Source Code for FlyAway:

1. Connection.util.java:

```
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.StringUtil;
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", "Vyshi@1432");
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+"";
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 {
```

```
//PreparedStatement stm=con.prepareStatement("INSERT INTO 'flyaway.flights'('name', 'from', 'to', 'date',
    'time', 'price') values(?,?,?,?,?)");
    //String sql="INSERT INTO flights
    ('name','from','to','date','time','price')values("+flight.get("name")+"',""+flight.get("from")+"',""+flight.get("to
    ")+"',"+flight.get("date")+"',"+flight.get("time")+"',"+flight.get("price")+"');";String query1 = "INSERT
    INTO flights (name, fromf, tof, datef, timef, price)VALUES" + " (""+
    StringUtil.fixSqlFieldValue(flight.get("name")) + "'," + " "" + StringUtil.fixSqlFieldValue(flight.get("from"))
    + "'." + " "'+ StringUtil.fixSqlFieldValue(flight.get("to")) + "'," + " ""
    +StringUtil.fixSqlFieldValue(flight.get("date")) + ""," + " ""+ StringUtil.fixSqlFieldValue(flight.get("time"))
    + ""," + " ""+ StringUtil.fixSqlFieldValue(flight.get("price")) + "")");
    //String sql="INSERT INTO `flyaway`. `flights` (`name`, `fromf`, `tof`, `datef`, `timef`, `price`) VALUES
    ('indigo', 'hyd', 'viz', '2021-04-08', '10:00', '2000');";
             String query 1 = "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"));
    //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;
2. FlightInsert.java:
```

```
package com.flightbooking.servlets;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import java.io.IOException;
import java.sql.SOLException;
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 FlightInsert 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");
```

3. ListOfFlights.java:

```
package com.flightbooking.servlets;
import java.io.IOException;
import java.sql.SQLException;
import javav.servlet.ServletException;
import javav.servlet.ServletException;
import javav.servlet.annotation.WebServlet;
import javav.servlet.http.HttpServlet;
import javav.servlet.http.HttpServletRequest;
import javav.servlet.http.HttpServletResponse;
import javav.servlet.http.HttpServletResponse;
import javav.servlet.http.HttpServletResponse;
import javav.servlet.http.HttpServletResponse;
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");
    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");
4. LoginOfAdmin.java:
    package com.flightbooking.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.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():
    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();
}
}
}
```

5. LoginOfUser.java:

```
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");
        ConnectionUtil dao=new ConnectionUtil();
        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();
        }
```

6. Logout.java:

```
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");
```

7. RegistrationOfuser.java:

```
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("/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");
       }
8. AdminHome.jsp:
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;fontweight:bold;">Flight
Booking</a><br><br>
<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=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></br></ri>
<label for=price>Price:-</label> <input type="text" name=price id=price/><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);
%>
</body>
</html>
9. AdminPage.jsp:
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<br/>br>
<a href=HomePage.jsp style="color:black;text-decoration:none; font-size:35px; fontweight:bold;">Flight
Booking</a>
<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/><br><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);
%>
</body>
</html>
```

10. BookFlight.jsp:

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
  <%@ page import="java.util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<br/>br>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;fontweight:bold;">Flight
Booking</a>
<br/>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>
11. FlightList.jsp:
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
  <%@ page import="java.util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;fontweight:bold;">Flight
Booking</a>
<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]%>
<\fd><\fd>
<a href=BookFlight.jsp>Book Now</a>
<%
}
%>
<%
}
else {
%>
<h1>There are no available flights</h1>
<%
}
%>
</body>
</html>
12. HomePage.jsp:
<%@ page language="java" contentType="text/html; charset=UTF-8"
 pageEncoding="UTF-8"%>
  <%@ page import="java.util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</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>><br>>
<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>
<label for=to>To:-</label> <input type=text name=to id=to/><br><br>
<input type=submit value=Search /> <input type=reset />
</form>
</div>
</body>
</html>
13.ForgotPassword.jsp:
<%@ page language="java" contentType="text/html; charset=UTF-8"
 pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;fontweight:bold;">Flight</a>
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/><br>
<input type=submit value=submit /> <input type=reset />
</form>
```

</div>

```
</body>
```

14. UserPage.jsp:

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<br/>br>
<a href=HomePage.jsp style="color:black;text-decoration:none; font-size:35px; fontweight:bold;">Flight
Booking</a>
<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>>
<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>
15. UserRegistration.jsp:
<%@ page language="java" contentType="text/html; charset=UTF-8"
  pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<br/>br>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size;35px;fontweight:bold;">Flight
Booking</a>
<br>><br>>
<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/><br/>
<label for=name>Name :-/label> <input type="text" name=name id=name/><br/>br><br/>br>
<label for=phno>Phone No. :-</label> <input type="text" name=phno id=phno/><br>><br>><br/>
<input type=submit value=submit /> <input type=reset />
</form>
</div>
</body>
</html>
16. web.xml:
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://xmlns.jcp.org/xml/ns/javaee"</pre>
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app 4 0.xsd"
id="WebApp ID" version="4.0">
 <display-name>FlyAway</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>
```

```
17. pom.xml:
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>Flyway</groupId>
 <artifactId>Flyway</artifactId>
<version>0.0.1-SNAPSHOT</version>
 <packaging>war</packaging>
 <build>
  <plugins>
   <plugin>
    <artifactId>maven-compiler-plugin</artifactId>
    <version>3.8.1</version>
    <configuration>
     <release>18</release>
    </configuration>
   </plugin>
   <plugin>
    <artifactId>maven-war-plugin</artifactId>
    <version>3.2.3</version>
   </plugin>
  </plugins>
 </build>
<dependencies>
   <dependency>
    <groupId>javax.servlet.jsp</groupId>
    <artifactId>javax.servlet.jsp-api</artifactId>
    <version>2.3.3</version>
    <scope>provided</scope>
   </dependency>
   <dependency>
    <groupId>javax.servlet</groupId>
    <artifactId>javax.servlet-api</artifactId>
    <version>4.0.1</version>
    <scope>provided</scope>
   </dependency>
   <dependency>
    <groupId>mysql</groupId>
    <artifactId>mysql-connector-java</artifactId>
```

<version>8.0.30</version>

```
</dependency>
</dependencies>
</project>
18.String.Util.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 = 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("<");</pre>
else if(c=='>')
encodedTag.append(">");
else if(c=='\&')
encodedTag.append("&");
else if(c=="")
encodedTag.append(""");
else if(c==' ')
encodedTag.append(" ");
encodedTag.append(c);
return encodedTag.toString();
}
```