RAILWAY CROSSING STATUS ALGORITHM:

- 1. index.jsp: This is the home page of the application. It provides links for user login and admin login.
- **2. login.jsp**: This JSP file contains the login form for users. It collects the username and password from the user.
- **3. Login.java (servlet):** This servlet is responsible for handling the user login process. It retrieves the username and password from the request parameters, performs a database query to validate the credentials, and redirects the user to the "userhome.jsp" page if the login is successful. Otherwise, it displays an error message.
- **4. Registration.jsp:** This JSP file contains the registration form for users. It collects the username, password, and email from the user.
- **5. Register.java (servlet):** This servlet handles the user registration process. It retrieves the username, password, and email from the request parameters, creates a Member object, and uses a RegisterDao to insert the user into the database.
- **6. RegisterDao.java:** This class is responsible for database operations related to user registration. It has a method insert that takes a Member object as input and inserts the user into the database.
- 7. Member.java: This class represents a user and contains their username, password, and email.
- **8. Userhome.jsp:** This file represents the user's home page. It displays a list of railway crossing information retrieved from a MySQL database. It also provides links to navigate to other pages like search and favorite crossings.
- **9. Search.jsp**: This file displays a simple form where users can enter a keyword to search for railway crossings. It submits the form data to the searchResult.jsp page.
- **10. SearchResult.jsp:** This file processes the search query entered by the user and performs a database query to retrieve matching railway crossings. It displays the search results in a table format.
- **11. Favorite.jsp:** This file is likely intended to display the user's favorite railway crossings. However, the code provided is similar to the SearchResult.jsp file, so it appears to be a duplication or a mistake.
- **12. AddToFavorite.java (Servlet):** This servlet is responsible for adding an item to the user's favorites. It establishes a database connection, prepares an SQL statement to insert the favorite item, executes the statement, and then redirects the user back to the user home page.
- **13. RemoveFromFavorite.java (Servlet**): It seems that there was an error in copying the code, as this file is identical to AddToFavorite.java. However, based on the name, it is likely intended to remove an item from the user's favorites. You would need to provide the correct code for this functionality.

- **14. Adminlogin.jsp**: This JSP (JavaServer Pages) file is a view that displays search results from the adminhome table. It sets up a data source and performs a query to search for records that match a given keyword in the Name or Address columns. The search results are then displayed in an HTML table.
- **15. AdminLogin.java (Servlet):** This servlet handles the login functionality for the admin user. It receives the username and password parameters, establishes a database connection, and executes a query to check if the provided credentials are valid. If the login is successful, it forwards the request to the adminhome.jsp page. Otherwise, it displays an error message indicating a failed login attempt.
- **16. adminhome.jsp:** This JSP file displays search results for railway crossings. It uses SQL queries to retrieve data from a MySQL database and displays it in a tabular format.
- **17. Addrail.jsp:** This JSP file contains a form for adding a new railway crossing. It includes input fields for the name, address, landmark, train schedule, person in charge, and status of the crossing.
- **18. RailCross.java:** This Java class defines a RailCross object that represents a railway crossing. It has private fields for the crossing's attributes and corresponding getters and setters.
- **19. RailCrossing.java:** This servlet receives form data from Addrail.jsp and inserts a new railway crossing into the MySQL database using the RailCross object.
- **20. Update.jsp:** This JSP file displays a form for updating an existing railway crossing. It is similar to Addrail.jsp but pre-fills the form with the existing crossing's data.
- **21. UpdateProcess.jsp:** This JSP file handles the update process by updating the corresponding record in the MySQL database based on the form data received from Update.jsp.
- **22. Delete.jsp:** This JSP file handles the deletion of a railway crossing record from the MySQL database.

Railway Crossing Status

Source Code:

Database:

CREATE DATABASE railway;

use railway;

CREATE TABLE user (

uname VARCHAR(45) NOT NULL,

email VARCHAR(45) NOT NULL,

password VARCHAR(45) NOT NULL,

```
PRIMARY KEY(uname));
CREATE TABLE admin (
uname VARCHAR(45) NOT NULL,
password VARCHAR(45) NOT NULL,
PRIMARY KEY (uname));
insert into admin values ('Admin', '12345');
CREATE TABLE railway.adminhome (
id INT NOT NULL AUTO_INCREMENT,
Name VARCHAR(45) NOT NULL,
Address VARCHAR(45) NOT NULL,
Landmark VARCHAR(45) NOT NULL,
Trainschedule TIME NOT NULL,
pname VARCHAR(45) NOT NULL,
status VARCHAR(45) NOT NULL,
UNIQUE INDEX id_UNIQUE (id ASC) VISIBLE,
PRIMARY KEY (id));
CREATE TABLE favorites (
id INT PRIMARY KEY,
Name VARCHAR(255),
Address VARCHAR(255),
Landmark VARCHAR(255),
Trainschedule VARCHAR(255),
pname VARCHAR(255),
status VARCHAR(255));
```

//index.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
```

```
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>User Login</title>
</head>
</head>
<body>
<h3>Welcome to Railway Crossing!!!</h3>
<a href="login.jsp">User Login</a><br><br>
<a href="adminlogin.jsp">Admin Login</a>
</body>
</html>
//addrail.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"</pre>
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Add Railway Crossing</title>
</head>
<body>
<h2>Add Railway Crossing</h2>
<form action="RailCrossing" method="POST">
Name:
<input type="text" name="Name" required>
Address:
<input type="text" name="Address" required>
Landmark:
<input type="text" name="Landmark" required>
<t.r>
Time Schedule:
<input type="time" name="Trainschedule" required>
<t.r>
Person In-Charge:
<input type="text" name="pname" required>
Status:
<input type="radio" name="status" value="open" required> open
<input type="radio" name="status" value="closed" required> closed
```

```
<input type="submit" value="Add Crossing">
</form>
</body>
</html>
//adminhome.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
   <%@ page import = "java.io.*,java.util.*,java.sql.*"%>
<%@ page import = "javax.servlet.http.*,javax.servlet.*" %>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Admin Home</title>
</head>
<body>
<h2>Admin Home</h2>
<a href="adminhome.jsp">Home</a><br>
<a href="addrail.jsp">Add Railway Crossing</a><br>
<a href="search.jsp">Search Crossing</a><br><br><br>
<sql:setDataSource var = "snapshot" driver = "com.mysql.jdbc.Driver"</pre>
url = "jdbc:mysql://localhost:3306/railway"
user = "root" password = "purnasri2103"/>
<sql:query dataSource="${snapshot}" var="result">
SELECT * from adminhome;
</sql:query>
Sr.No
Name
Address
Landmark
Time Schedule
Person In-Charge
Status
Action
<c:forEach var="row" items="${result.rows}">
<c:out value="${row.id}" />
<c:out value="${row.Name}" />
<c:out value="${row.Address}" />
<c:out value="${row.Landmark}" />
<c:out value="${row.Trainschedule}" />
<c:out value="${row.pname}" />
<c:out value="${row.status}" />
<!-- Action buttons for each row -->
<form action="update.jsp" method="GET">
```

```
<input type="hidden" name="id" value="${row.id}" />
<input type="submit" value="Update" />
</form>
<form action="delete.jsp" method="POST">
<input type="hidden" name="id" value="${row.id}" />
<input type="submit" value="Delete" />
</form>

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```

//adminlogin

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
   <%@ page import = "java.io.*,java.util.*,java.sql.*"%>
<%@ page import = "javax.servlet.http.*,javax.servlet.*" %>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Admin Home</title>
</head>
<body>
<h2>Admin Home</h2>
<a href="adminhome.jsp">Home</a><br>
<a href="addrail.jsp">Add Railway Crossing</a><br>
<a href="search.jsp">Search Crossing</a><br><br>
<sql:setDataSource var = "snapshot" driver = "com.mysql.jdbc.Driver"</pre>
url = "jdbc:mysql://localhost:3306/railway"
user = "root" password = " purnasri2103"/>
<sql:query dataSource="${snapshot}" var="result">
SELECT * from adminhome;
</sql:query>
\langle t.r \rangle
Sr.No
Name
Address
Landmark
Time Schedule
Person In-Charge
Status
Action
<c:forEach var="row" items="${result.rows}">
\langle t.r \rangle
```

```
<c:out value="${row.id}" />
<c:out value="${row.Name}" />
<c:out value="${row.Address}" />
<c:out value="${row.Landmark}" />
<c:out value="${row.Trainschedule}" />
<c:out value="${row.pname}" />
<c:out value="${row.status}" />
<!-- Action buttons for each row -->
<form action="update.jsp" method="GET">
<input type="hidden" name="id" value="${row.id}" />
<input type="submit" value="Update" />
</form>
<form action="delete.jsp" method="POST">
<input type="hidden" name="id" value="${row.id}" />
<input type="submit" value="Delete" />
</form>
</c:forEach>
</body>
</html>
//delete.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
   <%@ page import = "java.io.*,java.util.*,java.sql.*"%>
<%@ page import = "javax.servlet.http.*,javax.servlet.*" %>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Admin Home</title>
</head>
<body>
<h2>Admin Home</h2>
<a href="adminhome.jsp">Home</a><br>
<a href="addrail.jsp">Add Railway Crossing</a><br>
<a href="search.jsp">Search Crossing</a><br><br>
<sql:setDataSource var = "snapshot" driver = "com.mysql.jdbc.Driver"</pre>
url = "jdbc:mysql://localhost:3306/railway"
user = "root" password = "purnasri2103"/>
<sql:query dataSource="${snapshot}" var="result">
SELECT * from adminhome;
</sql:query>
\langle t.r \rangle
Sr.No
Name
Address
Landmark
```

```
Time Schedule
Person In-Charge
Status
Action
<c:forEach var="row" items="${result.rows}">
<c:out value="${row.id}" />
<c:out value="${row.Name}" />
<c:out value="${row.Address}" />
<c:out value="${row.Landmark}" />
<c:out value="${row.Trainschedule}" />
<c:out value="${row.pname}" />
<c:out value="${row.status}" />
<!-- Action buttons for each row -->
<form action="update.jsp" method="GET">
<input type="hidden" name="id" value="${row.id}" />
<input type="submit" value="Update" />
<form action="delete.jsp" method="POST">
<input type="hidden" name="id" value="${row.id}" />
<input type="submit" value="Delete" />
</form>
</c:forEach>
</body>
</html>
```

//deleteProcess.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.io.*,java.util.*,java.sql.*" %>
<%@ page import="javax.servlet.http.*,javax.servlet.*" %>
String id = request.getParameter("id");
// Check if ID is provided
if (id != null && !id.isEmpty()) {
try {
// Database connection details
String url = "jdbc:mysql://localhost:3306/railway";
String user = "root";
String password = "purnasri2103";
// Create database connection
Connection conn = DriverManager.getConnection(url, user, password);
// Prepare and execute the delete statement
String sql = "DELETE FROM adminhome WHERE id = ?";
PreparedStatement pstmt = conn.prepareStatement(sql);
pstmt.setString(1, id);
pstmt.executeUpdate();
// Close resources
```

```
pstmt.close();
conn.close();
// Redirect back to delete.jsp with success message
response.sendRedirect("delete.jsp?success=true");
} catch (SQLException e)
{e.printStackTrace();
// Handle database errors
response.sendRedirect("delete.jsp?error=true");
}
else {
// ID is not provided, redirect back to delete.jsp with error message
response.sendRedirect("delete.jsp?error=true");
}
%>
```

//favorite.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
   <%@ page import="java.io.*,java.util.*,java.sql.*"%>
<%@ page import="javax.servlet.http.*,javax.servlet.*"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/sql" prefix="sql"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Favorite Crossing</title>
</head>
<body>
<h2>Favorite Crossing</h2>
<a href="userhome.jsp">Home</a><br>
<a href="search.jsp">Search Crossing</a><br><br>
<sql:setDataSource var="snapshot" driver="com.mysql.jdbc.Driver"</pre>
url="jdbc:mysql://localhost:3306/railway" user="root" password="
purnasri2103"
<sql:query dataSource="${snapshot}" var="favorites">
SELECT * FROM favorites;
</sql:query>
<c:if test="${not empty favorites.rows}">
\langle t.r \rangle
Sr.No
Name
Address
Landmark
Time Schedule
Person In-Charge
Status
<c:forEach var="favorite" items="${favorites.rows}">
<c:out value="${favorite.id}" />
```

//login.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"</pre>
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>User Login</title>
</head>
<body>
<div align=center>
<h2>User Login</h2>
<form action="Login" method="POST">
Name: <input type="text" name="uname"
placeholder="UserName" required>
Password: <input type="password" name="password"
placeholder="password" required><br/><br/>br>
<input type="submit" value="Login"><br><br>>Don't have an
<a href="index.jsp">Back<a>
</form>
</div>
</body>
</html>
```

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"</pre>
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Register form</title>
</head>
<body>
<form action="Register" method="post">
<div align=center>
<h3>User Registration</h3>
Name: <input type="text" name="uname"
placeholder="UserName" required>
Email: <id><input type="text" name="email" placeholder="Email"</pre>
required>
Password: <input type="password" name="password"
placeholder="password" required><br><br>
<br/><br/><br/>Already
Registered?<a href="login.jsp">Go to login</a>
</div>
</form>
</body>
</html>
//search.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
   <%@ page import="java.io.*, java.util.*, java.sql.*" %>
<%@ page import="javax.servlet.http.*, javax.servlet.*" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/sql" prefix="sql" %>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Search Crossing</title>
</head>
<body>
<h2>Search Crossing</h2>
<form action="searchResult.jsp" method="GET">
<input type="text" name="keyword" placeholder="Enter keyword" />
<input type="submit" value="Search" />
</form>
</body>
</html>
```

//searchResult.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
   <%@ page import="java.io.*, java.util.*, java.sql.*" %>
<%@ page import="javax.servlet.http.*, javax.servlet.*" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<%@ taglib uri="http://java.sun.com/jsp/jstl/sql" prefix="sql" %>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Search Results</title>
</head>
<body>
<h2>Search Results</h2>
<sql:setDataSource var="snapshot" driver="com.mysql.cj.jdbc.Driver"</pre>
url="jdbc:mysql://localhost:3306/railway" user="root" password="
purnasri2103"
/>
<c:set var="keyword" value="${param.keyword}" />
<sql:query dataSource="${snapshot}" var="result">
SELECT * FROM adminhome
WHERE Name LIKE CONCAT('%', ?, '%') OR Address LIKE CONCAT('%', ?, '%')
<sql:param value="${keyword}" />
<sql:param value="${keyword}" />
</sql:query>
Sr.No
Name
Address
Landmark
Time Schedule
Person In-Charge
Status
<c:forEach var="row" items="${result.rows}">
<c:out value="${row.id}" />
<c:out value="${row.Name}" />
<c:out value="${row.Address}" />
<c:out value="${row.Landmark}" />
<c:out value="${row.Trainschedule}" />
<c:out value="${row.pname}" />
<c:out value="${row.status}" />
</c:forEach>
</body>
</html>
```

//update.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   pageEncoding="ISO-8859-1"%>
<%@ page import="java.io.*,java.util.*,java.sql.*"%>
<%@ page import="javax.servlet.http.*,javax.servlet.*"%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="sql" uri="http://java.sun.com/jsp/jstl/sql" %>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Update Railway Crossing</title>
</head>
<body>
<h2>Update Railway Crossing</h2>
<sql:setDataSource var="snapshot" driver="com.mysql.jdbc.Driver"</pre>
url="jdbc:mysql://localhost:3306/railway" user="root" password="
purnasri2103"
/>
<c:if test="${not empty param.id}">
<sql:query dataSource="${snapshot}" var="result">
SELECT * FROM adminhome WHERE id = ?
<sql:param value="${param.id}" />
</sql:query>
<c:if test="${not empty result.rows}">
<c:forEach var="row" items="${result.rows}">
<form action="updateProcess.jsp" method="POST">
<input type="hidden" name="id" value="${row.id}" />
<t.r>
Name:
<input type="text" name="Name" value="${row.Name}" required>
Address:
<input type="text" name="Address" value="${row.Address}" required>
Landmark:
<input type="text" name="Landmark" value="${row.Landmark}"</pre>
required>
Time Schedule:
<input type="time" name="Trainschedule" value="${row.Trainschedule}"</pre>
required>
Person In-Charge:
<input type="text" name="pname" value="${row.pname}" required>
Status:
```

```
\langle t.d \rangle
<input type="radio" name="status" value="open" ${row.status == 'open' ?</pre>
'checked' : ''} required> Open
<input type="radio" name="status" value="closed" ${row.status == 'closed' ?</pre>
'checked' : ''} required> Closed
<input type="submit" value="Update Crossing">
</form>
</c:forEach>
</c:if>
</c:if>
</body>
</html>
```

//updateProcess.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"%>
    <%@ page import="java.io.*,java.util.*,java.sql.*"%>
<%@ page import="javax.servlet.http.*,javax.servlet.*"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/sql" prefix="sql"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Update Crossing Process</title>
</head>
<body>
<h2>Update Crossing Process</h2>
<sql:setDataSource var="snapshot" driver="com.mysql.jdbc.Driver"</pre>
url="jdbc:mysql://localhost:3306/railway" user="root" password="
purnasri2103"
/>
<c:if test="${not empty param.id}">
<sql:update dataSource="${snapshot}">
UPDATE adminhome SET Name=?, Address=?, Landmark=?, Trainschedule=?,
pname=?, status=?
WHERE id=?
<sql:param value="${param.Name}" />
<sql:param value="${param.Address}" />
<sql:param value="${param.Landmark}" />
<sql:param value="${param.Trainschedule}" />
<sql:param value="${param.pname}" />
```

```
<sql:param value="${param.status}" />
<sql:param value="${param.id}" />
</sql:update>
Update successful!
</c:if>
<a href="adminhome.jsp">Back to Admin Home</a>
</body>
</html>
```

//userhome.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"%>
    <%@ page import="java.io.*,java.util.*,java.sql.*"%>
<%@ page import="javax.servlet.http.*,javax.servlet.*"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<%@ taglib uri="http://java.sun.com/jsp/jst1/sql" prefix="sql"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>User Home</title>
<style>
.header {
text-align: center;
margin-bottom: 20px;
}
.link
{ display:
block;
margin-bottom: 10px;
</style>
</head>
<body>
<h2>User Home</h2>
<a class="link" href="userhome.jsp">Home</a>
<a class="link" href="search.jsp">Search Crossing</a>
<a class="link" href="favorite.jsp">Favorite Crossing</a>
<sql:setDataSource var="snapshot" driver="com.mysql.jdbc.Driver"</pre>
url="jdbc:mysql://localhost:3306/railway" user="root" password="purnasri2103"
/>
<sql:query dataSource="${snapshot}" var="result">
SELECT * FROM adminhome;
</sql:query>
<c:forEach var="row" items="${result.rows}">
<h4>Name: <c:out value="${row.Name}" /></h4>
Address: <c:out value="${row.Address}" />
Landmark: <c:out value="${row.Landmark}" />
Time Schedule: <c:out value="${row.Trainschedule}" />
Person In-Charge: <c:out value="${row.pname}" />
```

```
Status: <c:out value="${row.status}" />
<form action="AddToFavorite" method="POST">
<input type="hidden" name="itemId" value="${row.id}" />
<input type="submit" value="Add to Favorite" />
</form>
</div>
<hr />
</c:forEach>
<a class="link" href="login.jsp">Logout</a>
</body>
</html>
```

```
//AdminLogin.java
package adminlogin;
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.servlet.RequestDispatcher;
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.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
* Servlet implementation class AdminLogin
*/
@WebServlet("/AdminLogin")
public class AdminLogin extends HttpServlet {
        private static final long serialVersionUID = 1L;
  /**
   * @see HttpServlet#HttpServlet()
   */
  public AdminLogin() {
     super();
    // TODO Auto-generated constructor stub
  }
        /**
         * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException {
                 // TODO Auto-generated method stub
                 response.getWriter().append("Served at: ").append(request.getContextPath());
        }
         * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
         */
        protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
                 // TODO Auto-generated method stub
                 try{
```

```
PrintWriter out= response.getWriter();
                          Class.forName("com.mysql.cj.jdbc.Driver");
                          Connection
        con=DriverManager.getConnection("jdbc:mysql://localhost:3306/railway", "root", "madhuri4512");
                          String uname = request.getParameter("uname");
                          String pass = request.getParameter("password");
                          PreparedStatement ps = con.prepareStatement("SELECT uname FROM admin WHERE
uname=? AND password=?");
                          ps.setString(1,uname);
                          ps.setString(2,pass);
                          ResultSet rs = ps.executeQuery();
                          if(rs.next()) {
                          RequestDispatcher rd = request.getRequestDispatcher("adminhome.jsp");
                          rd.forward(request, response);
                          }
                          else {
                          out.println("<font color=red size=4>Login Failed!!!<br>");
                          out.println("<font color=red size=2>Invalid user name or password<br>");
                          out.println("<a href=login.jsp>Try Again</a>");
                          }
                          }catch (ClassNotFoundException e)
                          {e.printStackTrace();
                          } catch (SQLException e) {
                          // TODO Auto-generated catch block
                          e.printStackTrace();
        }
```

}

//AddToFavorite.java

```
package favorite;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
/**
 * Servlet implementation class AddToFavorite
@WebServlet("/AddToFavorite")
public class AddToFavorite extends HttpServlet {
      private static final long serialVersionUID = 1L;
    /**
     * @see HttpServlet#HttpServlet()
    public AddToFavorite() {
        super();
        // TODO Auto-generated constructor stub
    }
      /**
       * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
      protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
            // TODO Auto-generated method stub
            response.getWriter().append("Served at:
").append(request.getContextPath());
      }
      /**
       * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
      protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
            // TODO Auto-generated method stub
                  String itemId = request.getParameter("itemId");
                  // Perform necessary operations to add the item to
favorites
```

```
try {
                    // Establish database connection
                    Class.forName("com.mysql.jdbc.Driver");
                    Connection connection =
      DriverManager.getConnection("jdbc:mysql://localhost:3306/railway",
"root",
                    "Divya@112531");
                    // Prepare SQL statement to insert the favorite crossing
                    String sql = "INSERT INTO favorites (id, Name, Address,
Landmark, Trainschedule, pname, status) " +
                    "SELECT id, Name, Address, Landmark, Trainschedule, pname,
status " +
                    "FROM adminhome WHERE id = ?";
                    PreparedStatement statement =
connection.prepareStatement(sql);
                    statement.setString(1, itemId);
                    // Execute the SQL statement
                    int rowsAffected = statement.executeUpdate();
                    // Close the database connection
                    statement.close();
                    connection.close();
                    // Redirect the user back to the user home page
                    response.sendRedirect("userhome.jsp");
                    } catch (ClassNotFoundException | SQLException e)
                    {e.printStackTrace();
      }
}
//Login.java
package login;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.servlet.RequestDispatcher;
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.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
* Servlet implementation class Login
*/
@WebServlet("/Login")
public class Login extends HttpServlet {
        private static final long serialVersionUID = 1L;
  /**
   * @see HttpServlet#HttpServlet()
   */
  public Login() {
     super();
    // TODO Auto-generated constructor stub
  }
         * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
         protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException {
                 // TODO Auto-generated method stub
```

```
response.getWriter().append("Served at: ").append(request.getContextPath());
        }
        /**
         * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
        protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
                 // TODO Auto-generated method stub
                 try {
                          PrintWriter out= response.getWriter();
                          Class.forName("com.mysql.cj.jdbc.Driver");
                          Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/railway", "root", "purnasri2103");
                          String uname = request.getParameter("uname");
                          String pass = request.getParameter("password");
                          PreparedStatement ps = con.prepareStatement("SELECT uname FROM user WHERE
uname=? AND password=?");
                         ps.setString(1,uname);
                          ps.setString(2,pass);
                          ResultSet rs = ps.executeQuery();
                          if(rs.next()) {
                          RequestDispatcher rd = request.getRequestDispatcher("userhome.jsp");
                          rd.forward(request, response);
                          }
                          else {
                          out.println("<font color=red size=4>Login Failed!!!<br>");
                          out.println("<font color=red size=2>Invalid user name or password<br>");
                          out.println("<a href=login.jsp>Try Again</a>");
                          }
                          }catch (ClassNotFoundException e)
```

```
{e.printStackTrace();
                    } catch (SQLException e) {
                    // TODO Auto-generated catch block
                    e.printStackTrace();
                    }
                    }
                    private PreparedStatement prepareStatement(String string) {
                    // TODO Auto-generated method stub
                    return null;
      }
}
//RailCross.java
package rail;
public class RailCross {
      private String name;
      private String address;
      private String landmark;
      private String trainSchedule;
      private String personInCharge;
      private String status;
      public RailCross(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.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 getStatus() {
             return status;
      public void setStatus(String status) {
             this.status = status;
}
//RailCrossing.java
package rail;
import java.io.IOException;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
import java.sql.Time;
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.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
* Servlet implementation class RailCrossing
*/
public class RailCrossing extends HttpServlet {
         private static final long serialVersionUID = 1L;
         private String dbUrl = "jdbc:mysql://localhost:3306/railway";
         private String dbUsername = "root";
         private String dbPassword = "purnasri2103";
         private String dbDriver = "com.mysql.cj.jdbc.Driver";
  /**
   * @see HttpServlet#HttpServlet()
  public RailCrossing() {
     super();
     // TODO Auto-generated constructor stub
  }
         * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
```

```
*/
```

```
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException {
                 // TODO Auto-generated method stub
                 response.getWriter().append("Served at: ").append(request.getContextPath());
        }
         * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
        protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
                 // TODO Auto-generated method stub
                 String name =
                                  request.getParameter("Name");
                                  String address = request.getParameter("Address");
                                  String landmark = request.getParameter("Landmark");
                                   String trainSchedule = request.getParameter("Trainschedule");
                                   String personInCharge = request.getParameter("pname");
                                   String status = request.getParameter("status");
                                   RailCross railCrossing = new RailCross(name, address, landmark,
                                  trainSchedule, personInCharge, status);
                                  String result = insertRailCrossing(railCrossing);
                                  response.getWriter().print(result);
                                  private String insertRailCrossing(RailCross railCrossing) {
                                  try
                                  { Class.forName(dbDriver);
                                  Connection connection = DriverManager.getConnection(dbUrl, dbUsername,
                                  dbPassword);
```

```
String sql = "INSERT INTO adminhome (Name, Address,
Landmark, Trainschedule, pname, status) VALUES (?, ?, ?, ?, ?, ?)";
                                 PreparedStatement statement = connection.prepareStatement(sql);
                                 statement.setString(1, railCrossing.getName());
                                 statement.setString(2, railCrossing.getAddress());
                                 statement.setString(3, railCrossing.getLandmark());
                                 statement.setString(4, railCrossing.getTrainSchedule());
                                 statement.setString(5, railCrossing.getPersonInCharge());
                                 statement.setString(6, railCrossing.getStatus());
                                 int rowsInserted = statement.executeUpdate();
                                 if (rowsInserted > 0) {
                                 return "Data inserted successfully";
                                 } else {
                                 return "Failed to insert data";
                                 } catch (ClassNotFoundException | SQLException e)
                                 {e.printStackTrace();
                                 return "Error: " + e.getMessage();
                                 }
                                 }
}
//Member.java
package register;
public class Member {
        private String uname, password, email;
        public Member(String uname, String password, String email) {
                super();
```

```
this.uname = uname;
              this.password = password;
               this.email = email;
       }
       public String getUname() {
              return uname;
       public void setUname(String uname) {
               this.uname = uname;
       }
       public String getPassword() {
              return password;
       public void setPassword(String password) {
              this.password = password;
       public String getEmail() {
              return email;
       }
       public void setEmail(String email) {
              this.email = email;
       }
}
//Register.java
package register;
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.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
```

import javax.servlet.http.HttpServletRequest;

```
import javax.servlet.http.HttpServletResponse;
/**
* Servlet implementation class Register
*/
public class Register extends HttpServlet {
        private static final long serialVersionUID = 1L;
  /**
   * @see HttpServlet#HttpServlet()
   */
  public Register() {
     super();
    // TODO Auto-generated constructor stub
  }
        /**
         * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException {
                 // TODO Auto-generated method stub
                 response.getWriter().append("Served at: ").append(request.getContextPath());
        }
         * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
         */
        protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
                 // TODO Auto-generated method stub
```

```
String password = request.getParameter("password");
             String email = request.getParameter("email");
             Member user = new Member(uname, password, email);
             RegisterDao rDao = new RegisterDao();
             String result = rDao.insert(user);
             response.getWriter().print(result);
             }
      }
//RegisterDao.java
package register;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;
public class RegisterDao {
      private String dbUrl = "jdbc:mysql://localhost:3306/railway";
      private String dbUname = "root";
      private String dbPassword = "purnasri2103";
      private String dbDriver = "com.mysql.cj.jdbc.Driver";
      public void loadDriver(String dbDriver)
      try
      { Class.forName(dbDriver);
      } catch (ClassNotFoundException e) {
      // TODO Auto-generated catch block
      e.printStackTrace();
      public Connection getConnection()
      Connection con = null;
      try {
      con = DriverManager.getConnection(dbUrl, dbUname, dbPassword);
      } catch (SQLException e) {
      // TODO Auto-generated catch block
      e.printStackTrace();
      }
      return con;
      public String insert(Member member)
      loadDriver(dbDriver);
      Connection con = getConnection();
```

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

```
String result = "Data entered successfully";
      String sql = "insert into user values(?,?,?)";
      PreparedStatement ps;
      try {
      ps = con.prepareStatement(sql);
      ps.setString(1, member.getUname());
      ps.setString(2, member.getPassword());
      ps.setString(3, member.getEmail());
      ps.executeUpdate();
      } catch (SQLException e) {
      // TODO Auto-generated catch block
      e.printStackTrace();
      result = "Data not entered";
      return result;
}
//web.xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="https://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="https://java.sun.com/xml/ns/javaee"
xmlns:web="http://java.sun.com/xml/ns/javaee"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app 2 5.xsd" id="WebApp ID"
version="2.5">
  <display-name>phase2 end project</display-name>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
    <welcome-file>index.jsp</welcome-file>
    <welcome-file>index.htm</welcome-file>
    <welcome-file>default.html</welcome-file>
    <welcome-file>default.jsp</welcome-file>
    <welcome-file>default.htm</welcome-file>
  </welcome-file-list>
  <servlet>
    <description></description>
    <display-name>AdminLogin</display-name>
    <servlet-name>AdminLogin</servlet-name>
    <servlet-class>adminlogin.AdminLogin</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>AdminLogin</servlet-name>
    <url-pattern>/AdminLogin</url-pattern>
  </servlet-mapping>
  <servlet>
    <description></description>
    <display-name>AddToFavorite</display-name>
```

```
<servlet-name>AddToFavorite</servlet-name>
    <servlet-class>favorite.AddToFavorite</servlet-class>
 </servlet>
 <servlet-mapping>
   <servlet-name>AddToFavorite</servlet-name>
   <url-pattern>/AddToFavorite</url-pattern>
 </servlet-mapping>
 <servlet>
    <description></description>
   <display-name>Login</display-name>
   <servlet-name>Login</servlet-name>
    <servlet-class>login.Login</servlet-class>
 </servlet>
 <servlet-mapping>
   <servlet-name>Login</servlet-name>
   <url-pattern>/Login</url-pattern>
 </servlet-mapping>
 <servlet>
   <description></description>
   <display-name>RailCrossing</display-name>
   <servlet-name>RailCrossing</servlet-name>
   <servlet-class>rail.RailCrossing</servlet-class>
 </servlet>
 <servlet-mapping>
   <servlet-name>RailCrossing</servlet-name>
   <url-pattern>/RailCrossing</url-pattern>
 </servlet-mapping>
 <servlet>
   <description></description>
   <display-name>Register</display-name>
   <servlet-name>Register
   <servlet-class>register.Register</servlet-class>
 </servlet>
 <servlet-mapping>
   <servlet-name>Register</servlet-name>
    <url-pattern>/Register</url-pattern>
 </servlet-mapping>
</web-app>
```