**SOURCE CODES OF PHASE 2 END PROJECT**

**RAILWAY CROSSING STATUS**

**Servlet cods:**

**AddCrossingServlet**

package com.simpli;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet(name = "addCrossingServlet", urlPatterns = { "/addCrossing" })

public class AddCrossingServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse

response)

throws ServletException, IOException {

// Retrieve the form data from the request

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

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

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

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

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

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

// Create a new RailwayCrossing object with the form data

RailwayCrossing crossing = new RailwayCrossing();

crossing.setName(name);

crossing.setAddress(address);

crossing.setLandmark(landmark);

crossing.setTrainSchedule(trainSchedules);

crossing.setPersonInCharge(personInCharge);

crossing.setStatus(status);

// Save the new crossing to the database

RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();

crossingDAO.addCrossing(crossing);

// Redirect to the admin homepage after adding the crossing

response.sendRedirect("adminHome.jsp");

}

}

**AddToFavoritesServlet**

package com.simpli;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import java.io.IOException;

public class AddToFavoritesServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

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

int railwayCrossingId = Integer.parseInt(crossingId);

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

RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();

crossingDAO.addToFavorites(railwayCrossingId); // Implement this method in RailwayCrossingDAO

}

// Redirect back to the userHome.jsp page

response.sendRedirect("userHome.jsp");

}

}

**AdminHomePageServlet**

package com.simpli;

import java.io.IOException;

import java.util.List;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/adminHomePage")

public class AdminHomePageServlet extends HttpServlet {

private RailwayCrossingDAO crossingDAO;

public void init() {

crossingDAO = new RailwayCrossingDAO();

}

protected void doGet(HttpServletRequest request, HttpServletResponse

response)

throws ServletException, IOException {

// Fetch all railway crossing details from the database

List<RailwayCrossing> crossings = crossingDAO.getAllCrossings();

// Pass the crossing details to the JSP page

request.setAttribute("crossings", crossings);

request.getRequestDispatcher("adminHome.jsp").forward(request,

response);

}

}

**AdminLoginServlet**

package com.simpli;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/adminLogin")

public class AdminLoginServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

private static final String ADMIN\_ID = "mani@gmail.com";

private static final String ADMIN\_PASSWORD = "Mani@123";

protected void doPost(HttpServletRequest request, HttpServletResponse

response)

throws ServletException, IOException {

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

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

if (email != null && email.equals(ADMIN\_ID) && password != null &&

password.equals(ADMIN\_PASSWORD)) {

response.sendRedirect("adminHome.jsp");

} else {

request.getRequestDispatcher("adminLogin.jsp").forward(request,

response);

}

}

}

**DeleteCrossingServlet**

package com.simpli;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/deleteCrossing")

public class DeleteCrossingServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse

response)

throws ServletException, IOException {

// Retrieve the crossing ID from the request

int crossingId = Integer.parseInt(request.getParameter("id"));

// Perform the delete operation (implement your logic)

RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();

crossingDAO.deleteCrossing(crossingId);

// Redirect to the admin homepage after the deletion

response.sendRedirect("adminHome.jsp");

}

}

**LoginServlet**

package com.simpli;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

@WebServlet("/login")

public class LoginServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse

response)

throws ServletException, IOException {

// Retrieve the form data

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

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

// Check if the provided credentials are valid

UserDAO userDAO = new UserDAO();

User user = userDAO.getUserByEmail(email);

if (user != null && user.getPassword().equals(password)) {

// Authentication successful

// You can store user details in session for further use

HttpSession session = request.getSession();

session.setAttribute("user", user);

// Redirect to a success page or perform any other necessary actions

response.sendRedirect("userHome.jsp");

} else {

// Authentication failed

// Redirect to an error page or display an error message

response.sendRedirect("userRegister.jsp?error=1");

}

}

}

**RegisterServlet**

package com.simpli;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class RegisterServlet

\*/

@WebServlet("/register")

public class RegisterServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

protected void doPost(HttpServletRequest request, HttpServletResponse

response)

throws ServletException, IOException {

// Retrieve the form data

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

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

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

// Create a new User object

User user = new User(name, email, password);

// Store the user in the database

UserDAO userDAO = new UserDAO();

userDAO.registerUser(user);

// Redirect to a success page or perform any other necessary actions

response.sendRedirect("userLogin.jsp");

}

}

**RemoveFromFavoritesServlet**

package com.simpli;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class RemoveFromFavoritesServlet

\*/

public class RemoveFromFavoritesServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse

response)

throws ServletException, IOException {

// TODO Auto-generated method stub

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

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

int railwayCrossingId = Integer.parseInt(crossingId);

// Perform the database operation to remove the crossing from favorites

RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();

crossingDAO.removeFromFavorites(railwayCrossingId); // Implement this method in RailwayCrossingDAO

}

// Redirect back to the userHome.jsp page

response.sendRedirect("userHome.jsp");

}

}

**SearchCrossingServlet**

package com.simpli;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet(name = "searchCrossingServlet", urlPatterns = { "/searchCrossing"

})

public class SearchCrossingServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

// Retrieve the search ID from the request

int searchId = Integer.parseInt(request.getParameter("searchId"));

// Implement your logic to search for the crossing by ID and retrieve its

// details from the database

RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();

RailwayCrossing crossing = crossingDAO.getCrossingById(searchId);

// Set the search result in the request attribute

request.setAttribute("crossing", crossing);

// Redirect to the admin homepage with the search results

request.getRequestDispatcher("adminHome.jsp").forward(request,

response);

}

}

**UpdateCrossingServlet**

package com.simpli;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/updateCrossing")

public class UpdateCrossingServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse

response)

throws ServletException, IOException {

try {

// Retrieve the crossing ID from the hidden field

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

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

int crossingId = Integer.parseInt(idParam);

// Retrieve the updated details for the crossing

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

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

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

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

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

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

// Create a new RailwayCrossing object with the updated details

RailwayCrossing updatedCrossing = new RailwayCrossing();

updatedCrossing.setId(crossingId);

updatedCrossing.setName(name);

updatedCrossing.setAddress(address);

updatedCrossing.setLandmark(landmark);

updatedCrossing.setTrainSchedule(trainSchedules);

updatedCrossing.setPersonInCharge(personInCharge);

updatedCrossing.setStatus(status);

// Perform the update operation

RailwayCrossingDAO crossingDAO = new RailwayCrossingDAO();

crossingDAO.updateCrossing(updatedCrossing);

// Redirect to the admin homepage after the update

response.sendRedirect("adminHome.jsp");

} else {

// Handle case where idParam is empty or null

throw new ServletException("Crossing ID is missing.");

}

} catch (NumberFormatException e) {

// Handle case where idParam is not a valid integer

throw new ServletException("Invalid Crossing ID format.", e);

} catch (Exception e) {

// Handle other exceptions

throw new ServletException("An error occurred during the crossing update.", e);

}

}

}