

# **Assignment III**

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### **Overview**

Implementing a web application for "Travel Thru Air" using servlets to support the following two use cases:

- 1. A list of current special deals must appear on the home page. Each special deal must display the departure city, the arrival city, and the cost. These special deals are set up by the marketing department and change during the day, so it can't be static. Special deals are only good for a limited amount of time.
- 2. A user may search for flights, given a departure city, time and an arrival city. The results must display the departure city, the arrival city, the total cost, and how many legs the flight will have.

### Use

Java,tomcat,eclipse,jsp,css

### **Structure**

### 1. JSP

- a. **Index.jsp:** jsp file for the home page.
- b. **logincustomer.jsp & loginmanager.jsp:** jsp file for login page
- c. **logout.jsp**: jsp file for logout page
- d. **modify.jsp**: jsp file for updating flight informations
- e. **spacialdeal.jsp**: jsp file to show all the special deal
- f. welcomecustomer.jsp: jsp file to search for a flight
- g. registercustomer & registermanager :jsp file for register page

### 2. Class

- a. Controller pckg:
  - i. **Registercusomer and logingcustomer**: save the customer data in database
  - ii. **Registermanager and logingmanager**: save the manager data in database
- b. Model class pckg:
  - i. **Flight**: save all the data of flights
  - ii. **User**: save all the data of users
  - iii. **Deal**: save all the data about a deals
- c. DB pckg:
  - i. **DBConnection**: connect database and the servlets

### Goals:

- 1. Make a Web Application to show all Flights available at a time .
- 2. Show a list of Special deals.

### **CODE SNIPPET**

### registercustomer.java

```
package ass3.travel.controller.customer;
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletReguest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/registercustomer")
public class registercustomerservlet extends HttpServlet
       private static final long serialVersionUID = 1L;
  /**
  * @see HttpServlet#HttpServlet()
  public registercustomerservlet() {
    super();
    // TODO Auto-generated constructor stub
  }
       * @see HttpServlet#doPost(HttpServletReguest reguest, HttpServletResponse
response)
       protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
             try
             {
                    response.setContentType("text/html");
                    PrintWriter out = response.getWriter();
                    String username = request.getParameter("username");
                    String password = request.getParameter("password");
                    String name = request.getParameter("name");
                    String query = "select * from customers where username =?";
```

```
Connection conn = (Connection)
getServletContext().getAttribute("DBConnection");
                     PreparedStatement statement = conn.prepareStatement(query);
                     statement.setString(1,username);
                     ResultSet resultset = statement.executeQuery();
                     if (resultset.next())
                     {
                            out.println("<h1>Customer already exists in the database.
Please login.</h1>");
                            out.println("Want to go to login page? \r\n" +
href=\"http://localhost:8090/air-line/logincustomer.jsp\">Customer Login</a> ");
                     else
                     {
                            query = "insert into customers values(?, ?, ?)";
                            statement = conn.prepareStatement(query);
                            statement.setString(1,username);
                            statement.setString(2,password);
                            statement.setString(3,name);
                            statement.executeUpdate();
                            out.println("<h1>The customer has been registered!</h1>");
                            out.println("Want to go to home page? \r\n" +
href=\"http://localhost:8090/air-line/registercustomer.jsp\">Customer Home Page</a> ");
              }
              catch (Exception e) {
                     response.getWriter().println("username can be at most 10 letters");
                     e.printStackTrace();
              }
       }
       public static long getSerialversionuid() {
              return serialVersionUID;
       }
}
```

### **DBconnection.java**

```
package ass3.travel.db;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
public class DBConnection {
       public static Connection getConnection() {
              Connection conn = null;
             try {
                     System.out.println("W1");
                    Class.forName("com.mysql.jdbc.Driver");
DriverManager.getConnection("jdbc:mysql://localhost:3306/traveldb", "sadrul",
"captain1234@");
             } catch (ClassNotFoundException e) {
                     // TODO Auto-generated catch block
                     e.printStackTrace();
             } catch (SQLException e) {
                    // TODO Auto-generated catch block
                     e.printStackTrace();
             return conn;
      }
}
```

### <u>User.java</u>

```
package ass3.travel.model;
public class User
       private String username;
       private String password;
       private String name;
       private String usertype;
       public User() {
       public User(String username, String password, String name, String usertype) {
              this.username = username;
              this.password = password;
              this.name = name;
              this.usertype = usertype;
       public String getUsername() {
              return username;
       public void setUsername(String username) {
             this.username = username;
       public String getPassword() {
              return password;
       public void setPassword(String password) {
             this.password = password;
       public String getName() {
             return name;
       public void setName(String name) {
             this.name = name;
       public String getUsertype() {
              return usertype;
       }
       public void setUsertype(String usertype) {
             this.usertype = usertype;
       }
}
```

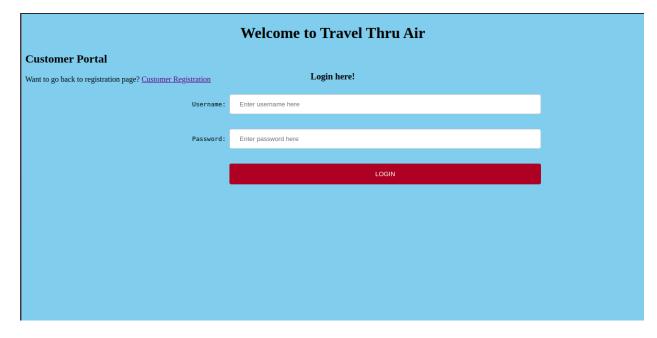
### Flight.java

```
package ass3.travel.model;
public class Flight
       private String flightno;
       private String departurecity;
       private String arrivalcity;
       private int cost;
       private String departuretime;
       private String arrivaltime;
       private int legs;
       public Flight() {
       public Flight(String flightno, String departurecity, String arrivalcity, int cost, String
departuretime, String arrivaltime, int legs) {
               this.flightno = flightno;
               this.departurecity = departurecity;
               this.arrivalcity = arrivalcity;
               this.cost = cost;
               this.departuretime = departuretime;
               this.arrivaltime = arrivaltime;
               this.legs = legs;
       public String getFlightno() {
               return flightno;
       public void setFlightno(String flightno) {
               this.flightno = flightno;
       public String getDeparturecity() {
               return departurecity;
       public void setDeparturecity(String departurecity) {
               this.departurecity = departurecity;
       public String getArrivalcity() {
               return arrivalcity;
       public void setArrivalcity(String arrivalcity) {
               this.arrivalcity = arrivalcity;
       public double getCost() {
               return cost;
       }
```

```
public void setCost(int cost) {
              this.cost = cost;
       public String getDeparturetime() {
              return departuretime;
       public void setDeparturetime(String departuretime) {
              this.departuretime = departuretime;
       public String getArrivaltime() {
              return arrivaltime;
       public void setArrivaltime(String arrivaltime) {
              this.arrivaltime = arrivaltime;
       }
       public int getLegs() {
              return legs;
       }
       public void setLegs(int legs) {
              this.legs = legs;
       }
}
```

## Output

# Welcome to Travel Thru Air Are you from management department? Management Portal Are you a customer? Customer Portal



	Welcome to Travel Thru Air
Customer Portal  Want to go back to registration page? <u>Customer Registration</u>	Login here!
Username:	Enter username here
Password:	Enter password here
	LOGIN

Want to logout? Logout

Show all the spacial deal .Spacial Deal

Search flights

Departure City: Bangalore 
Arrival City: Bangalore 
Number of persons:
Expected Departure Time (Start): 0000 HRS 
Expected Departure Time (End): 00000 HRS 
SEARCH

Want to logout? Logout

### **Current Special Deals**

DEPARTURE CITY	ARRIVAL CITY	COST
Delhi	Kolkata	only Rs. 3000.0
Delhi	Kolkata	only Rs. 3500.0

Want to logout?  $\underline{Logout}$ 

Want to search flights again?  $\underline{\text{Profile Page}}$ 

### Flight list

CHOOSE	FLIGHT NUMBER	DEPARTURE CITY	ARRIVAL CITY	TOTAL COST	DEPARTURE TIME	ARRIVAL TIME	LEGS	PERSONS
01	a2	Delhi	Bangalore	Rs. 13500.0	0100 HRS	0400 HRS	2	3
BUY								

Want to logout?  $\underline{Logout}$ 

Want to search flights again?  $\underline{\text{Profile Page}}$ 

### Flight list

CHOOSE	FLIGHT NUMBER	DEPARTURE CITY	ARRIVAL CITY	TOTAL COST	DEPARTURE TIME	ARRIVAL TIME	LEGS	PERSONS
<b>0</b> 1	a2	Delhi	Bangalore	Rs. 13500.0	0100 HRS	0400 HRS	2	3
BUY								

You bought ticket of Flight 1