Dao.java >> Dao class having all the database related objects

==

```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","Host");
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+"'";
```

```java
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();
```

```java
        }
        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("phn
o
")+"','"+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
{
```

```java
                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 {
```

```java
            //stm.execute();
st.execute(query1);                return
true;
        } catch (SQLException e) {
System.out.print("error");
e.printStackTrace();           }
            return false;
    }


}
```

===

All Servlet Classes

AdminLogin.java >>> Java Code for admin login page

===

```java
package com.servlets;


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 com.database.Dao;


@WebServlet("/AdminLogin")
public class AdminLogin extends HttpServlet {
```

```java
        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();

                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();

                }


        }


}
```

==

FlightList.java

==

```java
package com.servlets;
```

```java
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
```

```java
                e.printStackTrace();

}

        response.sendRedirect("FlightList.jsp");

    }


}
```

==

ForgotPassword.java

==

```java
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();
```

```java
                    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");
            }


}
```

==

InsertFlight.java

==

```java
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;
```

```java
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 {
```

```java
                              session.setAttribute("message", "Invalid Details");
                    }
          } catch (ClassNotFoundException | SQLException e) {
                    // TODO Auto-generated catch block
System.out.print("error");
e.printStackTrace();              }
            response.sendRedirect("AdminHome.jsp");
      }


}
```

==

LogOut.java

==

```java
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 {
```

```java
                HttpSession session=request.getSession();
session.setAttribute("user",null);
response.sendRedirect("HomePage.jsp");
        }


}
```

==

UserLogin.java

==

```java
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");
```

```java
                    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();
        }


    }

}
```

===

UserRegistration.java

===

```java
package com.servlets;


import javax.servlet.annotation.WebServlet;
import java.io.IOException;  import
java.sql.SQLException;

import java.util.HashMap;
```

```java
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 {
```

```java
                        session.setAttribute("message","Invalid Details");
                }
        } catch (ClassNotFoundException | SQLException e) {
// TODO Auto-generated catch block
e.printStackTrace();                    }
                response.sendRedirect("UserPage.jsp");
        }


}
```

==
StringUtil.java

==

```java
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();

        }
```

```java
    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("&");

                else if(c=='"')

                            encodedTag.append("\"");

                else if(c==' ')

                            encodedTag.append(" ");

                else

                            encodedTag.append(c);

                }

return encodedTag.toString();              }


}
```

==
All JSP Pages

AdminHome.jsp

<%@ page language="

java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>

<!DOCTYPE html>

<html>

```html
<head>
<meta charset="ISO-8859-1">
<title>Admin Home</title></head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none
;font-size:35px;font-weight:bold;">FlyAway</a>
<br><br>
<center>
<h1>Insert New Flight Details</h1>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px" align="center">
<form action=InsertFlight method=post>
            <label for=name>Name :-</label> <input type="text" name=name id=name /><br><br>
            <label for=from>From :-</label> <input type="text" name=from id=from /><br><br>
            <label for=to>To :-</label> <input type="text" name=to id=to /><br><br>
             <label for=departure>Departure :-</label> <input type="date" name=departure id=departure
/><br><br>
             <label for=time>Time :-</label> <input type="time" name=time id=time /><br><br>
             <label for=price>Price :-</label> <input type="text" name=price id=price /><br><br>
             <input type=submit value=submit /> <input type=reset />
</form>
</div>
</center>
<%
            String message=(String)session.getAttribute("message");
             if(message!=null){
%>
<p style="color:silver;"><%=message %></p>
<%
                session.setAttribute("message", null);
            }
```

```
%>
</body>
</html>

=======================================================================
AdminPage.jsp
<%@ page language="
java" contentType="text/html; charset=ISO-8859-1"  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Admin Page</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none
;font-size:35px;font-weight:bold;">FlyAway</a>
<br><br>
<center>
<h2>Admin Login</h2>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px" align="center">
<form action=AdminLogin method=post>
        <label for=email>Email :-</label> <input type="email" name=email id=email /><br><br>
        <label for=pass>Password :-</label> <input type="password" name=password id=pass  /><br><br>
        <input type=submit value=submit /> <input type=reset />
</form>
</div></center><br>
<a href=ForgotPassword.jsp style="font-size:25;color:red;">Forgot Password</a>
<%
        String message=(String)session.getAttribute("message");
        if(message!=null){
%>
```

```jsp
<p style="color:silver;"><%=message %></p>
<%
                    session.setAttribute("message", null);
            }
%>
</body>
</html>
```

===

BookFlight.jsp

```jsp
<%@ page language="
java" contentType="text/html; charset=ISO-8859-1"  pageEncoding="ISO-8859-1"%>
<%@ page import="
java.util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>FlyAway</title>
</head>
<body >
<br><a href=HomePage.jsp style="color:black;text-decoration:none
;font-size:35px;font-weight:bold;">FlyAway</a>
<br><br>
<%
            @SuppressWarnings("unchecked")
            HashMap<String,String> user=(HashMap<String,String>)session.getAttribute("user");
            if(user==null){
                    response.sendRedirect("UserPage.jsp");
            }
%>
<p align="center" style="color:green;font-size:40px;font-weight:bold">Flight Booked Successfully</p>
</body>
</html>
```

```
========================================================================
FlightList.jsp
<%@ page language="
java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<!DOCTYPE html> <%@
page import="
java.util.*" %>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Flight List</title>
</head>
<body >
<br>
<a href=HomePage.jsp
style="color:black;text-decoration:none;font-size:35px;font-weight:bold;">FlyAway</a>
<br><br>
<%
        @SuppressWarnings("unchecked")
        List<String[]> flights=(List<String[]>)session.getAttribute("flights");
        if(flights!=null){
%>
<h1>Available Flights</h1>
<center>
<table border="1">
<tr>
        <th>Name</th>
        <th>Time</th>
        <th>Price</th>
</tr>
<%
        for(String[] flight:flights){
%>
```

```jsp
<tr>
<td><%=flight[0]%></td>
<td><%=flight[1]%></td>
<td><%=flight[2]%></td>
</tr>
</table>
</center>
<center><a href=BookFlight.jsp>Book Now</a> </center>
<%
        }
%><%
        }
else{
%>
<h1>There are no available flights</h1>
<%
            }
%>
</body>
</html>
```

===

ForgotPassword.jsp

```jsp
<%@ page language="
java" contentType="text/html; charset=ISO-8859-1"  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none
```

```
;font-size:35px;font-weight:bold;">FlyAway</a>

<br><br>

<center>

<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px" align="center">

<form action=ForgotPassword method=post>

        <label for=email>Email :-</label> <input type="email" name=email id=email /><br><br>

        <label for=pass>New Password :-</label> <input type="password" name=password id=pass
/><br><br>

         <input type=submit value=submit /> <input type=reset />

</form>

</div>

</center>

</body>

</html>
```

===

HomePage.jsp

```
<%@ page language="

java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>

<%@ page import="

java.util.*" %>

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>FlyAway</title>

</head>

<body >

<h1>FlyAway</h1>

<div align="right">

<a href="AdminPage.jsp">Admin Login</a>

</div>

<%

        @SuppressWarnings("unchecked")
```

```jsp
        HashMap<String,String> user=(HashMap<String,String>)session.getAttribute("user");

        if(user!=null){
%>
<p>Welcome <%=user.get("name") %></p>
<a href="Logout">Logout</a>
<%
}else{
%>
<a href=UserPage.jsp>User Login</a>
<%
}
%>
<br><br>
<center>
<div style="border:5px solid black;width:25%;border-radius:20px;padding:20px" align="center">
<form action=FlightList method=post>
        <label for=from>From :-</label> <input type=text name=from id=from/><br><br>
        <label for=to>To :-</label> <input type=text name=to id=to/><br><br>
<label for=departure>Departure :-</label> <input type=date name=departure
id=departure/><br><br>
        <label for=travellers>Travellers :-</label> <input type=number name=travellers
id=travellers/><br><br>
        <input type=submit value=Search /> <input type=reset />
</form>
</div>
</center>
</body>
</html>
```

==

```jsp
UserPage.jsp<%@ page language=" java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
```

```html
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none
;font-size:35px;font-weight:bold;">FlyAway</a>
<br><br>
<center>
<h2>User Login</h2>
<div style="border:2px solid black;width:25%;border-radius:20px;padding:20px" align="center">
<form action=UserLogin method=post >
<table >
<tr>
<td><label for=email>Email</label><br></td>
<td><input type="email" name=email id=email /></td>
</tr>
<tr>
<td><label for=pass>Password</label><br></td>
<td><input type="password" name=password id=pass /></td>
</tr>
<tr>
<td><input type=submit value=submit /></td><td><input type=reset /></td>
</tr>
</table>
</form>
</div>
</center>
<br><br>
<i>New User-Create account</i>
<h4><a href=UserRegistration.jsp style="font-size:25;color:red;">Create Account</a></h4>
<%
```

```jsp
            String message=(String)session.getAttribute("message");

            if(message!=null){
%>
<p style="color:silver;"><%=message %></p>
<%

                session.setAttribute("message", null);

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

==

```jsp
UserRegistration.jsp  <%@
page language="
java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head><meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none
;font-size:35px;font-weight:bold;">FlyAway</a>
<br><br>
<center>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px" align="center">
<form action=UserRegistration method=post>
        <label for=email>Email :-</label> <input type="email" name=email id=email /><br><br>
<label for=pass>Password :-</label> <input type="password" name=password id=pass
/><br><br>
        <label for=name>Name :-</label> <input type="text" name=name id=name /><br><br>
        <label for=phno>Phone No. :-</label> <input type="text" name=phno id=phno /><br><br>
```

```html
        <label for=adno>Aadhaar No. :-</label> <input type="text" name=adno id=adno /><br><br>

        <input type=submit value=submit /> <input type=reset />

</form>

</div>

</center>

</body>

</html>
```