# **Flyaway**

The code for the project is hosted on: GitHub

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This document contains the following sections:

Sprint Planning

- Core Concepts used in project
- Product capabilities and source code
- Unique Selling point of the Application
- Conclusion

### **Sprint Planning and Task Completion**

**Note:** A separate document for sprint planning is attached to the Zip.

The project is planned to be completed in two Sprints. The task assumed to be completed are:

### Sprint 1:

- Flow chart of the application
- Initializing Git repository to track changes of development
- Writing the source code

#### **Sprint 2:**

- Testing the program with various user inputs
- Pushing project to GitHub
- Creating documentation

## **Core Concepts Used in the Project**

- JSP
- Servlets
- JDBC
- Tomcat
- HTML
- CSS
- Exception Handling

### **Product Capabilities**

The application has the following capabilities:

- 1. Welcome page
- 2. User login
- 3. User signup
- 4. Search Flights
- 5. Search results
- 6. Passenger details
- 7. Payment
- 8. Thankyou
- 9. Admin page with respective functions which include
  - 9.1. Change Admin Password
  - 9.2.Show bookings
  - 9.3.Add flights

Source code for each of the capabilities with output is shown below:

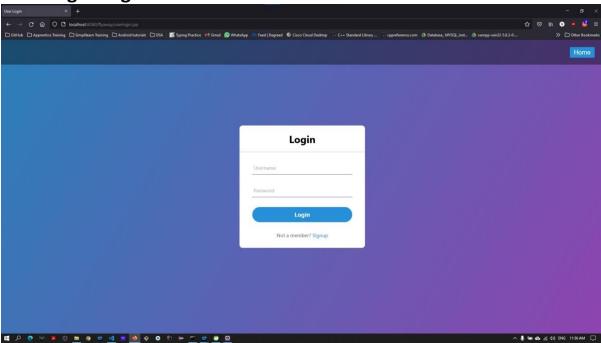
**Note:** Complete source code, respective servlets of the app is zipped please check zip/Gitrepo for reference.

**Welcome Page of the Application:** 



```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</p>
  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<meta charset="ISO-8859-1">
<title>Welcome to FLYAWAY</title>
<link rel="stylesheet" href= "css/welcome.css">
<div class="wrapper">
  <nav class ="navbar">
    <a class = "active" href = "welcome.jsp">Home</a>
    <a href = "adminlogin.jsp">Admin</a>
  <div class="center">
  <h1> Welcome to FlyAway </h1><br>
  <h2>Book Flight Tickets at best prices!</h2><br>
  <div class = "bookFlights">
  <button onclick = "location.href = 'userlogin.jsp" class = "searchpage">Book Flights</button>
  <button onclick = "location.href = 'adminlogin.jsp" class="adminlogin">Admin Login/button>
```

**User Login Page** 

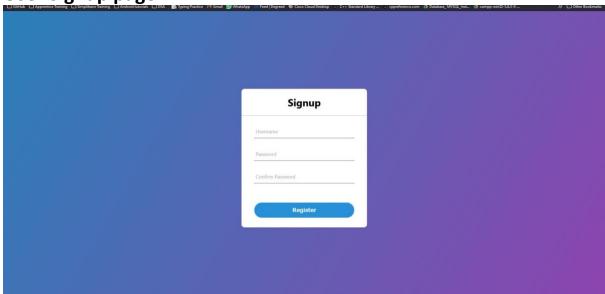


```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<IDOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<tittle>User Login</title>
link rel="stylesheet" href="css/userlogin.css">
</head>
<body>
<nav class = "navbar">

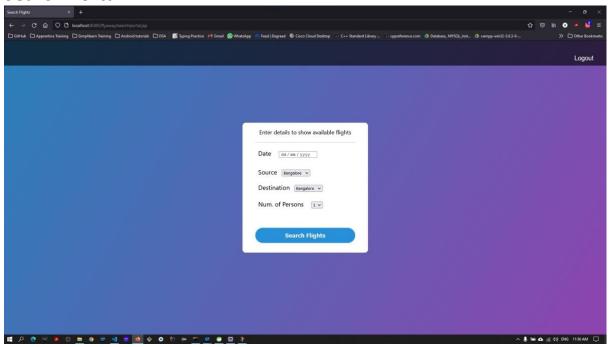
<ili><a class = "active" href = "welcome.jsp">Home</a>
</nav>
<div class = "center">
<h1>Login</h1>
<form action="userLogin" method="post" class="form-container">
<div class="txt_field">
<input type = "text" name = "uname" required>
<label for = "username">Username</label>
</div></div></div></div
```

```
<div class ="txt_field">
    <input type = "password" name = "pass" required>
    <label for = "password">Password</label>
    </div>
    <button type = "submit" value = "userlogin">Login </button>
        <div class ="signup_link">
        Not a member? <a href = "signup.jsp">Signup</a>
        </div>
    </form>
        </div>
</body>
</html>
```

**User Signup page** 



### **Search Portal**

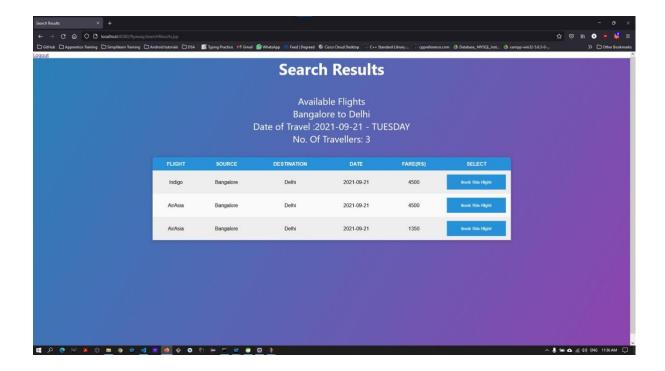


```
    page language="java" contentType="text/html; charset=ISO-8859-1"

  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<meta charset="ISO-8859-1">
k rel = "stylesheet" href = "css/searchportal.css">
<title>Search Flights</title>
<%
if(session.getAttribute("username")==null)
    response.sendRedirect("userlogin.jsp");
%>
<div class="navbar">
<nav class ="navbar">
    <a class ="logout" href = "userlogin.jsp">Logout</a>
<div class ="center">
<form class = "form-container" action = "search" method = "post" >
 Enter details to show available flights 
<div class = "date-group">
<label class ="date" class ="date">Date</label>
<input type = "date" class ="form-control" id = "date" name ="date" placeholder = "Travel Date:">
<div class ="form-group">
<label class="source">Source</label>
<select name ="source">
  <option value = "Bangalore">Bangalore/option>
  <option value = "Delhi">Delhi</option>
  <option value = "Mumbai">Mumbai
```

```
<option value = "Hyderabad">Hyderabad</option>
<div class ="form-group">
<label class="destination">Destination</label>
<select class ="dest" id ="destination" name ="destination">
  <option value = "Bangalore">Bangalore/option>
  <option value = "Delhi">Delhi</option>
  <option value = "Mumbai">Mumbai
  <option value = "Hyderabad">Hyderabad</option>
<div class ="form-group">
<label class="no-of-persons">Num. of Persons</label>
<select class ="form-control" id ="no-of-persons" name ="no-of-persons">
  <option value = "1">1</option>
  <option value = "2">2</option>
  <option value = "3">3</option>
  <option value = "4">4</option>
  <option value = "5">5</option>
  <option value = "6">6</option>
<button type ="submit" value = "Submit">Search Flights/button>
```

#### **Search Results**



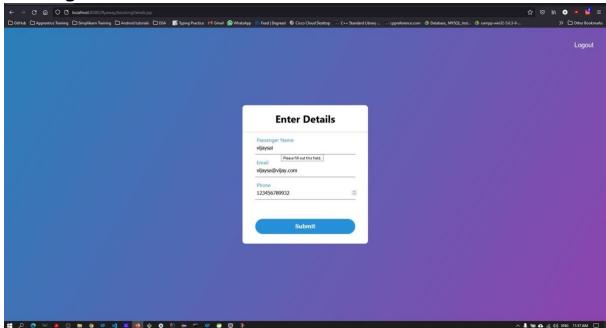
```
    page language="java" contentType="text/html; charset=ISO-8859-1"

  pageEncoding="ISO-8859-1"%>
<%@page import = "java.sql.*" %>
 <%@page import = "com.dao.searchDao" %>
<%
String driver = "com.mysql.jdbc.Driver";
String url = "jdbc:mysql://localhost:3306/flyaway";
String username = "root";
String password = "root";
String sql = searchDao.getQuery();
try{
  Class.forName(driver);
catch(ClassNotFoundException e) {
  e.printStackTrace();
Connection con = null;
Statement st = null;
ResultSet rs = null;
%>
```

```
<!DOCTYPE html>
k rel="stylesheet" href = "css/searchresults.css">
<meta charset="ISO-8859-1">
<title>Search Results</title>
</head>
<%
 if(session.getAttribute("username")==null)
   response.sendRedirect("userlogin.jsp");
%>
<div class="navbar">
<nav class ="navbar">
   <a class ="logout" href = "userlogin.jsp">Logout</a>
<div class ="container">
<h2>Search Results</h2>
Available Flights <br> <%=searchDao.source %> to <%=searchDao.destination %> <br>
Date of Travel :<%=searchDao.date %> - <%=searchDao.day %> <br>
No. Of Travellers: <%=searchDao.persons %><br> 
Select a Flight
 Flight
 Source
 Destination
 Date
 Fare(Rs)
 Select
```

```
<%
try {
  con = DriverManager.getConnection(url,username,password);
  st = con.createStatement();
  rs = st.executeQuery(sql);
  while(rs.next()){
%>
<%=rs.getString("name") %>
      <"=rs.getString("source") %>
      < %=rs.getString("destination") %>
      <</td>
      < %=rs.getString("TicketPrice") %>
        <form action="${pageContext.request.contextPath}/bookingDetails.jsp" method="post">
           <input type="hidden" id="name" name="name" value="<%=rs.getString("name")%>">
          <input type="hidden" id="ticket_price" name="ticket_price"</pre>
value="<%=rs.getString("TicketPrice")%>">
          <input type="hidden" id="flight_id" name="flight_id" value="<%=rs.getString("FlightId")%>">
          <input type="submit" class="btn btn-success" value="Book This Flight">
    <%
      } catch (Exception e) {
        e.printStackTrace();
    %>
```

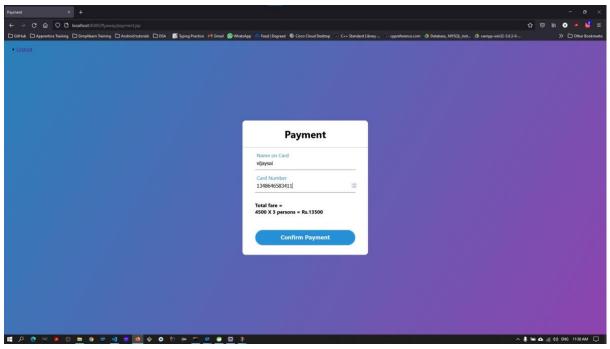
**Passenger Details** 



```
@ page language="java" contentType="text/html; charset=ISO-8859-1"
  pageEncoding="ISO-8859-1"%>
 <@ page import ="com.dao.bookingDetails" %>
 %
  bookingDetails.flightBookingId = request.getParameter("flight_id");
  bookingDetails.ticketPrice= Integer.parseInt(request.getParameter("ticket_price"));
  bookingDetails.flightName=request.getParameter("name");
%>
<!DOCTYPE html>
k rel ="stylesheet" href="css/bookingdetails.css">
<meta charset="ISO-8859-1">
<title>Booking Details</title>
</head>
<%
if(session.getAttribute("username")==null)
    response.sendRedirect("adminlogin.jsp");
```

```
<div class="navbar">
<nav class ="navbar">
                <a class ="logout" href = "userlogin.jsp">Logout</a>
<div class = "center">
       <h1>Enter Details</h1>
       <form class="form-container" action="${pageContext.request.contextPath}/payment.jsp" method="post">
       <div class ="txt_field">
       <input type = "text" id ="passname" name ="passname" required>
       <a href="label"><a href="label
       <div class="txt_field">
       <input type = "email" id ="emal" name ="email" aria-describedby="emailHelp" required>
       <label for="email">Email</label>
       <div class = "txt_field">
       <input type="number" id="phone" name="phone" required >
       <label for="phone">Phone
       <button type="submit" class="btn btn-success btn-block" value="Submit">Submit/button>
```

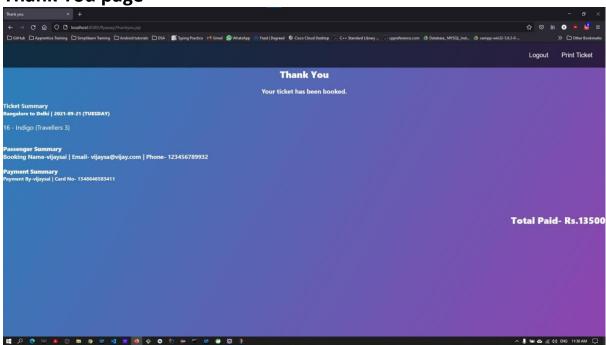
# **Payment page**



```
%@ page language="java" contentType="text/html; charset=ISO-8859-1"
         pageEncoding="ISO-8859-1"%>
   <%@ page import= "com.dao.bookingDetails" %>
    %@ page import= "com.dao.searchDao" %>
    %
         bookingDetails.passengerName = request.getParameter("passname");
         bookingDetails.passengerEmail = request.getParameter("email");
         bookingDetails.passengerMobile = request.getParameter("phone");
if (booking Details.passenger Name.equals ("") || booking Details.passenger Email.equals ("") || booking Details.pass
erMobile.equals("")){
                  out.print("Enter valid details");
         else {
%>
 <!DOCTYPE html>
k rel ="stylesheet" href="css/payment.css">
 <meta charset="ISO-8859-1">
 <title>Payment</title>
     %
```

```
if(session.getAttribute("username")==null)
    response.sendRedirect("userlogin.jsp");
%>
<div class="navbar">
<nav class ="navbar">
    <a class ="logout" href = "userlogin.jsp">Logout</a>
<div class="center">
  <h1>Payment</h1>
  <form action="${pageContext.request.contextPath}/thankyou.jsp" method="post" class="form-container">
  <div class = "txt_field">
  <input type="text" class="form-control" id="name_on_card" name="name_on_card" required>
  <label for="card_details">Name on Card</label>
  <div class="txt_field">
  <input type="number" class="form-control" id="card_details" name="card_details" required>
  <label for="card_details">Card Number</label>
  <span><strong>Total fare = <br> <%=bookingDetails.ticketPrice%> X
<%=searchDao.persons%> persons =
Rs.<%=bookingDetails.ticketPrice*searchDao.persons%></strong></span>
  <button type="submit" class="btn btn-success btn-block" value="Submit">Confirm Payment</button>
-%
```

Thank You page



```
<%@page import="servlets.Login"%>

    page language="java" contentType="text/html; charset=ISO-8859-1"

        pageEncoding="ISO-8859-1"%>

    page import = "com.dao.bookingDetails" %>

   <%@ page import = "com.dao.searchDao" %>
   -%
bookingDetails.nameOnCard = request.getParameter("name_on_card");
bookingDetails.cardDetails =request.getParameter("card_details");
%>
 <!-- update database -->

    page import="java.io.IOException"%>

   <@ page import ="java.sql.Connection"%>

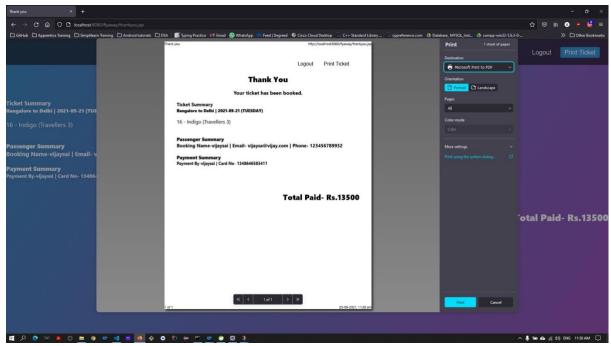
    page import ="java.io.PrintWriter"%>

   opening state of the contract of the contra
   <%@ page import ="java.sql.PreparedStatement"%>
   <%@ page import ="java.sql.SQLException"%>
   <%@page import ="javax.servlet.ServletException"%>
   @page import ="javax.servlet.http.HttpServlet"%>
    @page import ="javax.servlet.http.HttpServletRequest"%>
```

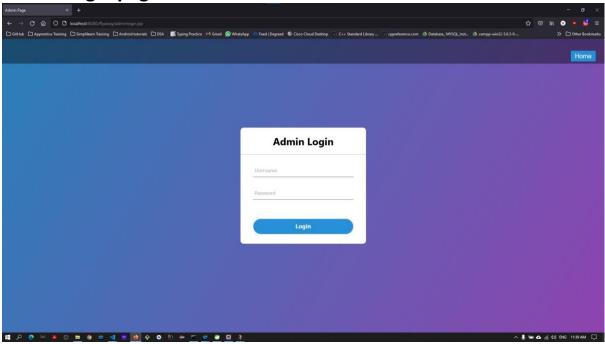
```
<@page import ="javax.servlet.http.HttpServletResponse"%>
<%
       String passengerName = bookingDetails.passengerName;
       String email = bookingDetails.passengerEmail;
       String phone = bookingDetails.passengerMobile;
       String cardNumber=bookingDetails.cardDetails;
       String Source = searchDao.source;
       String Destination = searchDao.destination;
       String Day = searchDao.date + " " + searchDao.day;
       int noOfPersons = searchDao.persons;
       int TotalPrice =bookingDetails.ticketPrice*searchDao.persons;
       String sql = "insert into
bookinglist(passengerName,email,phone,cardNumber,Source,Destination,Day,noOfPersons,TotalPrice)
values(?,?,?,?,?,?,?,?)";
       String url = "jdbc:mysql://localhost:3306/flyaway";
       String username = "root";
       String password = "root";
       Class.forName("com.mysql.jdbc.Driver");
       Connection con = DriverManager.getConnection(url,username,password);
       PreparedStatement st = con.prepareStatement(sql);
       st.setString(1,passengerName);
       st.setString(2, email);
       st.setString(3,phone);
       st.setString(4,cardNumber);
       st.setString(5,Source);
       st.setString(6,Destination);
       st.setString(7,Day);
       st.setInt(8,noOfPersons);
       st.setInt(9,TotalPrice);
       st.executeUpdate();
       con.close();
%>
<!-- Show Details -->
<!DOCTYPE html>
<meta charset="ISO-8859-1">
<link rel ="stylesheet" href="css/thankyou.css">
```

```
<title>Thank you</title>
<%
if(session.getAttribute("username")==null)
    response.sendRedirect("userlogin.jsp");
%>
<div class="navbar">
<nav class ="navbar">
    <a class ="logout" href = "welcome.jsp">Logout</a>
    <a onclick="window.print()" class="print">Print Ticket</a>
<div class="container">
    <h1 align="center"><span><strong>Thank You</strong></span></h1>
    <span><strong>Your ticket has been booked.</strong></span>
    <h3>Ticket Summary</h3>
    <h4><strong><%=searchDao.source%> to <%=searchDao.destination%> | <%=searchDao.date%>
(<%=searchDao.day%>)</strong></h4>
    <%=bookingDetails.flightBookingId%> - <%=bookingDetails.flightName%> (Travellers)
<%=searchDao.persons%>)<br>
    <h3><strong>Passenger Summary</strong></h3>
    <%=bookingDetails.passengerEmail%> | Phone- <%=bookingDetails.passengerMobile%></h3>
    <h3><strong>Payment Summary</strong></h3>
    <h4>Payment By-<%=bookingDetails.nameOnCard%> | Card No-
<%=bookingDetails.cardDetails%></h4><br>
    <h2 align="right"><strong>Total Paid-
Rs.<%=searchDao.persons*bookingDetails.ticketPrice%></strong></h2><br>
```

### Print ticket demo

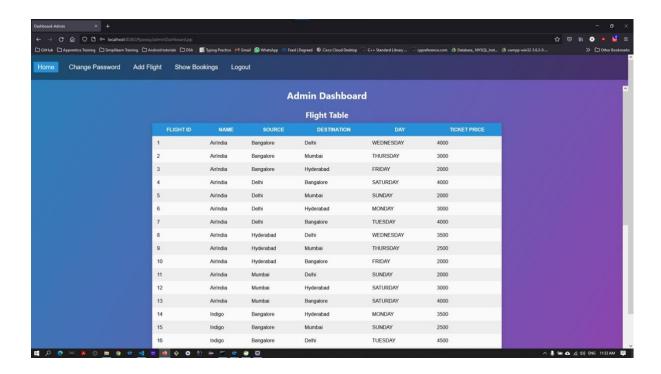


**Admin Login page** 



```
%@ page language="java" contentType="text/html; charset=ISO-8859-1"
  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<meta charset="ISO-8859-1">
<title>Admin Page</title>
<link rel="stylesheet" href="css/adminlogin.css">
<nav class ="navbar">
    <a class = "active" href = "welcome.jsp">Home</a>
  <div class = "center">
  <h1>Admin Login</h1>
  <form action="Login" method="post" class="form-container">
  <div class ="txt_field">
  <input type = "text" name = "uname" required>
  <span></span>
  <label for = "username">Username</label>
  <div class ="txt_field">
  <input type = "password" name = "pass" required>
  <label for = "password">Password</label>
  <button type = "submit" value = "login">Login /button>
```

#### **Admin Dashboard**

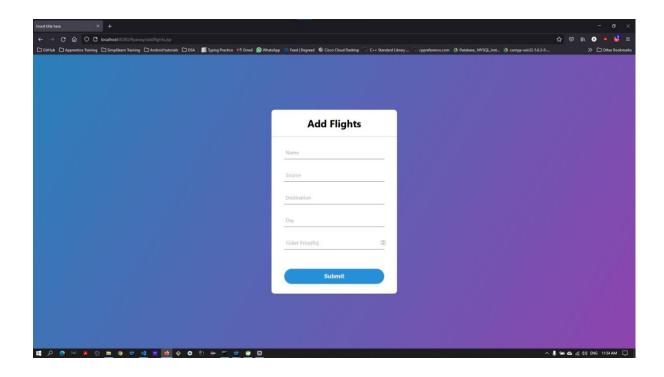


```
@ page language="java" contentType="text/html; charset=ISO-8859-1"
  pageEncoding="ISO-8859-1"%>
<%@page import = "servlets.Login" %>
 <%@page import ="java.sql.*" %>
String driver = "com.mysql.jdbc.Driver";
String url = "jdbc:mysql://localhost:3306/flyaway";
String username = "root";
String password = "root";
String sql = null;
try{
  Class.forName(driver);
  } catch(ClassNotFoundException e){
     e.printStackTrace();
Connection con =null;
Statement st = null;
ResultSet rs =null;
%>
<!DOCTYPE html>
```

```
k rel ="stylesheet" href="css/admindashboard.css">
<meta charset="ISO-8859-1">
<title>Dashboard-Admin</title>
<body>
<%
if(session.getAttribute("username")==null)
   response.sendRedirect("adminlogin.jsp");
%>
<div class="navbar">
<nav class ="navbar">
   <a class = "active" href = "welcome.jsp">Home</a>
   <a href = "change-password.jsp">Change Password</a>
   <a href = "addflights.jsp">Add Flight</a>
   <a href = "showbookings.jsp">Show Bookings</a>
   <a class ="logout" href = "adminlogin.jsp">Logout</a>
<div class ="container">
 <h2> Admin Dashboard </h2>
<div class ="table">
  Flight Id 
    Name 
    source 
    Destination 
    Day 
    Ticket Price 
   </thread>
   <h3>Flight Table</h3>
```

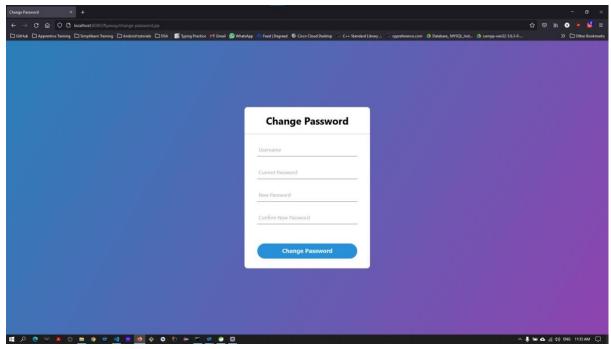
```
<%
     con = DriverManager.getConnection(url,username,password);
     st = con.createStatement();
     sql = "select *from airlineslist";
     rs=st.executeQuery(sql);
     while(rs.next()){
   %>
   <"=rs.getString("FlightID") %>
   <%=rs.getString("Source") %>
   <%=rs.getString("Destination") %>
   <"=rs.getString("Day") %>
   <"=rs.getString("TicketPrice") %>
   <%
   %>
</html>
```

# **Add Flights page**



```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"</p>
  pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<link rel="stylesheet" href="css/signup.css">
<meta charset="ISO-8859-1">
<title>Insert title here</title>
<%
if(session.getAttribute("username")==null)
    response.sendRedirect("adminlogin.jsp");
%>
<div class = "center">
  <h1>Add Flights</h1>
  <form action="addflights" method="post" class="form-container">
  <div class ="txt_field">
  <input type = "text" name = "Name" required>
  <label for = "Name">Name</label>
```

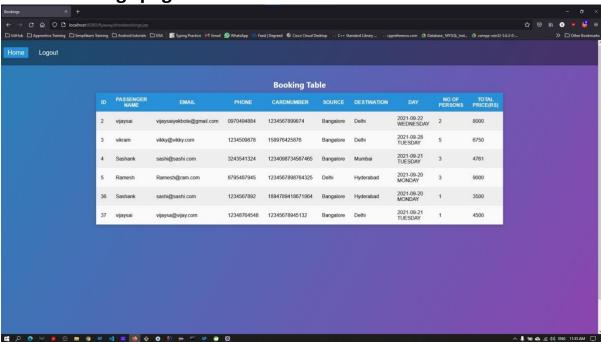
# Admin change password



#### Source code:

```
%@ page language="java" contentType="text/html; charset=ISO-8859-1"
  pageEncoding="ISO-8859-1"%>
  <%@ page import = "servlets.Login" %>
<!DOCTYPE html>
<meta charset="ISO-8859-1">
<title>Change Password</title>
<link rel="stylesheet" href = "css/signup.css">
<%
if(session.getAttribute("username")==null)
    response.sendRedirect("adminlogin.jsp");
%>
<div class ="center">
  <h1>Change Password</h1>
  <form action="changepassword" method="post" class="form-container">
  <div class="txt_field">
  <input type = "text" name = "uname" required>
  <label for = "username">Username</label>
```

**Show Bookings page** 



```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1"%>
```

```
<%@page import = "servlets.Login" %>
<%@page import ="java.sql.*" %>
<%
String driver = "com.mysql.jdbc.Driver";
String url = "jdbc:mysql://localhost:3306/flyaway";
String username = "root";
String password = "root";
String sql = null;
try{
  Class.forName(driver);
  } catch(ClassNotFoundException e){
    e.printStackTrace();
Connection con =null;
Statement st = null;
ResultSet rs =null;
%>
<!DOCTYPE html>
k rel ="stylesheet" href="css/admindashboard.css">
<meta charset="ISO-8859-1">
<title>Bookings</title>
<%
if(session.getAttribute("username")==null)
    response.sendRedirect("adminlogin.jsp");
%>
<div class="navbar">
<nav class ="navbar">
    <a class = "active" href = "welcome.jsp">Home</a>
    <a class ="logout" href = "adminlogin.jsp">Logout</a>
```

```
<div class ="container">
<div class ="table">
  Id 
   Passenger Name 
   Email 
   Phone 
   CardNumber 
    Source 
   Destination
   Day 
   No Of Persons 
    Total Price(Rs)
   <h3>Booking Table</h3>
   <%
    con = DriverManager.getConnection(url,username,password);
    st = con.createStatement();
    sql = "select *from bookinglist";
    rs=st.executeQuery(sql);
    while(rs.next()){
   %>
   <%=rs.getString("id") %>
   < %=rs.getString("passengerName") %>
   <%=rs.getString("email") %>
   <%=rs.getString("phone") %>
   <%=rs.getString("cardNumber") %>
   <%=rs.getString("Source") %>
   <%=rs.getString("Destination") %>
```

```
<%=rs.getString("Day") %>
<</td>

<%=rs.getString("noOfPersons") %>
<</td>

<%=rs.getString("TotalPrice") %>

<%</td>
}

%>

</div>

</body>
</html>
```

## **Unique Selling Points of the Application:**

- **1.** The application is designed to keep on running and taking user inputs even after exceptions occur.
- **2.** Material UI
- 3. Responsive Web UI.

### **Conclusion:**

Further improvements to the application can be done which may include:

- User forgot password
- Show users in admin dashboard.
- Option to book round tickets.