**Flyway Code:**

**Login Of Admin:**

**package com.java;**

**import java.io.IOException;**

**import java.sql.SQLException;**

**import javax.servlet.ServletException; import javax.servlet.annotation.WebServlet; import javax.servlet.http.HttpServlet; import javax.servlet.http.HttpServletRequest;**

**import javax.servlet.http.HttpServletResponse;**

**import javax.servlet.http.HttpSession;**

**import DAO.com.\*;**

**@WebServlet("/AdminLogin")**

**public class LoginOfAdmin extends HttpServlet {**

**private static final long serialVersionUID = 1L;**

**protected void doPost(HttpServletRequest request, HttpServletResponse response)**

**throws ServletException, IOException {**

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

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

**try {**

**ConnectionUtil dao=new ConnectionUtil();**

**if(dao.checkAdmin(email,password)) { response.sendRedirect("AdminHome.jsp");**

**}**

**else {**

**}**

**HttpSession session=request.getSession(); session.setAttribute("message", "Invalid Details"); response.sendRedirect("AdminPage.jsp");**

**} catch (ClassNotFoundException | SQLException e) {**

**// TODO Auto-generated catch block e.printStackTrace();**

**}**

**}**

**}**

**Login of user:**

**package com.sharu;**

**import javax.servlet.annotation.WebServlet;**

**import java.io.IOException; import java.sql.SQLException; import java.util.HashMap;**

**import javax.servlet.ServletException; import javax.servlet.http.HttpServlet; import javax.servlet.http.HttpServletRequest;**

**import javax.servlet.http.HttpServletResponse;**

**import javax.servlet.http.HttpSession;**

**import DAO.com.\*;**

**@WebServlet("/UserLogin")**

**public class LoginOfUser extends HttpServlet {**

**private static final long serialVersionUID = 1L;**

**protected void doPost(HttpServletRequest request, HttpServletResponse response)**

**throws ServletException, IOException {**

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

**try {**

**ConnectionUtil dao=new ConnectionUtil(); HashMap<String,String> user=dao.checkUser(email,password); HttpSession session=request.getSession();**

**if(user!=null) {**

**session.setAttribute("user", user); response.sendRedirect("HomePage.jsp");**

**}**

**else {**

**}**

**session.setAttribute("message", "Invalid Details"); response.sendRedirect("UserPage.jsp");**

**} catch (ClassNotFoundException | SQLException e) {**

**// TODO Auto-generated catch block e.printStackTrace();**

**}**

**}**

**}**

**Logout of user:**

**package com.sharu;**

**import javax.servlet.annotation.WebServlet;**

**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.http.HttpSession;**

**@WebServlet("/Logout")**

**public class Logout extends HttpServlet {**

**private static final long serialVersionUID = 1L;**

**protected void doGet(HttpServletRequest request, HttpServletResponse response)**

**throws ServletException, IOException {**

**HttpSession session=request.getSession();**

**session.setAttribute("user", null);**

**response.sendRedirect("HomePage.jsp");**

**}**

**}**

**Registration of user:**

**package com.sharu;**

**import javax.servlet.annotation.WebServlet;**

**import java.io.IOException;**

**import java.sql.SQLException;**

**import java.util.HashMap;**

**import javax.servlet.ServletException;**

**import javax.servlet.http.HttpServlet;**

**import javax.servlet.http.HttpServletRequest;**

**import javax.servlet.http.HttpServletResponse;**

**import javax.servlet.http.HttpSession;**

**import DAO.com.\*;**

**@WebServlet("/UserRegistration")**

**public class RegistrationOfUser extends HttpServlet {**

**private static final long serialVersionUID = 1L;**

**protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {**

**String email=request.getParameter("email"); String password=request.getParameter("password"); String name=request.getParameter("name");**

**String phno=request.getParameter("phno"); String adno=request.getParameter("adno");**

**HashMap<String,String> user=new HashMap<>(); user.put("email", email); user.put("password", password); user.put("name", name);**

**user.put("phno", phno);**

**user.put("adno", adno);**

**try {**

**if("Successfully" != null);**

**ConnectionUtil dao=new ConnectionUtil(); boolean result=dao.insertUser(user); HttpSession session=request.getSession(); if(result) {**

**session.setAttribute("message", "User Added");**

**}**

**else {**

**}**

**session.setAttribute("message","Invalid Details");**

**} catch (ClassNotFoundException | SQLException e) {**

**// TODO Auto-generated catch block e.printStackTrace();**

**}**

**response.sendRedirect("UserPage.jsp");**

**}**

**}**

**StringUtil:**

**package com.sharu;**

**public class StringUtil {**

**public static String fixSqlFieldValue(String value) {**

**if (value == null) {**

**return null;**

**}**

**int length = value.length();**

**StringBuffer fixedValue = new StringBuffer((int)(length\*1.1));**

**for(int i = 0 ; i < length ;i++) { char c = value.charAt(i); if ( c == '\'') {**

**fixedValue.append("''");**

**}else {**

**fixedValue.append(c);**

**}**

**}**

**return fixedValue.toString();**

**}**

**public static String encodeHtmlTag(String tag) {**

**if (tag==null)**

**return null;**

**int length = tag.length();**

**StringBuffer encodedTag = new StringBuffer(2 \* length);**

**for(int i = 0 ; i < length;i++) { char c = tag.charAt(i); if(c=='<')**

**encodedTag.append("<");**

**else if(c=='>')**

**encodedTag.append(">");**

**else if(c=='&')**

**encodedTag.append("&amp;");**

**else if(c=='"')**

**encodedTag.append("&quot;");**

**else if(c=='"')**

**encodedTag.append("&nbsp;");**

**else {**

**}**

**Dao connection;**

**package DAO.com;**

**import java.sql.Connection;**

**import java.sql.DriverManager;**

**import java.sql.ResultSet;**

**import java.sql.SQLException;**

**import java.sql.Statement;**

**import java.util.ArrayList;**

**import java.util.HashMap;**

**import java.util.List;**

**public class ConnectionUtil { public Connection con=null; public Statement st=null;**

**public ConnectionUtil() throws ClassNotFoundException, SQLException{ Class.forName("com.mysql.cj.jdbc.Driver");**

**con=DriverManager.getConnection("jdbc:mysql://localhost:3306/mphasis","root ","Root@password");**

**System.out.println("connection established with database"); st=con.createStatement();**

**}**

**public List<String[]> getAvailableFlights(String f, String t, String d) {**

**List<String[]> flights=new ArrayList<>();**

**String query="SELECT \* FROM flyaway.flights where fromf='"+f+"' and tof='"+t+"' and datef='"+d+"'";**

**try {**

**ResultSet rs=st.executeQuery(query);**

**if(rs.next()) {**

**String[] flight=new String[3]; flight[0]=rs.getString("name"); flight[1]=rs.getString("timef"); flight[2]=rs.getString("price"); flights.add(flight);**

**return flights;**

**}**

**} catch (SQLException e) { e.printStackTrace();**

**}**

**return null;**

**}**

**public HashMap<String, String> checkUser(String email, String password) { HashMap<String,String> user=null;**

**String query="select \* from user where email='"+email+"' and password='"+password+"'";**

**try {**

**ResultSet rs=st.executeQuery(query);**

**if(rs.next()) {**

**user=new HashMap<>();**

**user.put("name", rs.getString("name")); user.put("email",rs.getString("email")); user.put("phno",rs.getString("phno"));**

**user.put("adno",rs.getString("adno"));**

**}**

**return user;**

**} catch (SQLException e) { e.printStackTrace();**

**}**

**return user;**

**}**

**public boolean insertUser(HashMap<String, String> user) {**

**String query="INSERT INTO user (email, password, name, phno, adno) values('"+user.get("email")+"','"+user.get("password")+"','"+user.get("name")+"',' "+user.get("phno")+"','"+user.get("adno")+"')";**

**try {**

**st.execute(query);**

**return true;**

**} catch (SQLException e) { e.printStackTrace();**

**}**

**return false;**

**}**

**public boolean checkAdmin(String email, String password) {**

**try {**

**ResultSet rs=st.executeQuery("select \* from admin where email='"+email+"' and password='"+password+"'");**

**if(rs.next())**

**return true;**

**} catch (SQLException e) { e.printStackTrace();**

**}**

**return false;**

**}**

**public boolean changeAdminPassword(String email, String password) {**

**try {**

**ResultSet rs=st.executeQuery("select \* from admin where email='"+email+"'");**

**if(!rs.next()) {**

**return false;**

**}**

**st.execute("update admin set password='"+password+"' where email='"+email+"'");**

**return true;**

**} catch (SQLException e) {**

**e.printStackTrace();**

**}**

**return false;**

**}**

**public boolean insertFlight(HashMap<String, String> flight) throws SQLException {**

**System.out.println(flight.get("date"));**

**System.out.println(flight.get("time"));**

**String query1="INSERT into flyaway.flights (name,from,to,date,time,price) values('indigo','hyd','viz','24-02-2022','10:30','2000')";**

**return false;**

**}**

**}**

****