FlyAway (An Airline Booking Portal)

githubLink:

https://github.com/ramani04/simplilern/tree/main/FlyAway dataBase.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 com.String.StringUtil; public class database { public Connection con=null; public Statement st=null; public database() throws ClassNotFoundException, SQLException{ Class.forName("com.mysql.jdbc.Driver");

con=DriverManager.getConnection("jdbc:mysql://localhost:3306/flyaway","root","ra mani44");

> 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")+"', "name")+"', "name", "name"
("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("dat
e")+"',""+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;
}
}
AdminLogin.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.database;
@WebServlet("/AdminLogin")
public class AdminLogin extends HttpServlet {
       private static final long serialVersionUID = 1L;
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
       String email=request.getParameter("email");
```

```
try {
                     database dao=new database();
                     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
package com.Servlets;
import java.io.IOException;
import java.sql.SQLException;
import java.util.List;
```

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

```
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.database;
@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 {
                     database dao = new database();
                     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");
       }
}
ForgotPassword.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.database;
@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 {
                     database dao=new database();
```

```
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
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.database;
@WebServlet("/InsertFlight")
public class InsertFilght 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("from", from);
              flight.put("to", to);
              flight.put("date", departure);
              flight.put("time", time);
              flight.put("price", price);
              try {
                     database dao=new database();
                     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");
}
```

Logout.java

```
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.HttpServletResponse;
import javax.servlet.http.HttpServletResponse;
```

```
@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");
       }
}
UserLogin.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.database;
@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 {
                     database dao=new database();
                     HashMap<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();
              }
}
}
```

UserRegisiration.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.database;
@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> user=new HashMap<>();
              user.put("email", email);
```

```
user.put("name", name);
              user.put("phno", phno);
              user.put("adno", adno);
              try {
                      database dao=new database();
                      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.String;
public class StringUtil {
       public static String fixSqlFieldValue(String value) {
              if (value == null) {
                      return null;
              }
              int length = value.length();
```

user.put("password", password);

```
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("&");
                      else if(c=='"')
                             encodedTag.append(""");
                      else if(c==' ')
                             encodedTag.append(" ");
                      else
                             encodedTag.append(c);
              return encodedTag.toString();
       }
}
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-</p>
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"</pre>
align="center">
<form action=InsertFlight method=post>
      <label for=name>Name :-</label> <input type="text" name=name id=name</pre>
/><br><
      <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=time>Time :-</label> <input type="time" name=time id=time /><br>
      <label for=price>Price :-</label> <input type="text" name=price id=price /><br>
      <input type=submit value=submit /> <input type=reset />
</form>
</div>
</center>
<%
      String message=(String)session.getAttribute("message");
      if(message!=null){
%>
<%=message %>
             session.setAttribute("message", null);
      }
%>
</body>
</html>
AdminPage.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 Page</title>
</head>
<body >
<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"</pre>
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</pre>
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){
%>
<%=message %>
             session.setAttribute("message", null);
      }
%>
</body>
</html>
BookFlight.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>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");
      }
%>
Flight Booked
Successfully
</body>
</html>
FilghtList.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 >
<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>
Name
      Time
      Price
<%
      for(String[] flight:flights){
%>
```

```
<\td><\td>/td>
<\td><\td>\(\)
</center>
<center><a href=BookFlight.jsp>Book Now</a> </center>
<%
     }
%>
<%
     }
     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-
weight:bold;">FlyAway</a>
<br>>dr><br>
<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" name=password</pre>
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"</pre>
  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")
      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>>dr><br>
<center>
<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>
```

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 >
<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"</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 />
```

```
</form>
</div>
</center>
<br>>dr><br>
<i>New User-Create account</i>
<h4><a href=UserRegistration.jsp style="font-size:25;color:red;">Create Account</a></h4>
<%
      String message=(String)session.getAttribute("message");
      if(message!=null){
%>
<%=message %>
<%
             session.setAttribute("message", null);
      }
%>
</body>
</html>
UserRegistrion.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-
weight:bold;">FlyAway</a>
<br>>dr><br>
<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>
/><br><
      <label for=phno>Phone No. :-</label> <input type="text" name=phno id=phno
/><br><
```