

## PROJECT OBJECTIVE:- Develop an FlyAway (Airline Booking Portal).

### JSP CODE:-

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
    <title> Admin Login Page</title>
</head>
<body>
    <h2>Login</h2>
    <form action="LoginServlet" method="post">
        Username: <input type="text" name="username"><br><br>
        Password: <input type="password" name="password"><br><br>
        <input type="submit" value="Login">
    </form>
</body>
</html>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
    <title>Invalid Login</title>
</head>
<body>
    <h2>Invalid Login</h2>
    <a href="adminlogin.jsp"> Re Login</a>
</body>
</html>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Search Flights</title>
</head>
<body>
    <h1>Search Flights</h1>
    <form action="SearchFlightServlet" method="post">
        <label for="source">Source:</label>
        <input type="text" id="source" name="source" required><br><br>

        <label for="destination">Destination:</label>
        <input type="text" id="destination" name="destination" required><br><br>

        <label for="dateOfTravel">Date of Travel:</label>
        <input type="date" id="dateOfTravel" name="dateOfTravel" required><br><br>
```

```

        <label for="NumberOfPersons">Number of Persons:</label>
        <input type="text" id="text" name="NumberOfPersons" required><br><br>

        <input type="submit" value="Search Flights">
    </form>
</body>
</html>

```

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>

```

```

<!DOCTYPE html>
<html>
<head>
    <title>Flight Booking Form</title>
</head>
<body>
    <h2>Flight Booking</h2>
    <form action="RegisterServlet" method="post">
        <label for="flightId">Flight ID:</label>
        <input type="text" id="flightId" name="flightId" value="<%=
request.getParameter("flightId") %>"><br><br>

        <label for="fullName">Full Name:</label>
        <input type="text" id="fullName" name="fullName"><br><br>

        <label for="email">Email:</label>
        <input type="email" id="email" name="email"><br><br>

        <label for="phoneNumber">Phone Number:</label>
        <input type="text" id="phoneNumber" name="phoneNumber"><br><br>

        <input type="submit" value="Submit">
    </form>
</body>
</html>

```

```

<%@ page contentType="text/html; charset=UTF-8" language="java" %>
<%@ page import="com.entities.Flight" %>
<%@ page import="java.util.Enumeration" %>
<html>
<head>
    <title>Available Flights</title>
</head>
<body>
    <h1>Available Flights</h1>
    <table border="1">
        <tr>
            <th>Flight ID</th>
            <th>Source</th>
            <th>Destination</th>
            <th>Arrival Date</th>
            <th>Price</th>
            <th>Select</th> <!-- New column for select button -->
        </tr>
        <%
            Enumeration<String> attributeNames = request.getAttributeNames();

```

```

        while (attributeNames.hasMoreElements()) {
            String attributeName = attributeNames.nextElement();
            if (attributeName.startsWith("flight")) {
                Flight flight = (Flight) request.getAttribute(attributeName);
            }
        }

        <tr>
            <td><%= flight.getId() %></td>
            <td><%= flight.getSource() %></td>
            <td><%= flight.getDestination() %></td>
            <td><%= flight.getDate() %></td>
            <td><%= flight.getPrice() %></td>
            <td><form action="FlightBooking.jsp" method="post">
                <input type="hidden" name="flightId" value="<%=
flight.getId() %>">
                <input type="submit" value="Select">
            </form>
        </td>

    </tr>

    <%
    }
    }
    %>
</table>
<% if (!request.getAttributeNames().hasMoreElements()) { %>
    <p>No flights available for the selected criteria.</p>
<% } %>

</body>
</html>

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<%@ page import="java.util.*" %>
<%@ page import="com.entities.Booking" %>
<%@ page import="com.entities.RegisterServlet" %>
<%@ page import="com.entities.SearchFlightServlet" %>
<%@ page import="com.entities.Flight" %>
<%@ page import="com.entities.FlightService" %>
<!DOCTYPE html>
<html>
<head>
    <title>Payment Confirmation</title>
</head>
<body>
    <h2>Payment Confirmation</h2>

    <%
    Booking booking = (Booking) session.getAttribute("booking");
    String str1 = (String)session.getAttribute("s");
    String str2 = (String)session.getAttribute("d");
    String str3 = (String)session.getAttribute("date");
    Integer str4 =(Integer)session.getAttribute("n");
    Double str5=(Double)session.getAttribute("p");
    Double t=str4*str5;
    %>

```

```

        <!-- Display the booking details -->
        <p>Confirm your Payment</p>
        <p>Flight ID: <%= booking.getFlightId() %></p>
        <p>Flight Source: <%= str1 %></p>
        <p>Flight Destination: <%= str2 %></p>
        <p>Date: <%= str3 %></p>
        <p>Persons: <%= str4 %></p>
        <p>Price per person: <%= str5 %></p>
        <p>Total Price: <%= t %></p>
        <a href="confirmation.jsp">Confirm Payment</a>

</body>
</html>

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<%@ page import="java.util.*" %>
<%@ page import="com.entities.Booking" %>
<%@ page import="com.entities.RegisterServlet" %>
<!DOCTYPE html>
<html>
<head>
    <title>Booking Confirmation</title>
</head>
<body>
    <h2>Booking Confirmation</h2>

    <%
    Booking booking = (Booking) session.getAttribute("booking");
    %>

    <!-- Display the booking details -->
    <p>Thank you for booking!</p>
    <p>Flight ID: <%= booking.getFlightId() %></p>
    <p>Full Name: <%= booking.getFullName() %></p>
    <p>Email: <%= booking.getEmail() %></p>
    <p>Phone Number: <%= booking.getPhoneNumber() %></p>
</body>
</html>

```

## SERVLET CODE:-

```

package com.entities;

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 LoginServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    protected void doPost(HttpServletRequest request, HttpServletResponse
response)
        throws ServletException, IOException {
        // Retrieve username and password from the request
        String username = request.getParameter("username");
        String password = request.getParameter("password");

        if (username.equals("Harshit")&&password.equals("Harshit123@")) {

            // Redirect to the dashboard page
            response.sendRedirect("search.jsp");
        } else {
            // If invalid, redirect back to the login page with an error message
            response.sendRedirect("invalid.jsp");
        }
    }
}

```

```

package com.entities;
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

```

```

public class RegisterServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
        int flightId = Integer.parseInt(request.getParameter("flightId"));
        String fullName = request.getParameter("fullName");
    }
}

```

```

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

// Create a Booking object
Booking booking = new Booking();
booking.setFlightId(flightId);
booking.setFullName(fullName);
booking.setEmail(email);
booking.setPhoneNumber(phoneNumber);

// Call a service or DAO to save the booking details
BookingService.bookFlight(booking);

// Set booking in request attribute
// request.setAttribute("booking", booking);
HttpSession session = request.getSession();
session.setAttribute("booking", booking);

// Forward the request to the confirmation page
RequestDispatcher rd = request.getRequestDispatcher("payment.jsp");
rd.forward(request, response);
}
}

```

```

package com.entities;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;
import java.util.ArrayList;
import java.util.List;
public class SearchFlightServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {

```

```

        String source = request.getParameter("source");
        String destination = request.getParameter("destination");
        String dateOfTravel = request.getParameter("dateOfTravel");
        String nu = request.getParameter("NumberofPersons");
        int num;
        num=Integer.parseInt(nu);
        HttpSession session = request.getSession();
        session.setAttribute("s", source);
        session.setAttribute("d", destination);
        session.setAttribute("date", dateOfTravel);
        session.setAttribute("n",num);

        // Call a service to retrieve available flights based on the provided details
        List<Flight> flights = FlightService.searchFlights(source, destination,
dateOfTravel);

        if(!flights.isEmpty())
        {
            Double price;
            price= flights.get(0).getPrice();
            session.setAttribute("p",price);
        }

        // Set flights in request attribute
        for (Flight flight : flights) {
            request.setAttribute("flight" + flight.getId(), flight);
        }

        // Forward the request to the flights display page
        RequestDispatcher rd = request.getRequestDispatcher("flights.jsp");
        rd.forward(request, response);

    }
}

```

## JAVA CODE:-

```
package com.entities;
import java.util.*;

public class Booking {
    private int id;
    private int flightId;
    private String fullName;
    private String email;
    private String phoneNumber;

    public Booking() {
        super();
        // TODO Auto-generated constructor stub
    }
    public Booking(int id, int flightId, String fullName, String email, String
phoneNumber) {
        super();
        this.id = id;
        this.flightId = flightId;
        this.fullName = fullName;
        this.email = email;
        this.phoneNumber = phoneNumber;
    }
    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public int getFlightId() {
        return flightId;
    }
    public void setFlightId(int flightId) {
        this.flightId = flightId;
    }
    public String getFullName() {
        return fullName;
    }
    public void setFullName(String fullName) {
        this.fullName = fullName;
    }
    public String getEmail() {
        return email;
    }
    public void setEmail(String email) {
        this.email = email;
    }
    public String getPhoneNumber() {
        return phoneNumber;
    }
    public void setPhoneNumber(String phoneNumber) {
        this.phoneNumber = phoneNumber;
    }
}
```



```
}
```

```
package com.entities;  
import java.util.*;  
import java.sql.Connection;  
import java.sql.DriverManager;  
import com.servlets.dbcon.DbConnection;  
import java.sql.*;  
import java.sql.Date;
```

```
public class BookingService {  
    public static void bookFlight(Booking booking) {  
        try {  
            // Connect to database  
            // Connection conn =  
DriverManager.getConnection("jdbc:mysql://localhost:3306/your_database",  
"username", "password");  
            Connection conn = DbConnection.getConnection();  
            // Prepare and execute query  
            String query = "INSERT INTO Booking (flight_id, fullName, email,  
phoneNumber) VALUES (?, ?, ?, ?)";  
            PreparedStatement statement = conn.prepareStatement(query);  
            statement.setInt(1, booking.getFlightId());  
            statement.setString(2, booking.getFullName());  
            statement.setString(3, booking.getEmail());  
            statement.setString(4, booking.getPhoneNumber());  
            statement.executeUpdate();  
  
            // Close connections  
            statement.close();  
            conn.close();  
        } catch (SQLException e) {  
            e.printStackTrace();  
        }  
    }  
}
```

```
package com.entities;
import java.sql.Date;
import java.util.*;

public class Flight {
    private int id;
    private String source;
    private String destination;
    private Date date;
    private double price;

    public Flight() {
        super();
        // TODO Auto-generated constructor stub
    }
    public Flight(int id, String source, String destination, Date date, double
price) {
        super();
        this.id = id;
        this.source = source;
        this.destination = destination;
        this.date = date;
        this.price = price;
    }
    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public String getSource() {
        return source;
    }
    public void setSource(String source) {
        this.source = source;
    }
}
```

```

    }
    public String getDestination() {
        return destination;
    }
    public void setDestination(String destination) {
        this.destination = destination;
    }
    public Date getDate() {
        return date;
    }
    public void setDate(Date date) {
        this.date = date;
    }
    public double getPrice() {
        return price;
    }
    public void setPrice(double price) {
        this.price = price;
    }
}

}
package com.entities;
import java.sql.Connection;
import java.sql.DriverManager;
import java.util.*;
import com.servlets.dbcon.DbConnection;
import java.sql.*;
import java.sql.Date;

public class FlightService {
    public static List<Flight> searchFlights(String source, String destination,
String dateOfTravel) {
        List<Flight> flights = new ArrayList<>();

        try {

```

```

// Connect to database
Connection conn = DbConnection.getConnection();

// Prepare and execute query
String query = "SELECT * FROM Flight WHERE source = ? AND
destination = ?AND date = ?";
PreparedStatement statement = conn.prepareStatement(query);
statement.setString(1, source);
statement.setString(2, destination);
statement.setDate(3, Date.valueOf(dateOfTravel));
ResultSet resultSet = statement.executeQuery();

// Process the results
while (resultSet.next()) {
    Flight flight = new Flight();
    flight.setId(resultSet.getInt("id"));
    flight.setSource(resultSet.getString("source"));
    flight.setDestination(resultSet.getString("destination"));
    flight.setDate(resultSet.getDate("date"));
    flight.setPrice(resultSet.getDouble("price"));
    flights.add(flight);
}

// Close connections
resultSet.close();
statement.close();
conn.close();
} catch (SQLException e) {
    e.printStackTrace();
}

return flights;
}
}

```

## DATABASE CODE:-

```
package com.servlets.dbcon;
import java.sql.Connection;
import java.sql.DriverManager;

public class DbConnection {

    public static Connection getConnection()
    {
        Connection conObj = null;
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
            conObj =
DriverManager.getConnection("jdbc:mysql://localhost:3306/projectf","root",
"Harshit@464");
        } catch (Exception e) {
            // TODO: handle exception
            System.out.println(e);
        }
        return conObj;
    }
}
```

```
CREATE DATABASE projectf;
USE projectf;
CREATE TABLE Flight (
    id INT AUTO_INCREMENT PRIMARY KEY,
    source VARCHAR(100),
    destination VARCHAR(100),
    date DATE,
    price DOUBLE
);
USE projectf;
INSERT INTO Flight (source, destination, date, price)
```

```
VALUES ('New York', 'Los Angeles', '2024-05-15', 250.00);
SELECT * FROM projectf.Flight;
INSERT INTO Flight (source, destination, date, price)
VALUES
    ('Los Angeles', 'New York', '2024-05-20', 275.00),
    ('Chicago', 'Dallas', '2024-06-01', 200.00),
    ('Dallas', 'Chicago', '2024-06-05', 225.00),
    ('San Francisco', 'Seattle', '2024-06-10', 150.00);
```

## WEB.XML:-

```
<!DOCTYPE web-app PUBLIC
"-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
"http://java.sun.com/dtd/web-app_2_3.dtd" >

<web-app>
  <display-name>Archetype Created Web Application</display-name>
  <servlet>
    <servlet-name>RegisterServlet</servlet-name>
    <display-name>RegisterServlet</display-name>
    <description></description>
    <servlet-class>com.entities.RegisterServlet</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>SearchFlightServlet</servlet-name>
    <display-name>SearchFlightServlet</display-name>
    <description></description>
    <servlet-class>com.entities.SearchFlightServlet</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>LoginServlet</servlet-name>
    <display-name>LoginServlet</display-name>
    <description></description>
    <servlet-class>com.entities.LoginServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>RegisterServlet</servlet-name>
    <url-pattern>/RegisterServlet</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>SearchFlightServlet</servlet-name>
    <url-pattern>/SearchFlightServlet</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>LoginServlet</servlet-name>
    <url-pattern>/LoginServlet</url-pattern>
  </servlet-mapping>
</web-app>
```