ConnectionUtil.java

```
package com;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.ArrayList;
import com.StringUtil;
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/flyaway","root","qwertyu
iop");
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")+"','"+u
ser.get("phno")+"','"+user.get("adno")+"')";
st.execute(query);
return true;
} catch (SQLException e) {
e.printStackTrace();
}
return false;
public boolean checkAdmin(String email, String password) {
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) {
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',
'fromf', 'tof', 'datef', 'timef', 'price') values(?,?,?,?,?)");
String sql="INSERT INTO flights ('name', 'fromf', 'tof', 'datef', 'timef', 'price')
values('"+flight.get("name")+"','"+flight.get("fromf")+"','"+flight.get("tof")+"','"
+flight.get("datef")+"','"+flight.get("timef")+"','"+flight.get("price")+"');";
```

```
String query1 = "INSERT INTO flights (name, fromf, tof, datef, timef, price) VALUES"
+ StringUtil.fixSqlFieldValue(flight.get("name")) + "'," + " '"
+ StringUtil.fixSqlFieldValue(flight.get("fromf")) + "'," + " '"
+ StringUtil.fixSqlFieldValue(flight.get("tof")) + "'," + " '" +
StringUtil.fixSqlFieldValue(flight.get("datef")) + "'," + " '"
+ StringUtil.fixSqlFieldValue(flight.get("timef")) + "'," + " '"
+ StringUtil.fixSqlFieldValue(flight.get("price")) + "')";
System.out.println(flight.get("datef"));
System.out.println(flight.get("timef"));
try {
//stm.execute();
st.execute(query1);
return true;
} catch (SQLException e) {
System.out.print("error");
e.printStackTrace();
}
return false;
}
}
```

FlightInsert.java

```
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.HttpServletResponse;
```

```
import com.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> flight=new HashMap<>();
flight.put("name", name);
flight.put("fromf", from);
flight.put("tof", to);
flight.put("datef", departure);
flight.put("timef", 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");
}
```

ForgotPassword.java

```
package com;
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.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;
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.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");
}
```

LoginOfAdmin.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.HttpServletResponse;
```

```
import com.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();
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();
}
```

LoginOfUser.java

```
package com;
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.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> user=dao.checkUser(email,password);
HttpSession session=request.getSession();
if(user!=null) {
session.setAttribute("user", user);
response.sendRedirect("index.jsp");
}
```

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

StringUtil.java

```
package com;
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++) {</pre>
                    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++) {</pre>
                    char c = 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();
      }
}
```

RegistrationOfUser.java

```
package com;
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.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 HashMap<>();
user.put("email", 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");
}
```

Logout.java

```
package com;
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("index.jsp");
}
}
```

pom.xml

```
cproject 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
 <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>
<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>8.0.30
</dependency>
```

```
</dependencies>
</project>
```

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>
```

Index.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>Flight Booking</title>
</head>
<body align="center">
<h1>FlyAway</h1>
<div align = "center" >
<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><br>>
<div align = "center">
<div style="border:5px solid black;width:25%;border-radius:20px;padding:20px" align =</pre>
"center">
<form action=FlightList method=post>
<label for=from> From :-</label> <input type=text name=from</pre>
id=from/><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=travellers> Travellers :-</label> <input type=number</pre>
name=travellers id=travellers/><br><br>
<input type=submit value=Search /> <input type=reset />
</form>
</div></div>
</body>
</html>
```

AdminHome.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 Home</title>
</head>
<body align= "center">
<br/>
<br/>
```

```
<a href=index.jsp style="color:black;text-decoration:none ;font-</pre>
size:35px;font_weight:bold;">Flight Booking</a>
<br><br><br>>
<h1>Insert New Flight Details</h1>
<div align = "center">
<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>
</div>
<%
String message=(String)session.getAttribute("message");
if(message!=null){
<%=message %>
session.setAttribute("message", null);
}
%>
</body>
</html>
```

AdminPage.jsp

```
<a href=index.jsp style="color:black;text-decoration:none ;font-</pre>
size:35px;font_weight:bold;">Flight Booking</a>
<br><br><br>>
<h2>Admin Login</h2>
<div align = "center">
<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></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);
</body>
</html>
```

BookFlight.jsp

```
HashMap<String,String>
user=(HashMap<String,String>)session.getAttribute("user");
if(user==null){
response.sendRedirect("UserPage.jsp");
}
%>

    align="center" style="color:green; font-size:40px; font-weight:bold">Flight
Booked Successfully
</body>
</html>
```

FlightList.jsp

```
<%@ 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 align= "center">
<a href=index.jsp style="color:black;text-decoration:none;font-</pre>
size:35px;font_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>
<div align = "center">
Name
Time
Price
for(String[] flight:flights){
%>
<%=flight[0]%>
<\td><\flight[1]\%>
```

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 align= "center">
<a href=index.jsp style="color:black;text-decoration:none ;font-</pre>
size:35px;font weight:bold;">Flight Booking</a>
<br><br><br>>
<div align = "center">
<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"</pre>
name=password id=pass /><br>
<input type=submit value=submit /> <input type=reset />
</form>
</div></div>
</body>
</html>
```

UserPage.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 align= "center">
<br>
<a href=index.jsp style="color:black;text-decoration:none ;font-</pre>
size:35px;font_weight:bold;">Flight Booking</a>
<br><br><br>>
<h2>User Login</h2>
<div align = "center">
<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></div>
<br><br><br>></pr>
<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);
}
%>
</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 align= "center">
<a href=index.jsp style="color:black;text-decoration:none ;font-</pre>
size:35px;font_weight:bold;">Flight Booking</a>
<br><br><br>>
<div align = "center">
<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>
<label for=phno>Phone No. :-</label> <input type="text" name=phno id=phno</pre>
<label for=adno> Aadhaar No. :-</label> <input type="text" name=adno id=adno</pre>
<input type=submit value=submit /> <input type=reset />
</form>
</div></div>
</body>
</html>
```