```
DAO:
```

```
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", "root");
 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> checkUser(String email, String password) {
HashMap<String,String> user=null;
```

```
String query="select * from user where email="+email+" and password="+password+"";
try {
 ResultSet rs=st.executeQuery(query);
 if(rs.next()) {
 user=new HashMap<>();
 user.put("name", rs.getString("name"));
 user.put("email",rs.getString("email"));
 user.put("phno",rs.getString("phno"));
 user.put("adno",rs.getString("adno"));
 }
 return user;
} catch (SQLException e) {
 e.printStackTrace();
return user;
public boolean insertUser(HashMap<String, String> user) {
String query="INSERT INTO user (email, password, name, phno, adno) values("+user.get("email")+"","+user.get("
password")+"',""+user.get("name")+"',""+user.get("phno")+"',""+user.get("adno")+"')";
try {
 st.execute(query);
 return true;
} catch (SQLException e) {
 e.printStackTrace();
return false;
public boolean checkAdmin(String email, String password) {
try {
 ResultSet rs=st.executeQuery("select * from admin where email=""+email+"" and password=""+password+""");
 if(rs.next())
 return true;
} catch (SQLException e) {
 e.printStackTrace();
return false;
public boolean changeAdminPassword(String email, String password) {
try {
 ResultSet rs=st.executeQuery("select * from admin where email=""+email+""");
 if(!rs.next()) {
 return false:
 st.execute("update admin set password=""+password+"" where email=""+email+""");
 return true;
} catch (SQLException e) {
 e.printStackTrace();
```

```
return false;
public boolean insertFlight(HashMap<String, String> flight) throws SQLException {
//PreparedStatement stm=con.prepareStatement("INSERT INTO 'flyaway.flights' ('name', 'from', 'to', 'date', 'time', 'p
rice') values(?,?,?,?,?)");
//String sql="INSERT INTO flights ('name', 'from', 'to', 'date', 'time', 'price') values("'+flight.get("name")+"', "'+flight.ge
t("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');";
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;
Util:
package org.simplilearn.workshop.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(" ");
  else
  encodedTag.append(c);
 return encodedTag.toString();
}
Servlets
package com.servlets;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
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;
public class AdminLogin extends HttpServlet {
```

private static final long serialVersionUID = 1L;

```
public AdminLogin() {
    super();
    // TODO Auto-generated constructor stub
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOExc
eption {
 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();
package com.servlets;
import java.io.IOException;
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;
import java.sql.SQLException;
import java.util.List;
public class FlightList extends HttpServlet {
private static final long serialVersionUID = 1L;
  public FlightList() {
```

super();

```
// TODO Auto-generated constructor stub
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOExc
eption {
 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);
 } catch (ClassNotFoundException | SQLException e) {
 // TODO Auto-generated catch block
 e.printStackTrace();
 response.sendRedirect("FlightList.jsp");
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;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
* Servlet implementation class ForgotPassord
public class ForgotPassord extends HttpServlet {
private static final long serialVersionUID = 1L;
  /**
   * @see HttpServlet#HttpServlet()
  public ForgotPassord() {
    super();
```

```
// TODO Auto-generated constructor stub
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOExc
eption {
 String email=request.getParameter("email");
 String password=request.getParameter("password");
 try {
 Dao dao=new Dao();
 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");
}
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.Dao;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class InsertFlight extends HttpServlet {
private static final long serialVersionUID = 1L;
```

* @see HttpServlet#HttpServlet()

```
*/
  public InsertFlight() {
    super();
    // TODO Auto-generated constructor stub
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOExc
eption {
 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");
}
package com.servlets;
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;
```

```
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;
public class Logout extends HttpServlet {
private static final long serialVersionUID = 1L;
   * @see HttpServlet#HttpServlet()
  public Logout() {
    super();
    // TODO Auto-generated constructor stub
  }
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOExce
ption {
 HttpSession session=request.getSession();
 session.setAttribute("user", null);
 response.sendRedirect("HomePage.jsp");
}
package com.servlets;
import java.io.IOException;
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.Dao;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class UserLogin extends HttpServlet {
private static final long serialVersionUID = 1L;
```

```
public UserLogin() {
    super();
    // TODO Auto-generated constructor stub
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOExc
eption {
 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();
package com.servlets;
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.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.Dao;
public class UserRegistration extends HttpServlet {
```

```
private static final long serialVersionUID = 1L;
  public UserRegistration() {
    super();
    // TODO Auto-generated constructor stub
  }
/**
 * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOExc
eption {
 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("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");
JSP Files
<%@ 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>
<center>
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;font-weight:bold;">FlyAway</a>
<br/>br><br/>><
<h2 style="text-decoration: underline;">Insert New Flight Details</h2>
<div style="border:3px solid black;width:45%;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>
<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>
<label for=departure>Departure :-</label> <input type="date" name=departure id=departure /><br>
<label for=time>Time :-<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>
< \frac{0}{0}
String message=(String)session.getAttribute("message");
if(message!=null){
%>
<%=message %>
 session.setAttribute("message", null);
%>
</center>
</body>
</html>
<%@ 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>
<center>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;font-weight:bold;">FlyAway</a>
<br>><br>>
<h2 style="text-decoration: underline;">Admin Login</h2>
<div style="border:3px solid black;width:45%;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>
<label for=pass>Password :-</label> <input type="password" name=password id=pass /><br>
<input type=submit value=submit /> <input type=reset />
```

```
</form>
</div>
<br>
<a href=ForgotPassword.jsp style="font-size:25;color:red;">Forgot Password</a>
< \frac{0}{0}
String message=(String)session.getAttribute("message");
if(message!=null){
%>
<%=message %>
 session.setAttribute("message", null);
%>
</center>
</body>
</html>
<%@ 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>
<center>
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;font-weight:bold;">FlyAway</a>
<br>><br>>
<h2 style="text-decoration: underline;">Admin Login</h2>
<div style="border:3px solid black;width:45%;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>>
<label for=pass>Password :-</label> <input type="password" name=password id=pass /><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);
%>
</center>
```

```
</html>
<%@ 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>
<center>
<br/>br>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;font-weight:bold;">FlyAway</a>
<br/>br><br/>>
<%
@SuppressWarnings("unchecked")
List<String[]> flights=(List<String[]>)session.getAttribute("flights");
if(flights!=null){
%>
<h1>Available Flights</h1>
>
Name
Time
Price
<%
for(String[] flight:flights){
%>
>
<\fd><\fd>\(\)
<\filangle flight[1]%>
<\full flight[2] %>
<center><a href=BookFlight.jsp>Book Now</a> </center>
<%
%>
<%
```

</body>

```
else{
%>
<h1>Sorry, There are no available flights</h1>
<%
%>
</body>
</html>
<%@ 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>
<center>
<br>>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;font-weight:bold;">FlyAway</a>
<br>><br>>
<div style="border:3px solid black;width:45%;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>
<label for=pass>New Password :-</label> <input type="password" name=password id=pass /><br>
<input type=submit value=submit /> <input type=reset />
</form>
</div>
</center>
</body>
</html>
<%@ 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>
<center>
<h1>FlyAway</h1>
<div align="center">
<a href="AdminPage.jsp">Admin Login</a>
</div>
@SuppressWarnings("unchecked")
```

```
HashMap<String>lser=(HashMap<String>)session.getAttribute("user");
if(user!=null){
%>
Welcome <%=user.get("name") %>
<a href="Logout">Logout</a>
< \frac{0}{0}
}else{
%>
<a href=UserPage.jsp>User Login</a>
<%
}
%>
</center>
<br>><br>>
<center>
<div style="border:3px solid black;width:45%;border-radius:25px;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>
<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>
<input type=submit value=Search /> <input type=reset />
</form>
</div>
</center>
</body>
</html>
<%@ 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>
<center>
<br>
<a href=HomePage.jsp
 style="color: black; text-decoration: none; font-size: 35px; font-weight: bold;">FlyAway</a>
<br>
<br>
 <h2 style="text-decoration: underline;">User Login</h2>
 <div
 style="border: 2px solid black; width: 45%; border-radius: 20px; padding: 20px"
 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</a>
 Account</a>
</h4>
<%
String message = (String) session.getAttribute("message");
if (message != null) {
%>
<%=message%>
session.setAttribute("message", null);
%>
</center>
</body>
</html>
<%@ 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>
<center>
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;font-weight:bold;">FlyAway</a>
<br>><br>>
<div style="border:3px solid black;width:45%;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>
<label for=pass>Password :-</label> <input type="password" name=password id=pass /><br>
<label for=name>Name :-</label> <input type="text" name=name id=name /><br>
<label for=phno>Phone No. :-</label> <input type="text" name=phno id=phno /><br>
```

```
<label for=adno>Aadhaar No. :-</label> <input type="text" name=adno id=adno /><br>
<input type=submit value=submit /> <input type=reset />
</form>
</div>
</center>
```

</body> </html>