

Source_Code [Fly_Away_Airline_Booking_Portal]:-

Create a Dynamic Web Project In Eclipse Named As:-Airline_Booking

//Create a DbConnection Class in com.servlets.dbcon

package: -

```
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",  
"Bhumikamalhan123*");
```

```
        } catch (Exception e) {
```

```
            System.out.println(e);
```

```
        }
```

```
        return conObj;
```

```
    } }
```

//Create a Booking Class in com.entities package:-

```
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();
    }
    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;
    }
}

```

//Create a BookingService Class in com.entities package:-

```

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 = 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();

    }

}

}
```

//Create a Flight Class in com.entities package:-

```
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();
    }

    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;
        }
    }
}
```

//Create a FlightService Class in com.entities package:-

```
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;
}
}

```

//Create a LoginServlet.java in com.entities package:-

```

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("chitresh")&&password.equals("chitresh123@")
)) {

        response.sendRedirect("search.jsp");
    } else {
        response.sendRedirect("invalid.jsp");
    }
}
}

```

//Create a RegisterServlet.java in com.entities package:-

```

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 to save the booking details
BookingService.bookFlight(booking);

HttpSession session = request.getSession();
session.setAttribute("booking", booking);

RequestDispatcher rd =
request.getRequestDispatcher("payment.jsp");
rd.forward(request, response);
}
}
```

//Create a SearchFlightServlet.java in com.entities package:-

```
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);

    }
}

```

//Create a adminlogin.jsp file in webapp: -

```

<%@ 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>

```

//Create a confirmation.jsp file in webapp :-

```

<%@ 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>

```

//Create a FlightBooking.jsp file in webapp :-

```

<%@ 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="text" id="email" name="email"><br><br>
    </form>

```

```

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

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

```

//Create a flights.jsp file in webapp: -

```

<%@ 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>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>

```

//Create a invalid.jsp file in webapp: -

```

<%@ 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>

```

//Create a payment.jsp file in webapp: -

```

<%@ 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>Flight 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>

```

//Create a search.jsp file in webapp: -

```

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

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

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

```

//Also Update web.xml file in webapp\WEB-INF :-

```

<!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>SearchFlightServlet</servlet-name>
        <display-name>SearchFlightServlet</display-name>
        <description></description>
        <servlet-
class>com.entities.SearchFlightServlet</servlet-class>
    </servlet>
    <servlet>
        <servlet-name>RegisterServlet</servlet-name>
        <display-name>RegisterServlet</display-name>
        <description></description>

```

```
        <servlet-class>com.entities.RegisterServlet</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>SearchFlightServlet</servlet-name>  
        <url-pattern>/SearchFlightServlet</url-pattern>  
    </servlet-mapping>  
    <servlet-mapping>  
        <servlet-name>RegisterServlet</servlet-name>  
        <url-pattern>/RegisterServlet</url-pattern>  
    </servlet-mapping>  
    <servlet-mapping>  
        <servlet-name>LoginServlet</servlet-name>  
        <url-pattern>/LoginServlet</url-pattern>  
    </servlet-mapping>  
</web-app>
```

