FlyAway (An airline Booking Portal)
(Project Screenshot)

Version history:

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Purpose	Sprint work and Project Specifications
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Contents:

☐ **Source Code**

1. Source Code:

1.1(a): DataBase(Dao.Java):

```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","
usha");
        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;
            }
```

```java
			} 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")+"')";

		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;
```

```java
}

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")+"','"+fl
ight.get("date")+"','"+flight.get("time")+"','"+flight.get("price")+"');";
    String query1 = "INSERT INTO flights (name, fromf, tof, datef, timef, price)
VALUES" + " ('"
                + StringUtil.fixSqlFieldValue(flight.get("name")) + "'," + " '" +
StringUtil.fixSqlFieldValue(flight.get("from")) + "'," + " '"
                + StringUtil.fixSqlFieldValue(flight.get("to")) + "'," + " '" +
StringUtil.fixSqlFieldValue(flight.get("date")) + "'," + " '"
                + StringUtil.fixSqlFieldValue(flight.get("time")) + "'," + " '" +
StringUtil.fixSqlFieldValue(flight.get("price")) + "')";

    //String sql="INSERT INTO `flyaway`.`flights` (`name`, `fromf`, `tof`,
`datef`, `timef`, `price`) VALUES ('indigo', 'hyd', 'viz', '2021-04-08', '10:00',
'2000');";
    System.out.println(flight.get("date"));
    System.out.println(flight.get("time"));
    //String query1="INSERT into flyaway.flights (name,from,to,date,time,price)
values('indigo','hyd','viz','24-02-2022','10:30','2000')";
    try {
        //stm.execute();
        st.execute(query1);
        return true;
    } catch (SQLException e) {
        System.out.print("error");
        e.printStackTrace();
    }
    return false;
}
}
```

1.1(b):Servlets (AdminLogin.java)

```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 {
        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();
            }

    }

}
```

1.1(c): FirstFlight.Java:

```java
package com.servlets;


import java.io.IOException;
import
java.sql.SQLException;
import java.util.List;

import javax.servlet.ServletException;
import
javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import
javax.servlet.http.HttpServletRequest;
import
javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

import

com.database.Dao;

@WebServlet("/FlightLis

t")
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);
```

1.1(D): 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("/ForgotPasswor
d")
public class ForgotPassword extends HttpServlet
        { private static final long serialVersionUID
        = 1L;
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {

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

                try {
                        Dao dao=new Dao();
                        HttpSession session=request.getSession();
                        if(dao.changeAdminPassword(email,passwor
                        d)) {
                                session.setAttribute("message", "Password Changed
                                Successfully");
                        }
                        else {
                                session.setAttribute("message", "Invalid Details");
                        }
                } catch (ClassNotFoundException | SQLException e) {
                        // TODO Auto-generated catch
```

1.1(e): Insert Flight.Java:

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

```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.HttpSession;

import com.database.Dao;


@WebServlet("/InsertFlight")
public class InsertFlight extends HttpServlet {
        private static final long serialVersionUID = 1L;
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {

                String
                name=request.getParameter("name");
                String
                from=request.getParameter("from");
                String to=request.getParameter("to");
                String departure=request.getParameter("departure");
                String time=request.getParameter("time");
                String price=request.getParameter("price");

                HashMap<String,String> flight=new
                HashMap<>(); flight.put("name", name);
                flight.put("from", from);
                flight.put("to", to);
                flight.put("date",
                departure);
                flight.put("time", time);
                flight.put("price", price);

                try {
                        Dao dao=new Dao();
                        HttpSession
                        session=request.getSession();
                        if(dao.insertFlight(flight)) {

                                session.setAttribute("message", "Flight Added Successfully");
                        }
                        else
                        {       session.setAttribute("message", "Invalid Details");

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

```
// TODO Auto-generated catch
block System.out.print("error");
```

```
                        e.printStackTrace();
                }
                response.sendRedirect("AdminHome.jsp");

        }

}
```

1.1(F): LogOut.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 {

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

1.1(g): 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;
```

```java
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

import com.database.Dao;
@WebServlet("/UserLogin")
public class UserLogin extends HttpServlet {
        private static final long serialVersionUID = 1L;
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {

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

                try {
                        Dao dao=new Dao();
                        HashMap<String,String> user=dao.checkUser(email,password);
                        HttpSession session=request.getSession();
                        if(user!=null) {
                                session.setAttribute("user", user);
                                response.sendRedirect("HomePage.jsp");
                        }
                        else {
                                session.setAttribute("message", "Invalid Details");
                                response.sendRedirect("UserPage.jsp");
                        }
                } catch (ClassNotFoundException | SQLException e) {
                        // TODO Auto-generated catch block
                        e.printStackTrace();
                }

}
}
```

1.1(g): UserRegistration.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;
```

```java
@WebServlet("/UserRegistration")
public class UserRegistration extends
        HttpServlet { private static final long
        serialVersionUID = 1L;
        protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
                String email=request.getParameter("email");
                String
                password=request.getParameter("password");
                String name=request.getParameter("name");
                String
                phno=request.getParameter("phno");
                String
                adno=request.getParameter("adno");

                HashMap<String,String> user=new
                HashMap<>(); user.put("email", email);
                user.put("password", password);
                user.put("name", name);
                user.put("phno", phno);
                user.put("adno", adno);

                try {
                        Dao dao=new Dao();
                        boolean result=dao.insertUser(user);
                        HttpSession
                        session=request.getSession(); if(result) {
                                session.setAttribute("message", "User Added Successfully");
                        }
                        else {
                                session.setAttribute("message","Invalid Details");
                        }
                } catch (ClassNotFoundException | SQLException e) {
                        // TODO Auto-generated catch
                        block e.printStackTrace();
                }
                response.sendRedirect("UserPage.jsp");
        }
}
```

1.1(h): Simplilearn Workshop(StringUtill.Java):

```java
package org.simplilearn.workshop.util;

public class StringUtil {
```

```java
        public static String fixSqlFieldValue(String value) {
            if (value == null) {
                return null;
            }
            int length = value.length();
            StringBuffer fixedValue = new StringBuffer((int)(length*1.1));
            for(int i = 0 ; i < length ;i++) {
                char c = value.charAt(i);
                if ( c == '\'') {
                    fixedValue.append("''");
                }else {
                    fixedValue.append(c);
                }
            }
            return fixedValue.toString();
        }

        public static String encodeHtmlTag(String tag) {
            if (tag==null)
                return null;
            int length = tag.length();
            StringBuffer encodedTag = new StringBuffer(2 * length);
            for(int i = 0 ; i < length;i++) {
                char c = tag.charAt(i);
                if(c=='<')
                    encodedTag.append("<");
                else if(c=='>')
                    encodedTag.append(">");
                else if(c=='&')
                    encodedTag.append("&amp;");
                else if(c=='"')
                    encodedTag.append("&quot;");
                else if(c==' ')
                    encodedTag.append(" ");
                else
                    encodedTag.append(c);
            }
            return encodedTag.toString();
        }
}
```

1.2: Web Folder:

1.2(A): AdminHome.Jsp:

```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>
```

1.2(b): AdminPage.jsp:

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

1.2 (c): BookFlight.jsp:

```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>
<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>
```

1.2 (d): 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>
```

1.2 (e): 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>
```

1.2 (f): 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")
      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>
```

1.2 (g): UserPage.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>
<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>
```

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

1.2 (h): 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>
        <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>
```