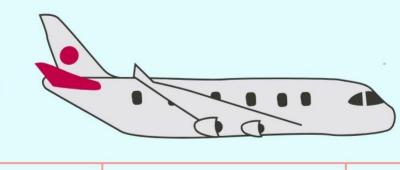
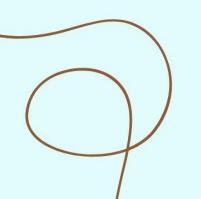
# ADVANCED JAVA PROJECT

## **SEMESTER 3 GROUP 10**

Topic: Airline Reservation System using Servlets and JDBC



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### **Project Overview**

The Airline Reservation System is designed to streamline flight booking processes, enabling users to create accounts, book flights, and generate receipts for their bookings. The system is built using Java Servlets and JDBC for backend processing and MySQL for database management. It provides a user-friendly interface for both customers and administrators, allowing the management of flight schedules and passenger information.

#### **Functionalities**

#### 1. User Registration and Login:

- Users can create an account by providing their name, email, password, and age.
- o Login functionality allows registered users to access the system.

#### 2. Flight Booking:

- Users can book flights by selecting a flight number, entering their travel details, and choosing a flight class.
- Booking data is stored in the MySQL database under the Booking table.

#### 3. View Bookings:

- Users can view their current bookings.
- o The system fetches booking details based on the user's session data.

#### 4. Add Flights (Admin Functionality):

- Admin users can add new flight details, including flight number, date, and available seats.
- o This feature allows administrators to manage available flights in the system.

#### 5. Flight Status:

 Users can check the status of available flights, including route information and availability.

#### **Database Structure**

- Users Table: Stores user information such as name, email, password, and age.
- **Booking Table:** Stores information about the flights booked by users, including flight\_number, flight\_date, passenger\_name, passenger\_age, and flight\_class.
- **Flight\_Status Table:** Stores information about available flights, including flight routes, timings, and seat availability.

#### **Technologies Used**

Backend: Java Servlets, JDBC

• Frontend: JSP, HTML, CSS, Bootstrap

Database: MySQL

• IDE: NetBeans

• Server: Apache Tomcat

#### **Future Enhancements**

- 1. **Payment Gateway Integration:** Implementing payment processing for flight bookings, allowing users to make online payments for their tickets.
- 2. **Enhanced Admin Panel:** Adding more admin functionalities, such as editing flight details, viewing all bookings, and generating reports.
- 3. **User Notifications:** Implementing an email notification system to inform users about their booking status, cancellations, or delays.
- 4. **Seat Selection:** Adding the ability for users to select specific seats while booking their flights.
- 5. **Enhanced Security:** Implementing two-factor authentication (2FA) for user accounts and encrypting sensitive data like passwords.
- 6. **Mobile App Integration:** Expanding the system into a mobile application, allowing users to book flights and check flight statuses from their smartphones.

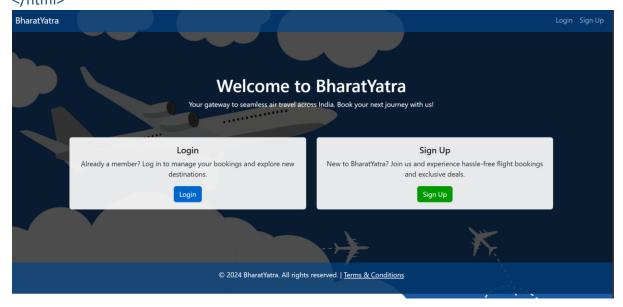
### **Source Code:**

#### Index.html

```
background-size: cover;
      background-position: center;
      color: white;
    }
    .overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    }
    .card {
      background-color: rgba(255, 255, 255, 0.9);
    }
    .navbar {
      background-color: rgba(0, 51, 102, 0.9);
    }
    footer {
      background-color: rgba(0, 51, 102, 0.9);
    .btn-primary {
      background-color: #0066cc;
      border-color: #0066cc;
    .btn-success {
      background-color: #009900;
      border-color: #009900;
    }
  </style>
</head>
<body>
  <!-- Navigation Bar -->
  <nav class="navbar navbar-expand-lg navbar-dark">
    <div class="container-fluid">
      <a class="navbar-brand" href="#">BharatYatra</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        class="nav-item">
            <a class="nav-link" href="login.html">Login</a>
          class="nav-item">
            <a class="nav-link" href="signup.html">Sign Up</a>
          </div>
```

```
</div>
  </nav>
  <!-- Main Content -->
  <div class="overlay">
    <div class="container my-5">
      <div class="row">
        <!-- Welcome Message -->
        <div class="col-12 text-center mb-5">
          <h1>Welcome to BharatYatra</h1>
          Your gateway to seamless air travel across India. Book your next journey with
us!
        </div>
        <!-- Login Card -->
        <div class="col-md-6 mb-4">
          <div class="card">
            <div class="card-body text-center">
              <h5 class="card-title">Login</h5>
              Already a member? Log in to manage your bookings
and explore new destinations.
              <a href="login.html" class="btn btn-primary">Login</a>
            </div>
          </div>
        </div>
        <!-- Signup Card -->
        <div class="col-md-6 mb-4">
          <div class="card">
            <div class="card-body text-center">
              <h5 class="card-title">Sign Up</h5>
              New to BharatYatra? Join us and experience hassle-free
flight bookings and exclusive deals.
              <a href="signup.html" class="btn btn-success">Sign Up</a>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- Footer -->
  <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved. | <a href="#" class="text-light">Terms</a>
& Conditions</a>
  </footer>
  <!-- Bootstrap JS -->
```

<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0alpha3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>



#### Signup.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Sign Up - BharatYatra</title>
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <style>
    body {
      background-image: url('images/airplane.jpg');
      background-size: cover;
      background-position: center;
      color: white;
    }
    .overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    }
    .card {
      background-color: rgba(255, 255, 255, 0.9);
    }
    .navbar {
      background-color: rgba(0, 51, 102, 0.9);
    footer {
```

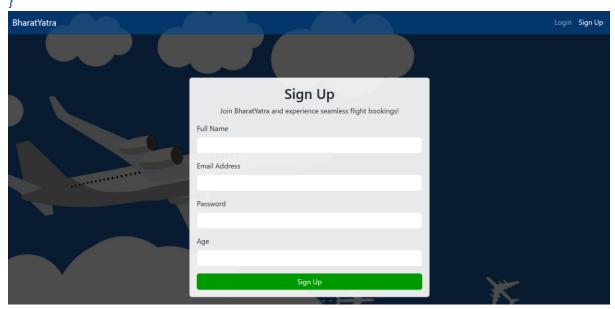
```
background-color: rgba(0, 51, 102, 0.9);
    .btn-success {
      background-color: #009900;
      border-color: #009900;
    }
  </style>
</head>
<body>
 <!-- Navigation Bar -->
 <nav class="navbar navbar-expand-lg navbar-dark">
    <div class="container-fluid">
      <a class="navbar-brand" href="index.html">BharatYatra</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
      <div class="collapse navbar-collapse" id="navbarNav">
        class="nav-item">
            <a class="nav-link" href="login.html">Login</a>
          class="nav-item">
            <a class="nav-link active" aria-current="page" href="signup.html">Sign Up</a>
          </div>
    </div>
  </nav>
  <!-- Main Content -->
  <div class="overlay">
    <div class="container my-5">
      <div class="row justify-content-center">
        <div class="col-md-6">
          <div class="card">
            <div class="card-body">
              <h2 class="text-center">Sign Up</h2>
              Join BharatYatra and experience seamless flight
bookings!
              <form action="SignupServlet" method="post">
                <div class="mb-3">
                  <label for="name" class="form-label">Full Name</label>
                  <input type="text" class="form-control" id="name" name="name"
required>
                </div>
```

```
<div class="mb-3">
                   <label for="email" class="form-label">Email Address</label>
                   <input type="email" class="form-control" id="email" name="email"
required>
                 </div>
                 <div class="mb-3">
                   <label for="password" class="form-label">Password</label>
                   <input type="password" class="form-control" id="password"
name="password" required>
                 </div>
                 <div class="mb-3">
                   <label for="age" class="form-label">Age</label>
                   <input type="number" class="form-control" id="age" name="age"
required>
                 </div>
                 <button type="submit" class="btn btn-success w-100">Sign Up</button>
               </form>
             </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- Footer -->
  <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved.
  </footer>
  <!-- Bootstrap JS -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-</pre>
alpha3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
Signupservlet
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
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;

```
@WebServlet("/SignupServlet")
public class SignupServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
  private static final String DB_URL = "jdbc:mysql://localhost:3306/ARS";
  private static final String DB USER = "root";
  private static final String DB_PASSWORD = "kshiti";
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    // Setting response content type
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    // Retrieving form parameters
    String name = request.getParameter("name");
    String email = request.getParameter("email");
    String password = request.getParameter("password");
    int age = Integer.parseInt(request.getParameter("age"));
    // Basic validation
    if (name.isEmpty() || email.isEmpty() || password.isEmpty() || age <= 0) {
      out.println("<h3 style='color:red;'>All fields are required and must be valid.</h3>");
      return;
    }
    Connection conn = null;
    PreparedStatement pstmt = null;
    try {
      // Load MySQL JDBC Driver (if necessary)
      Class.forName("com.mysql.cj.jdbc.Driver");
      // Establishing database connection
      conn = DriverManager.getConnection(DB_URL, DB_USER, DB_PASSWORD);
      // Preparing SQL query to insert user data into the database
      String sql = "INSERT INTO users (name, email, password, age) VALUES (?, ?, ?, ?)";
      pstmt = conn.prepareStatement(sql);
      // Setting parameters for the query
      pstmt.setString(1, name);
      pstmt.setString(2, email);
      pstmt.setString(3, password);
      pstmt.setInt(4, age);
```

```
// Executing the query
      int rowsInserted = pstmt.executeUpdate();
      if (rowsInserted > 0) {
         out.println("<h3 style='color:green;'>Signup successful! Welcome to
BharatYatra.</h3>");
        // Redirect to login page
         response.sendRedirect("login.html");
      } else {
         out.println("<h3 style='color:red;'>Signup failed. Please try again.</h3>");
      }
    } catch (SQLException | ClassNotFoundException e) {
      e.printStackTrace();
      out.println("<h3 style='color:red;'>Database error occurred: " + e.getMessage() +
"</h3>");
    } finally {
      // Closing resources
      try {
         if (pstmt != null) pstmt.close();
         if (conn != null) conn.close();
      } catch (SQLException e) {
         e.printStackTrace();
      }
    }
  }
```



#### Login.jsp

```
<%--
Document: login
Created on: 03-Sept-2024, 7:44:18 pm
Author: Kshiti
--%>
```

```
<%@ page contentType="text/html;charset=UTF-8" language="java" %>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login - BharatYatra</title>
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <style>
    body {
      background-image: url('images/airplane.jpg');
      background-size: cover;
      background-position: center;
      color: white;
    }
    .overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    .card {
      background-color: rgba(255, 255, 255, 0.9);
    }
    .navbar {
      background-color: rgba(0, 51, 102, 0.9);
    }
    footer {
      background-color: rgba(0, 51, 102, 0.9);
    }
    .btn-primary {
      background-color: #0066cc;
      border-color: #0066cc;
    }
  </style>
</head>
<body>
  <!-- Navigation Bar -->
  <nav class="navbar navbar-expand-lg navbar-dark">
    <div class="container-fluid">
      <a class="navbar-brand" href="index.jsp">BharatYatra</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
```

```
<div class="collapse navbar-collapse" id="navbarNav">
        cli class="nav-item">
            <a class="nav-link active" aria-current="page" href="login.jsp">Login</a>
          <a class="nav-link" href="signup.jsp">Sign Up</a>
          </div>
    </div>
  </nav>
  <!-- Main Content -->
  <div class="overlay">
    <div class="container my-5">
      <div class="row justify-content-center">
        <div class="col-md-6">
          <div class="card">
            <div class="card-body">
              <h2 class="text-center">Login</h2>
              Welcome back to BharatYatra! Please log in to
manage your bookings and travel plans.
              <!-- Display error messages based on the query parameters -->
                String error = request.getParameter("error");
                if (error != null) {
                  if (error.equals("invalidCredentials")) {
              %>
                    <div class="alert alert-danger" role="alert">
                       Invalid email or password. Please try again.
                     </div>
              <%
                  } else if (error.equals("emptyFields")) {
              %>
                    <div class="alert alert-warning" role="alert">
                       Please fill in all the fields.
                    </div>
              <%
                  } else if (error.equals("databaseError")) {
              %>
                    <div class="alert alert-danger" role="alert">
                      A database error occurred. Please try again later.
                    </div>
              <%
                  }
                }
```

```
%>
```

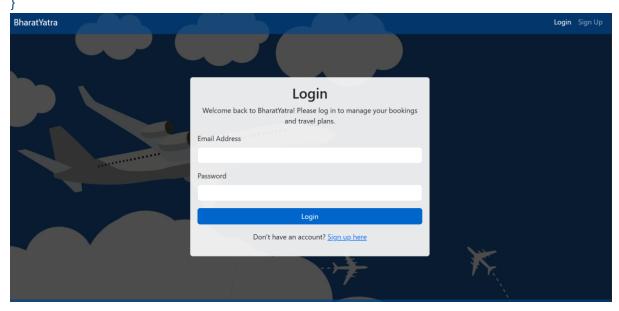
```
<form action="LoginServlet" method="post">
                 <div class="mb-3">
                   <label for="email" class="form-label">Email Address</label>
                   <input type="email" class="form-control" id="email" name="email"
required>
                 </div>
                 <div class="mb-3">
                   <label for="password" class="form-label">Password</label>
                   <input type="password" class="form-control" id="password"
name="password" required>
                </div>
                 <button type="submit" class="btn btn-primary w-100">Login</button>
              </form>
              <div class="mt-3 text-center">
                 >Don't have an account? <a href="signup.jsp">Sign up here</a>
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- Footer -->
  <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved.
  </footer>
  <!-- Bootstrap JS -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-</pre>
alpha3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

#### Loginservlet

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
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;
@WebServlet("/LoginServlet")
public class LoginServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
 // Database connection details
  private static final String DB URL = "jdbc:mysql://localhost:3306/ARS";
  private static final String DB USER = "root";
  private static final String DB PASSWORD = "kshiti";
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    // Setting response content type
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    // Retrieving form parameters
    String email = request.getParameter("email");
    String password = request.getParameter("password");
    // Basic validation
    if (email.isEmpty() || password.isEmpty()) {
      // Redirect to login page with error message
      response.sendRedirect("login.jsp?error=emptyFields");
      return;
    }
    Connection conn = null;
    PreparedStatement pstmt = null;
    ResultSet rs = null;
    try {
      // Load MySQL JDBC Driver (if necessary)
      Class.forName("com.mysql.cj.jdbc.Driver");
      // Establishing database connection
      conn = DriverManager.getConnection(DB_URL, DB_USER, DB_PASSWORD);
      // Preparing SQL query to check user credentials
      String sql = "SELECT * FROM users WHERE email = ? AND password = ?";
      pstmt = conn.prepareStatement(sql);
      pstmt.setString(1, email);
      pstmt.setString(2, password);
      // Executing the query
```

```
rs = pstmt.executeQuery();
    if (rs.next()) {
       // User is authenticated, redirect to home page
       response.sendRedirect("home.jsp");
    } else {
       // Invalid credentials, redirect back to login with an error
       response.sendRedirect("login.jsp?error=invalidCredentials");
    }
  } catch (SQLException | ClassNotFoundException e) {
    e.printStackTrace();
    // Redirect to login page with database error
    response.sendRedirect("login.jsp?error=databaseError");
  } finally {
    // Closing resources
    try {
       if (rs != null) rs.close();
       if (pstmt != null) pstmt.close();
       if (conn != null) conn.close();
    } catch (SQLException e) {
       e.printStackTrace();
  }
}
```



#### Logout.jsp

```
<%--
Document: logout
Created on: 03-Sept-2024, 8:24:35 pm
Author: Kshiti
--%>
```

```
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-</pre>
8"%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Logout - BharatYatra</title>
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <style>
    body {
      background-image: url('images/airplane.jpg');
      background-size: cover;
      background-position: center;
      color: white;
    }
    .overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    }
    .card {
      background-color: rgba(255, 255, 255, 0.9);
    .navbar {
      background-color: rgba(0, 51, 102, 0.9);
    }
    footer {
      background-color: rgba(0, 51, 102, 0.9);
    .btn-primary {
      background-color: #0066cc;
      border-color: #0066cc;
    }
  </style>
</head>
<body>
  <!-- Main Content -->
  <div class="overlay">
    <div class="container my-5">
      <div class="row justify-content-center">
        <div class="col-md-6">
           <div class="card">
             <div class="card-body text-center">
               <h2>You have been logged out</h2>
```

```
Thank you for using BharatYatra. You are now logged out.
               <a href="login.html" class="btn btn-primary">Login Again</a>
             </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- Footer -->
  <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved.
  </footer>
  <!-- Bootstrap JS -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-</pre>
alpha3/dist/js/bootstrap.bundle.min.js"></script>
  < --- Logout logic --%>
  <%
    // Invalidate the session
    session.invalidate();
    // Redirect to login page
    response.sendRedirect("index.html");
  %>
</body>
</html>
Home.jsp
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-</pre>
8"%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Home - BharatYatra</title>
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <style>
    body {
      background-image: url('images/airplane.jpg');
      background-size: cover;
      background-position: center;
      color: white;
```

```
.overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    .card {
      background-color: rgba(255, 255, 255, 0.9);
    }
    .navbar {
      background-color: rgba(0, 51, 102, 0.9);
    }
    footer {
      background-color: rgba(0, 51, 102, 0.9);
    }
    .btn-primary {
      background-color: #0066cc;
      border-color: #0066cc;
    }
    .button-container {
      margin-top: 30px; /* Adjust this value as needed */
  </style>
</head>
<body>
  <!-- Navigation Bar -->
  <nav class="navbar navbar-expand-lg navbar-dark">
    <div class="container-fluid">
      <a class="navbar-brand" href="home.jsp">BharatYatra</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        cli class="nav-item">
            <a class="nav-link active" aria-current="page" href="home.jsp">Home</a>
          class="nav-item">
            <a class="nav-link" href="logout.jsp">Logout</a>
          </div>
    </div>
  </nav>
  <!-- Main Content -->
```

```
<div class="overlay">
    <div class="container my-5">
      <div class="row justify-content-center">
        <div class="col-md-8">
          <div class="card">
            <div class="card-body">
               <h2 class="text-center">Welcome to BharatYatra</h2>
               Manage your flights and bookings with ease.
               <div class="button-container text-center">
                 <a href="checkFlight.jsp" class="btn btn-primary">Check Flight</a>
                 <a href="bookFlight.jsp" class="btn btn-primary">Book Flight</a>
                 <a href="addFlight.jsp" class="btn btn-primary">Add Flight</a>
               </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- Footer -->
  <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved.
  </footer>
  <!-- Bootstrap JS -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-</pre>
alpha3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
Homeservlet
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;
```

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws

@WebServlet("/HomeServlet")

ServletException, IOException {

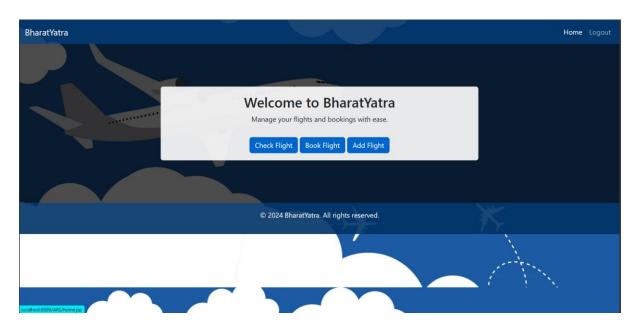
// Check if the user is logged in

@Override

public class HomeServlet extends HttpServlet {
 private static final long serialVersionUID = 1L;

```
if (request.getSession().getAttribute("user") == null) {
    // Redirect to login page if not logged in
    response.sendRedirect("login.html");
    return;
}

// Forward to the homepage JSP
    request.getRequestDispatcher("home.jsp").forward(request, response);
}
```



#### Checkflight.jsp

```
<%@ page import="java.util.List" %>
<%@ page import="javaclass.Flight" %>
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-</pre>
8"%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Check Flight - BharatYatra</title>
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <style>
    body {
      background-image: url('images/airplane.jpg');
      background-size: cover;
      background-position: center;
      color: white;
```

```
.overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    .card {
      background-color: rgba(255, 255, 255, 0.9);
    }
    .navbar {
      background-color: rgba(0, 51, 102, 0.9);
    }
    footer {
      background-color: rgba(0, 51, 102, 0.9);
    }
    .btn-primary {
      background-color: #0066cc;
      border-color: #0066cc;
    }
  </style>
</head>
<body>
  <!-- Navigation Bar -->
  <nav class="navbar navbar-expand-lg navbar-dark">
    <div class="container-fluid">
      <a class="navbar-brand" href="home.jsp">BharatYatra</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        class="nav-item">
            <a class="nav-link" href="home.jsp">Home</a>
          class="nav-item">
            <a class="nav-link" href="logout.jsp">Logout</a>
          </div>
    </div>
  </nav>
  <!-- Main Content -->
  <div class="overlay">
    <div class="container my-5">
      <div class="row justify-content-center">
```

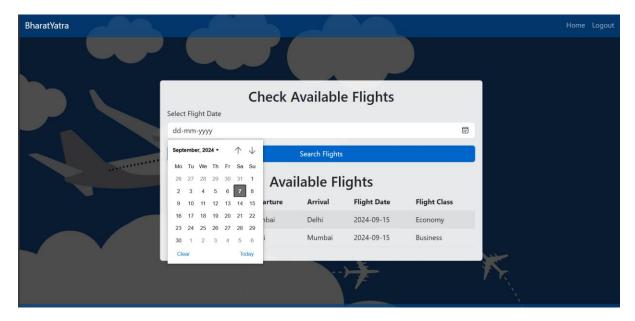
```
<div class="col-md-8">
         <div class="card">
           <div class="card-body">
            <h2 class="text-center">Check Available Flights</h2>
            <!-- Date Selection Form -->
            <form action="CheckFlightServlet" method="post" class="mb-4">
              <div class="mb-3">
                <label for="flightDate" class="form-label">Select Flight Date</label>
                <input type="date" class="form-control" id="flightDate"
name="flightDate" required>
              </div>
              <button type="submit" class="btn btn-primary w-100">Search
Flights</button>
             </form>
            <!-- Display Available Flights -->
            <h2 class="text-center">Available Flights</h2>
            <thead>
                Flight Number
                  Departure
                  Arrival
                  Flight Date
                  Flight Class
                </thead>
              <%
                  List<Flight> flights = (List<Flight>) request.getAttribute("flights");
                  if (flights != null && !flights.isEmpty()) {
                    for (Flight flight: flights) {
                %>
                <%= flight.getFlightNumber() %>
                  <%= flight.getDeparture() %>
                  <%= flight.getArrival() %>
                  <%= flight.getFlightDate() %>
                  <%= flight.getFlightClass() %>
                <%
                    }
                  } else {
                %>
                No flights available for the
selected date.
```

```
<%
                  %>
                </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- Footer -->
  <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved.
  </footer>
  <!-- Bootstrap JS -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-</pre>
alpha3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

#### Checkflightservlet

```
import java.io.IOException;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.Date;
import java.util.ArrayList;
import java.util.List;
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 javaclass. Flight;
@WebServlet("/CheckFlightServlet")
public class CheckFlightServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String flightDate = request.getParameter("flightDate");
```

```
System.out.println("Selected Date: " + flightDate); // Debugging line
    List<Flight> flights = new ArrayList<>();
    try {
      // Convert the flightDate to java.sql.Date
      java.sql.Date sqlDate = java.sql.Date.valueOf(flightDate);
      // Database connection
      Class.forName("com.mysql.cj.jdbc.Driver");
      Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/ARS",
"root", "kshiti");
      String query = "SELECT * FROM Flight_Status WHERE flight_date = ?";
      PreparedStatement stmt = conn.prepareStatement(query);
      stmt.setDate(1, sqlDate);
      ResultSet rs = stmt.executeQuery();
      while (rs.next()) {
         Flight flight = new Flight();
         flight.setFlightNumber(rs.getString("flight_number"));
         flight.setDeparture(rs.getString("departure"));
         flight.setArrival(rs.getString("arrival"));
         flight.setFlightDate(rs.getDate("flight_date"));
         flight.setFlightClass(rs.getString("flight_class"));
         flights.add(flight);
         // Log retrieved flight details
  System.out.println("Flight retrieved: " + flight.getFlightNumber());
      }
      rs.close();
      stmt.close();
      conn.close();
    } catch (Exception e) {
      e.printStackTrace();
    request.setAttribute("flights", flights);
    request.getRequestDispatcher("checkFlight.jsp").forward(request, response);
  }
}
```



#### Bookflight.jsp

```
<%--
  Document : bookflight
  Created on: 04-Sept-2024, 3:55:57 pm
 Author: Kshiti
--%>
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-</pre>
8"%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Book Flight - BharatYatra</title>
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <style>
    body {
      background-image: url('images/airplane.jpg');
      background-size: cover;
      background-position: center;
      color: white;
    }
    .overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    }
    .card {
      background-color: rgba(255, 255, 255, 0.9);
```

```
.navbar {
      background-color: rgba(0, 51, 102, 0.9);
    }
    footer {
      background-color: rgba(0, 51, 102, 0.9);
    .btn-primary {
      background-color: #0066cc;
      border-color: #0066cc;
    .container {
      margin-top: 50px;
    }
  </style>
</head>
<body>
  <!-- Navigation Bar -->
  <nav class="navbar navbar-expand-lg navbar-dark">
    <div class="container-fluid">
      <a class="navbar-brand" href="home.jsp">BharatYatra</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        cli class="nav-item">
            <a class="nav-link" href="home.jsp">Home</a>
          class="nav-item">
            <a class="nav-link" href="logout.jsp">Logout</a>
          </div>
    </div>
  </nav>
  <!-- Main Content -->
  <div class="overlay">
    <div class="container my-5">
      <div class="row justify-content-center">
        <div class="col-md-8">
          <div class="card">
            <div class="card-body">
              <h2 class="text-center">Book a Flight</h2>
```

```
<%-- Display the success or error message --%>
                String message = (String) request.getAttribute("message");
                if (message != null) {
              %>
                <div class="alert alert-info alert-dismissible fade show" role="alert">
                  <%= message %>
                  <button type="button" class="btn-close" data-bs-dismiss="alert" aria-
label="Close"></button>
                </div>
              <% } %>
              <form action="BookFlightServlet" method="post">
                <div class="mb-3">
                  <label for="flightNumber" class="form-label">Flight Number:</label>
                  <select name="flightNumber" id="flightNumber" class="form-select"</pre>
required>
                     <!-- Can use JSTL Api library to dynamically update the drop dowm list
-->
                     <option value="AI202">AI202 - Mumbai to Delhi
                     <option value="AI303">AI303 - Delhi to Mumbai
                     <option value="AI404">AI404 - Mumbai to Bangalore
                     <option value="AI4045">AI4045 - Mumbai to Goa</option>
                     <option value="AI4068">AI4068 - Mumbai to Srinagar
                     <option value="AI4069">AI4069 - Mumbai to Srinagar
                     <option value="AI8086">AI8086 - Mumbai to Surat
                  </select>
                </div>
                <div class="mb-3">
                  <label for="flightDate" class="form-label">Flight Date:</label>
                  <input type="date" id="flightDate" name="flightDate" class="form-
control" required>
                </div>
                <div class="mb-3">
                  <label for="passengerName" class="form-label">Passenger
Name:</label>
                  <input type="text" id="passengerName" name="passengerName"
class="form-control" placeholder="Enter your name" required>
                </div>
                <div class="mb-3">
                  <label for="passengerAge" class="form-label">Passenger Age:</label>
                  <input type="text" id="passengerAge" name="passengerAge"
class="form-control" placeholder="Enter your age" required>
                </div>
```

```
<div class="mb-3">
                   <label for="flightClass" class="form-label">Flight Class:</label>
                   <select name="flightClass" id="flightClass" class="form-select" required>
                     <option value="Economy">Economy</option>
                     <option value="Business">Business
                   </select>
                 </div>
                 <button type="submit" class="btn btn-primary">Book Flight</button>
               </form>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- Footer -->
  <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved.
  </footer>
  <!-- Bootstrap JS -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-</pre>
alpha3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
Bookflightservlet
import java.io.IOException;
```

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/BookFlightServlet")
public class BookFlightServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String flightNumber = request.getParameter("flightNumber");
```

```
String flightDate = request.getParameter("flightDate");
    String passengerName = request.getParameter("passengerName");
    String passengerAge = request.getParameter("passengerAge");
    String flightClass = request.getParameter("flightClass");
    try {
      // Database connection
      Class.forName("com.mysql.cj.jdbc.Driver");
      Connection conn = DriverManager.getConnection("idbc:mysql://localhost:3306/ARS",
"root", "kshiti");
      // SQL query to insert booking data into the database
      String query = "INSERT INTO Booking (flight_number, flight_date, passenger_name,
passenger age, flight class) VALUES (?, ?, ?, ?, ?)";
      PreparedStatement stmt = conn.prepareStatement(query);
      stmt.setString(1, flightNumber);
      stmt.setString(2, flightDate);
      stmt.setString(3, passengerName);
      stmt.setString(4, passengerAge);
      stmt.setString(5, flightClass);
      int rowsInserted = stmt.executeUpdate();
      if (rowsInserted > 0) {
        request.setAttribute("message", "Flight booked successfully!");
      } else {
        request.setAttribute("message", "Booking failed. Please try again.");
      }
      stmt.close();
      conn.close();
    } catch (Exception e) {
      e.printStackTrace();
      request.setAttribute("message", "An error occurred during booking. Please check
your inputs or try again later.");
    }
    request.getRequestDispatcher("bookFlight.jsp").forward(request, response);
}
```

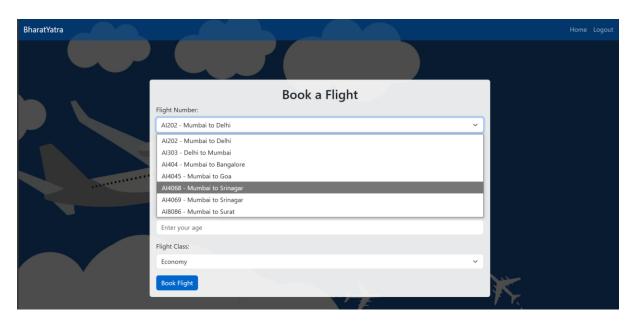
#### Flight class

/\*

```
* Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
```

<sup>\*</sup> Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template \*/

```
package javaclass;
* @author Kshiti
public class Flight {
  private String flightNumber;
  private String departure;
  private String arrival;
  private java.sql.Date flightDate;
  private String flightClass;
  // Getters and Setters
  public String getFlightNumber() { return flightNumber; }
  public void setFlightNumber(String flightNumber) { this.flightNumber = flightNumber; }
  public String getDeparture() { return departure; }
  public void setDeparture(String departure) { this.departure = departure; }
  public String getArrival() { return arrival; }
  public void setArrival(String arrival) { this.arrival = arrival; }
  public java.sql.Date getFlightDate() { return flightDate; }
  public void setFlightDate(java.sql.Date flightDate) { this.flightDate = flightDate; }
  public String getFlightClass() { return flightClass; }
  public void setFlightClass(String flightClass) { this.flightClass = flightClass; }
}
```



#### Addflightconfirmation

<%--

Document: addFlightConfirmation Created on: 06-Sept-2024, 7:35:40 pm

```
Author : Kshiti
--%>
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-</pre>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Add Flight Confirmation</title>
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <style>
    body {
      background-image: url('images/airplane.jpg');
      background-size: cover;
      background-position: center;
      color: white;
    .overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    }
    .card {
      background-color: rgba(255, 255, 255, 0.9);
    .navbar {
      background-color: rgba(0, 51, 102, 0.9);
    footer {
      background-color: rgba(0, 51, 102, 0.9);
    }
    .btn-primary {
      background-color: #0066cc;
      border-color: #0066cc;
    .button-container {
      margin-top: 30px; /* Adjust this value as needed */
  </style>
</head>
<body>
  <!-- Navigation Bar -->
  <nav class="navbar navbar-expand-lg navbar-dark">
```

```
<div class="container-fluid">
      <a class="navbar-brand" href="home.jsp">BharatYatra</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        cli class="nav-item">
            <a class="nav-link active" aria-current="page" href="home.jsp">Home</a>
          cli class="nav-item">
            <a class="nav-link" href="logout.jsp">Logout</a>
          </div>
    </div>
  </nav>
  <!-- Main Content -->
 <div class="overlay">
    <div class="container my-5">
      <div class="row justify-content-center">
        <div class="col-md-8">
          <div class="card">
            <div class="card-body">
              <h2 class="text-center">Flight Added Successfully</h2>
              Your flight has been added to the system. Thank
you!
              <div class="button-container text-center">
                <a href="addFlight.jsp" class="btn btn-primary">Add Another Flight</a>
                <a href="home.jsp" class="btn btn-primary">Back to Home</a>
              </div>
            </div>
          </div>
        </div>
      </div>
    </div>
  </div>
 <!-- Footer -->
 <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved.
  </footer>
  <!-- Bootstrap JS -->
```

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

#### Addflightform

```
<%--
  Document : addFlightForm
 Created on: 06-Sept-2024, 8:01:22 pm
 Author : Kshiti
--%>
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-</pre>
8"%>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Add Flight - BharatYatra</title>
  <!-- Bootstrap CSS -->
  k href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-
alpha3/dist/css/bootstrap.min.css" rel="stylesheet">
  <!-- Custom CSS -->
  <style>
    body {
      background-image: url('images/airplane.jpg');
      background-size: cover;
      background-position: center;
      color: white;
    }
    .overlay {
      background-color: rgba(0, 0, 0, 0.7);
      padding: 50px 0;
    }
    .card {
      background-color: rgba(255, 255, 255, 0.9);
    .navbar {
      background-color: rgba(0, 51, 102, 0.9);
    }
    footer {
      background-color: rgba(0, 51, 102, 0.9);
    }
    .btn-primary {
      background-color: #0066cc;
      border-color: #0066cc;
```

```
</style>
</head>
<body>
  <!-- Navigation Bar -->
  <nav class="navbar navbar-expand-lg navbar-dark">
    <div class="container-fluid">
      <a class="navbar-brand" href="home.jsp">BharatYatra</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        class="nav-item">
            <a class="nav-link active" aria-current="page" href="home.jsp">Home</a>
          cli class="nav-item">
            <a class="nav-link" href="logout.jsp">Logout</a>
          </div>
    </div>
  </nav>
  <!-- Main Content -->
  <div class="overlay">
    <div class="container my-5">
      <div class="row justify-content-center">
        <div class="col-md-8">
          <div class="card">
            <div class="card-body">
              <h2 class="text-center">Add New Flight</h2>
              <form action="AddFlightServlet" method="post">
                <div class="mb-3">
                  <label for="flightNumber" class="form-label">Flight Number</label>
                  <input type="text" id="flightNumber" name="flightNumber"
class="form-control" required>
                </div>
                <div class="mb-3">
                  <label for="departure" class="form-label">Departure</label>
                  <input type="text" id="departure" name="departure" class="form-
control" required>
                </div>
                <div class="mb-3">
                  <label for="arrival" class="form-label">Arrival</label>
```

```
<input type="text" id="arrival" name="arrival" class="form-control"
required>
                 </div>
                 <div class="mb-3">
                   <label for="flightDate" class="form-label">Flight Date</label>
                   <input type="date" id="flightDate" name="flightDate" class="form-
control" required>
                 </div>
                 <div class="mb-3">
                   <label for="flightClass" class="form-label">Flight Class</label>
                   <select id="flightClass" name="flightClass" class="form-select" required>
                     <option value="Economy">Economy</option>
                     <option value="Business">Business
                     <option value="First">First</option>
                   </select>
                 </div>
                 <input type="submit" value="Add Flight" class="btn btn-primary">
               </form>
             </div>
          </div>
        </div>
      </div>
    </div>
  </div>
  <!-- Footer -->
  <footer class="text-light text-center py-3">
    © 2024 BharatYatra. All rights reserved.
  </footer>
  <!-- Bootstrap JS -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0-</pre>
alpha3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

#### Addflightverificationservlet

```
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;
@WebServlet("/AddFlightVerificationServlet")
```

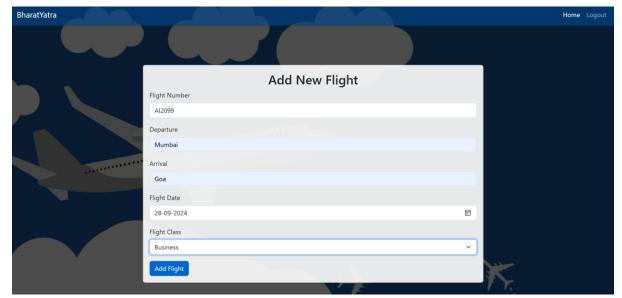
```
public class AddFlightVerificationServlet extends HttpServlet {
  private static final long serialVersionUID = 1L;
  private static final String ADMIN_PASSWORD = "iamadmin"; // Change this to your actual
admin password
  @Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String adminPassword = request.getParameter("adminPassword");
    if (ADMIN PASSWORD.equals(adminPassword)) {
      // Redirect to the actual Add Flight form
      response.sendRedirect("addFlightForm.jsp");
    } else {
      // Redirect to an error page or show a message
      request.setAttribute("errorMessage", "Invalid password. Access denied.");
      request.getRequestDispatcher("error.jsp").forward(request, response);
    }
  }
}
```

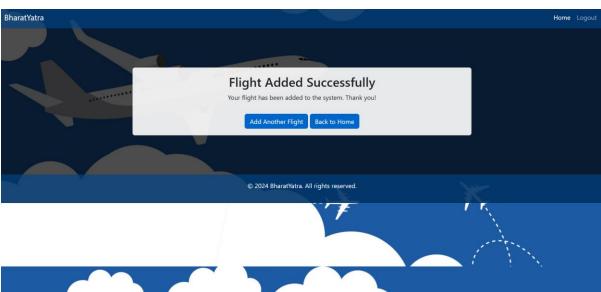


#### Addflightservlet

```
import java.io.IOException;
import java.sql.Connection;
import java.sql.DriverManager;
import javax.sql.PreparedStatement;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/AddFlightServlet")
public class AddFlightServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;
```

```
@Override
  protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
ServletException, IOException {
    String flightNumber = request.getParameter("flightNumber");
    String departure = request.getParameter("departure");
    String arrival = request.getParameter("arrival");
    String flightDate = request.getParameter("flightDate");
    String flightClass = request.getParameter("flightClass");
    try {
      // Database connection
      Class.forName("com.mysql.cj.jdbc.Driver");
      Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/ARS",
"root", "kshiti");
      // SQL Query to insert new flight details
      String query = "INSERT INTO Flight_Status (flight_number, departure, arrival,
flight date, flight class) VALUES (?, ?, ?, ?, ?)";
      PreparedStatement stmt = conn.prepareStatement(query);
      stmt.setString(1, flightNumber);
      stmt.setString(2, departure);
      stmt.setString(3, arrival);
      stmt.setString(4, flightDate);
      stmt.setString(5, flightClass);
      stmt.executeUpdate();
      stmt.close();
      conn.close();
      // Redirect to a confirmation page or back to the add flight page
      response.sendRedirect("addFlightConfirmation.jsp");
    } catch (Exception e) {
      e.printStackTrace();
      response.sendRedirect("error.jsp"); // Redirect to an error page if something goes
wrong
  }
```





#### Error.jsp