Project: FlyAway

Source Code

DAO Class

```
package com.flightbooking.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
com.simplelearn.util.*; 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:mysq
1://localhost:3306/db", "root", "DeepaliPoly@12345"); 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 db.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
      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")) + "')";
      System.out.println(flight.get("date"));
      System.out.println(flight.get("time"));
try {
//stm.execute();
st.execute(query1); return
} catch (SQLException e) {
System.out.print("error");
e.printStackTrace(); }
return false;
}
}
```

<u>SERVLETS</u>



FilghtInsert.java

```
package com.flightbooking.servlets;
                                     import
javax.servlet.annotation.WebServlet;
import
            javax.servlet.http.HttpServlet;
           java.io.IOException;
import
                                     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.flightbooking.database.ConnectionUtil;
@WebServlet("/InsertFlight")
public class FilghtInsert 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 {
                    ConnectionUtil dao=new ConnectionUtil();
                    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");
      }
}
```

```
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.flightbooking.database.ConnectionUtil;
@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 {
  ConnectionUtil
                    dao=new
                               ConnectionUtil();
                                                       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");
       }
}
                                    ListOfFlights.java
package com.flightbooking.servlets;
     import
                  java.io.IOException;
                                            import
java.sql.SQLException;
                          import
                                   java.util.List;
         javax.servlet.ServletException;
                                            import
javax.servlet.annotation.WebServlet;
                                            import
                                            import
javax.servlet.http.HttpServlet;
javax.servlet.http.HttpServletRequest;
                                            import
```

import

package com.flightbooking.servlets;

javax.servlet.http.HttpServletResponse;

```
javax.servlet.http.HttpSession;
                                           import
com.flightbooking.database.ConnectionUtil;
@WebServlet("/FlightList")
public class ListOfFlights 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 {
                    ConnectionUtil dao = new ConnectionUtil();
     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.flightbooking.servlets;
              java.io.IOException;
                                       import
java.sql.SQLException;
                                       import
javax.servlet.ServletException;
                                       import
javax.servlet.annotation.WebServlet;
                                       import
                                       import
javax.servlet.http.HttpServlet;
javax.servlet.http.HttpServletRequest;
import
javax.servlet.http.HttpServletResponse;
import
             javax.servlet.http.HttpSession;
import
com.flightbooking.database.ConnectionUtil;
@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();
```



```
package com.flightbooking.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.flightbooking.database.ConnectionUtil;
@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);
                                   session=request.getSession();
                    HttpSession
                    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.flightbooking.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"); }
}
                                 RegistrationOfUser.java
package com.flightbooking.servlets;
             javax.servlet.annotation.WebServlet;
   import
import
               java.io.IOException;
java.sql.SQLException; import java.util.HashMap;
        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.flightbooking.database.ConnectionUtil;
@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
                             user.put("email",
             HashMap<>();
                                                   email);
             user.put("password",
                                                password);
```

```
user.put("name",
                               name); user.put("phno",
              phno); user.put("adno", adno);
              try {
      ConnectionUtil dao=new ConnectionUtil();
                                                     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");
       }
}
                                     StringUtil.java
package com.simplelearn.util;
public class StringUtil { public static String
fixSqlFieldValue(String value) { if (value == null) {
return null;
              int length = value.length();
              StringBuffer
                                      fixedValue
              StringBuffer((int)(length*1.1)); for(int i = 0; i < length</pre>
              ;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 =</pre>
              tag.charAt(i); if(c=='<') encodedTag.append("<");</pre>
                    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();
```

```
}
```

<mark>JSP</mark>



AdminHome.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE 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-</pre>
weight:bold;">Flight Booking</a>
<br><br><br>>
<h1>Insert New Flight Details</h1>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px"</pre>
align="center">
<form action=InsertFlight method=post>
      <label for=name>Name :-</label> <input type="text" name=name id=name</pre>
/><br><br>
      <label for=from>From :-</label> <input type="text" name=from id=from</pre>
/><br><br>
      <label for=to>To :-</label> <input type="text" name=to id=to /><br>
      <label for=departure>Departure :-</label> <input type="date" name=departure</pre>
id=departure /><br>
      <label for=time>Time :-</label> <input type="time" name=time id=time</pre>
/><br><br>
      <label for=price>Price :-</label> <input type="text" name=price id=price</pre>
/><br><br>
      <input type=submit value=submit /> <input type=reset />
</form>
</div>
<%
      String message=(String)session.getAttribute("message");
      if(message!=null){
%>
<%=message %>
<% session.setAttribute("message", null); }</pre>
</body>
</html>
```



```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   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-</pre>
weight:bold;">Flight Booking</a>
<br><br><br>>
<h2>Admin Login</h2>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px"</pre>
align="center">
<form action=AdminLogin method=post>
      <label for=email>Email :-</label> <input type="email" name=email id=email</pre>
/><br><br>
      <label for=pass>Password :-</label> <input type="password" name=password</pre>
id=pass /><br><br>
      <input type=submit value=submit /> <input type=reset />
</form> </div>
<a href=ForgotPassword.jsp style="font-size:25;color:red;">Forgot Password</a>
<%
      String message=(String)session.getAttribute("message");
      if(message!=null){
%>
<%=message %>
<% session.setAttribute("message", null); }</pre>
</body>
                                       </html>
```



```
<%@ 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>
<br/>
<a href=HomePage.jsp style="color:black;text-decoration:none ;font-size:35px;font-weight:bold;">Flight Booking</a>
<br/>
<br/
```



```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
   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-</pre>
weight:bold;">Flight Booking</a>
<br><br><br><
<%
     @SuppressWarnings("unchecked")
     List<String[]> flights=(List<String[]>)session.getAttribute("flights");
      if(flights!=null){
%>
<h1>Available Flights</h1>
Name
      Time
      Price
for(String[]
<%
     flight:flights){
%>
<%=flight[0]%>
<%=flight[1]%>
<%=flight[2]%>
```

```
<%
       }
%>
<% } else{
%>
<h1>There are no available flights</h1>
       }
%>
</body>
</html>
                                     ForgotPassword.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    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-</pre>
weight:bold;">Flight Booking</a>
<br><br><br>>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px"</pre>
align="center">
<form action=ForgotPassword method=post>
       <label for=email>Email :-</label> <input type="email" name=email id=email</pre>
/><br><br>
       <label for=pass>New Password :-</label> <input type="password" name=password</pre>
id=pass /><br><br>
       <input type=submit value=submit /> <input type=reset />
</form>
</div>
</body>
                                        </html>
                                      HomePage.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Flight Booking</title>
</head>
```

Book Now

<body >

```
<h1>FlyAway</h1>
<div align="right">
<a href="AdminPage.jsp">Admin Login</a>
</div>
<%
      @SuppressWarnings("unchecked")
      HashMap<String,String>
user=(HashMap<String,String>)session.getAttribute("user"); if(user!=null){
Welcome <%=user.get("name") %>
<a href="Logout">Logout</a>
<%
      }else{
%>
<a href=UserPage.jsp>User Login</a>
<%
      }
%> <br><br>
<div style="border:5px solid black;width:25%;border-radius:20px;padding:20px"</pre>
align="center">
<form action=FlightList method=post>
      <label for=from>From :-</label> <input type=text name=from id=from/><br>
      <label for=to>To :-</label> <input type=text name=to id=to/><br>
      <label for=departure>Departure :-</label> <input type=date name=departure</pre>
id=departure/><br>
      <label for=travellers>Travellers :-</label> <input type=number</pre>
name=travellers id=travellers/><br><br>
      <input type=submit value=Search /> <input type=reset />
</form>
</div>
</body>
                                       </html>
                                      UserPage.jsp
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<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-</pre>
weight:bold;">Flight Booking</a>
<br><br><br>>
<h2>User Login</h2>
<div style="border:2px solid black;width:25%;border-radius:20px;padding:20px"</pre>
align="center">
```

<form action=UserLogin method=post >

```
<label for=email>Email</label><br>
   <input type="email" name=email id=email />
   <label for=pass>Password</label><br>
   <input type="password" name=password id=pass />
   <input type=submit value=submit />
   <input type=reset />
   </form>
</div>
<br><br><br>>
<i>New User-Create account</i>
<h4><a href=UserRegistration.jsp style="font-size:25;color:red;">Create</a>
Account</a></h4>
<%
     String message=(String)session.getAttribute("message");
     if(message!=null){
%>
<%=message %>
<% session.setAttribute("message", null); }</pre>
</body>
                                </html>
                             UserRegistration.jsp
```

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</pre>
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html> <head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body >
<a href=HomePage.jsp style="color:black;text-decoration:none ;font-size:35px;font-</pre>
weight:bold;">Flight Booking</a>
<br><br><br>>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px"</pre>
align="center">
<form action=UserRegistration method=post>
       <label for=email>Email :-</label> <input type="email" name=email id=email</pre>
/><br><br>
      <label for=pass>Password :-</label> <input type="password" name=password</pre>
id=pass /><br><br>
```

```
<label for=name>Name :-</label> <input type="text" name=name id=name</pre>
/><br><br>
      <label for=phno>Phone No. :-</label> <input type="text" name=phno id=phno</pre>
/><br><br>
      <label for=adno>Aadhaar No. :-</label> <input type="text" name=adno id=adno</pre>
/><br><br>
      <input type=submit value=submit /> <input type=reset />
</form>
</div>
</body>
                                     </html>
                                     web.xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
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>Flight Booking</display-name>
  <welcome-file-list>
    <welcome-file>UserRegistration.jsp</welcome-file>
    <welcome-file>AdminHome.jsp</welcome-file>
    <welcome-file>AdminPage.jsp</welcome-file>
    <welcome-file>FlightList.jsp</welcome-file>
    <welcome-file>BookFlight.jsp</welcome-file>
    <welcome-file>ForgotPassword.jsp</welcome-file>
    <welcome-file>HomePage.jsp</welcome-file>
    <welcome-file>UserPage.jsp</welcome-file>
 </welcome-file-list> </web-app>
                                     pom.xml
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
 <artifactId>FlyAway</artifactId>
  <version>1.0-SNAPSHOT
 <packaging>war</packaging>
  <name>FlyAway</name>
  <description>FlyAway is a ticket-booking portal that lets people book flights on
their website.</description>
 cproperties>
             <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
  <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
  <scope>provided</scope>
  </dependency>
          <dependency>
                <groupId>javax.servlet
                <artifactId>javax.servlet-api</artifactId>
                <version>4.0.1
                <scope>provided</scope>
          </dependency>
          <dependency>
              <groupId>mysql
              <artifactId>mysql-connector-java</artifactId>
              <version>8.0.23
          </dependency>
    </dependencies> </project>
```