## DAO.java

**package** com.database;

**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;

**import** org.simplilearn.workshop.util.StringUtil;

**public** **class** Dao {

**public** Connection con=**null**;

**public** Statement st=**null**;

**public** Dao() **throws** ClassNotFoundException, SQLException{

Class.*forName*("com.mysql.cj.jdbc.Driver");

con=DriverManager.*getConnection*("jdbc:mysql://localhost:3306/flyaway","root","root");

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 {

//PreparedStatement stm=con.prepareStatement("INSERT INTO 'flyaway.flights' ('name', 'from', 'to', 'date', 'time', 'price') values(?,?,?,?,?,?)");

//String sql="INSERT INTO flights ('name','from','to','date','time','price') values('"+flight.get("name")+"','"+flight.get("from")+"','"+flight.get("to")+"','"+flight.get("date")+"','"+flight.get("time")+"','"+flight.get("price")+"');";

String query1 = "INSERT INTO flights (name, fromf, tof, datef, timef, price) VALUES" + " ('"

+ StringUtil.fixSqlFieldValue(flight.get("name")) + "'," + " '" + StringUtil.fixSqlFieldValue(flight.get("from")) + "'," + " '"

+ StringUtil.fixSqlFieldValue(flight.get("to")) + "'," + " '" + StringUtil.fixSqlFieldValue(flight.get("date")) + "'," + " '"

+ StringUtil.fixSqlFieldValue(flight.get("time")) + "'," + " '" + StringUtil.fixSqlFieldValue(flight.get("price")) + "')";

//String sql="INSERT INTO `flyaway`.`flights` (`name`, `fromf`, `tof`, `datef`, `timef`, `price`) VALUES ('indigo', 'hyd', 'viz', '2021-04-08', '10:00', '2000');";

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')";

**try** {

//stm.execute();

st.execute(query1);

**return** **true**;

} **catch** (SQLException e) {

System.***out***.print("error");

e.printStackTrace();

}

**return** **false**;

}

}

## StringUtil

**------------**

**package** org.simplilearn.workshop.util;

**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**

encodedTag.append(c);

}

**return** encodedTag.toString();

}

}

**package** org.simplilearn.workshop.util;

**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**

encodedTag.append(c);

}

**return** encodedTag.toString();

}

}

**package** com.servlets;

**import** java.io.IOException;

**import** java.sql.SQLException;

**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;

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

**import** com.database.Dao;

@WebServlet("/FlightList")

**public** **class** FlightList **extends** HttpServlet {

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

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

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

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

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

**try** {

Dao dao = **new** Dao();

List<String[]> flights=dao.getAvailableFlights(from, to, departure);

HttpSession session=request.getSession();

session.setAttribute("flights", flights);

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

// **TODO** Auto-generated catch block

e.printStackTrace();

}

response.sendRedirect("FlightList.jsp");

}

}

**package** com.servlets;

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

**import** java.io.IOException;

**import** java.sql.SQLException;

**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** com.database.Dao;

@WebServlet("/ForgotPassword")

**public** **class** ForgotPassword **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** {

Dao dao=**new** Dao();

HttpSession session=request.getSession();

**if**(dao.changeAdminPassword(email,password)) {

session.setAttribute("message", "Password Changed Successfully");

}

**else** {

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

}

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

// **TODO** Auto-generated catch block

e.printStackTrace();

}

response.sendRedirect("AdminPage.jsp");

}

}

**package** com.servlets;

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

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

**import** java.io.IOException;

**import** java.sql.SQLException;

**import** java.util.HashMap;

**import** javax.servlet.ServletException;

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

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

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

**import** com.database.Dao;

@WebServlet("/InsertFlight")

**public** **class** InsertFlight **extends** HttpServlet {

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

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

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

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

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

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

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

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

HashMap<String,String> flight=**new** HashMap<>();

flight.put("name", name);

flight.put("from", from);

flight.put("to", to);

flight.put("date", departure);

flight.put("time", time);

flight.put("price", price);

**try** {

Dao dao=**new** Dao();

HttpSession session=request.getSession();

**if**(dao.insertFlight(flight)) {

session.setAttribute("message", "Flight Added Successfully");

}

**else** {

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

}

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

// **TODO** Auto-generated catch block

System.***out***.print("error");

e.printStackTrace();

}

response.sendRedirect("AdminHome.jsp");

}

}

**package** com.servlets;

**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");

}

}

**package** com.servlets;

**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** com.database.Dao;

@WebServlet("/UserLogin")

**public** **class** UserLogin **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** {

Dao dao=**new** Dao();

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();

}

}

}

**package** com.servlets;

**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** com.database.Dao;

@WebServlet("/UserRegistration")

**public** **class** UserRegistration **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** {

Dao dao=**new** Dao();

**boolean** result=dao.insertUser(user);

HttpSession session=request.getSession();

**if**(result) {

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

}

**else** {

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

}

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

// **TODO** Auto-generated catch block

e.printStackTrace();

}

response.sendRedirect("UserPage.jsp");

}

}

## Web.xml

--------

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://xmlns.jcp.org/xml/ns/javaee"* xsi:schemaLocation=*"http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app\_4\_0.xsd"* version=*"4.0"*>

<display-name>FlyAway</display-name>

<welcome-file-list>

<welcome-file>index.html</welcome-file>

<welcome-file>index.htm</welcome-file>

<welcome-file>index.jsp</welcome-file>

<welcome-file>default.html</welcome-file>

<welcome-file>default.htm</welcome-file>

<welcome-file>default.jsp</welcome-file>

</welcome-file-list>

</web-app>

## POM.XML

<project xmlns="http://maven.apache.org/POM/4.0.0" 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>org.simplilearn.workshop</groupId>

<artifactId>FlyAway</artifactId>

<version>1.0-SNAPSHOT</version>

<packaging>war</packaging>

<name>FlyAway</name>

<description>FlyAway is a ticket-booking portal that lets people book flights on their website.</description>

<properties>

<maven.compiler.source>1.8</maven.compiler.source>

<maven.compiler.target>1.8</maven.compiler.target>

</properties>

<build>

<plugins>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-war-plugin</artifactId>

<version>2.6</version>

<configuration>

<failOnMissingWebXml>false</failOnMissingWebXml>

</configuration>

</plugin>

</plugins>

</build>

<dependencies>

<dependency>

<groupId>javax.servlet.jsp</groupId>

<artifactId>javax.servlet.jsp-api</artifactId>

<version>2.3.3</version>

<scope>provided</scope>

</dependency>

<dependency>

<groupId>javax.servlet</groupId>

<artifactId>javax.servlet-api</artifactId>

<version>4.0.1</version>

<scope>provided</scope>

</dependency>

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

<version>8.0.23</version>

</dependency>

</dependencies>

</project>