bold; padding: 5px 10px;">Favorite
             Crossings</button>
      <div class="search-container">
             <input type="text" id="searchInput" placeholder="Search by name"</pre>
                    onkeyup="searchCrossings()">
             <button onclick="location.href='userLogin.jsp'" class="logout-button"</pre>
                    style="border-radius: 5px; font-weight: bold; padding: 5px
10px; ">Logout</button>
      </div>
      <div class="search-results">
             <%
             RailwayCrossingDatabaseOp crossingDAO = new RailwayCrossingDatabaseOp();
                          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 style="font-family: Times New Roman;"><%=crossing.getName()%></h3>
                           Status: <strong><span class="status"</pre>
<%=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: inline;">
                           <input type="hidden" name="crossingId"</pre>
value="<%=crossing.getId()%>">
                           <but><button<br/>type="submit"</br>
                                 style="border-radius: 5px; font-weight: bold; margin-top:
10px; margin-left: 0px; padding: 5px 10px;">ADD
```

```
TO FAVORITES</button>

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

**GITHUB Linke: https://github.com/dhiraj0803/JAVA-fsd.git**