A

PROJECT REPORT ON

**Airline Reservation System**

BY

**Ms. Rutuja Balkrishna Kokare**

SUBMITTED TO

**SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE**

IN PARTIAL FULFILLMENT OF DEGREE

**MASTER OF COMPUTER APPLICATION (SEM-I)**

UNDER THE GUIDANCE OF

**Dr. Shveti Chandan**

Through,



**Sadhu Vaswani Institute of Management Studies for Girls, Koregaon Park, Pune-411001**

**2023-24**

**DECLARATION BY STUDENT**

To,

The Director,

SVIMS, Koregaon Park, Pune

I, undersigned hereby declare that this project titled, **""** written and submitted by me to SPPU, Pune, in partial fulfilment of the requirement of the

award of the degree of **MASTER OF COMPUTER APPLICATION (MCA-I)** under the

guidance of **Dr. Shveti Chandan,** is my original work.

I further declare that to the best of my knowledge and belief, this project has not been submitted to this or any other University or Institution for the award of any Degree.

**Place: Pune**

**Date:**

**()**

**ACKNOWLEDGEMENT**

I extend my sincere gratitude to Dr. B. H. Nanwani, Dr. Rajesh Kashyap and Dr. Shveti Chadan for allowing me to carry out the study and for their constant encouragement, valuable suggestions, and guidance during the research work.

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I extend my special gratitude to my dearest family members and friends who encouraged and motivated me to complete the project report.

**Place: Pune**

**Date:**

**Rutuja**

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Introduction To System

**What is System :**

Airline reservation systems incorporate airline schedules, [fare tariffs,](https://en.wikipedia.org/wiki/Fare_basis_code) passenger reservations and ticket records. An airline's direct distribution works within their own reservation system, as well as pushing out information to the GDS. The second type of direct distribution channel are consumers who use the internet or mobile applications to make their own reservations. Travel agencies and other indirect distribution channels access the same GDS as those accessed by the airline reservation systems, and all messaging is transmitted by a standardized messaging system that functions on two types of messaging that transmit on SITA's high level network (HLN). These messaging types are called Type A [usually EDIFACT format] for real time interactive communication and Type B [TTY] for informational and booking type of messages. Message construction standards set by IATA and ICAO, are global, and apply to more than air transportation. Since airline reservation systems are business critical applications, and they are functionally quite complex, the operation of an in-house airline reservation system is relatively expensive.

**Introduction To System and Project :**

**2.1 About Project**

The “**Airline Reservation”** project was designed for Go Fast Airways, Mumbai, to provide a Web based Application developed in JSP and MySQL to automate their Airline Reservation process. The main aim of the project is to provide an effective working platform to computerize the whole Airline reservation process. This project has been designed in such a way that it suits to all other Airlines. It has two sides admin side and member/customer side. Admin is responsible for maintaining Route Info, Airlines info, Flights Entry, Flights Schedules, Tour Info, Charges, Booking Information, Cancel Booking Information, and generates various reports such as Booking List, Booking cancellation, Flight Info, Flight Schedules, Experience shared by members, Tour Info and Datewise Booking etc. whereas on member side, member can search flight, book flight, can see booking history as well as can perform cancellation of booking. As a guest, you can share your experience or contact with airline.

The main aim of developing this Airline Reservation based application is to manage the Go Fast Airways. The main advantage is to provide better solution to the Airlines who wants to main information quickly and reduces the man power and cost. Here users interact with Front End designed using JSP and JAVA and all information can be stored at the back end MySQL Server, This Project was done in three months under the guidance of our college professors.

**2.2 Objective of Project**

The Objectives for this project are:**-** o Maintains various master information related to Route Info, Airlines info, Flights Entry, Flights Schedules, Tour Info, Charges etc.

* It manages booking and their cancellationo It helps in searching flight and booking flighto You can also cancel flight booking.
* It allows to login, register, change password, logout etc.
* User can share their experience.o It provides all reports which contain Booking List, Booking cancellation, Flight Info, Flight Schedules, Experience shared by members, Tour Info and Datewise Booking and many more etc. and also daily updates to the class admin.

**2.3 Scope of System :**

* The provided system cannot be used to calculate profit loss report as there are many other things have to be considered in calculating the profit loss report.
* The target user for this system are admin, members and guest.o The system helps to overcome data redundancy and it also saves time.

**2.4 User Requirement :**

1. Performance: The system should be able to manage a high volume of requests and transactions with minimal delays or performance concerns.
2. Scalability: The system should be able to scale up or down to meet changing demand.
3. Security: The system should protect sensitive client data and maintain the security of all transactions.
4. Interoperability: As needed, the system should be able to integrate with other systems and platforms.
5. Compliance: The system must meet all essential regulatory and industry security, privacy, and data protection standards.
6. Availability: The system should be available at all times, with as little downtime as possible for maintenance or updates.
7. Usability: The system should be simple to use for both customers and staff, with a simple and straightforward interface.
8. Maintainability: The system should be simple to maintain and update, with low downtime.

**2.5 Admin Requirment:**

1. Users should be able to view and change their existing bookings.
2. Provide customer service via a call centre or online chat.
3. Allow users to find flights depending on their origin, destination, and preferred travel dates.
4. Display available flights, together with information such as departure and arrival timings, layover duration, and ticket price.
5. Provide real-time flight status updates, including delays and cancellations.
6. Allow users to check in online for their travel, including selecting a seat and printing a boarding card.
7. Integrate with the airline’s loyalty programme to allow users to redeem points for flights.
8. Allow consumers to choose and purchase flights.
9. Accept payment for the flight reservation.
10. Please provide a booking confirmation with a reservation number and itinerary.
11. These are only a few examples of functional requirements for an airline reservation system.

The particular requirements will be determined by the airline’s objectives and aims.

**Investigation**

**Investigation Phase 3.1 Existing System** o The existing system is manual system. Needs to be converted into automated system. o In the existing system all the documents are not contain any paper work which is handled there is no chance of getting documents corrupted. o There are many drawbacks of the existing system such as requirement of large number of human resource and papers along with higher chance of losing data and tearing books.

* Less Security. o It is not reliable.
* Existing system is a time consuming. o Accuracy not guaranteed.

**3.2 Proposed system**

The front-end development tool was JSP and JAVA which allows visualization to build the Airline Reservation. The back-end code was done with fully object-oriented. The JAVA is easy-to-use and efficient.

The back-end database development tool used was MySQL Server. It is able to handle large amounts of data while maintaining data integrity and provides a number of senior management and data distribution functions. These two development tools are powerful, and a good interface for development.

**Requirement Analysis**

**4.1 Hardware and Software requirement :**

Airline reservation make the life of passengers very easy as they don’t need to stand in queues for getting their seats reserved and they can easily make reservation on any airline just from a single system. The purpose of Airline reservation project is to build an application program which airline could use to manage the reservation of airlines ticket.

## • Hardware:-

**Ram :-** 8.00 GB

**Rom:**-512 GB

**Graphics:**-2 GB

**Processer :**- Intel(R) Core(TM) i5  **Mouse :**-Any normal mouse.  **Keyboard :**- Any window supported keyboard.

• **Software :-**

**Backend:-**java

**Frontend:-** HTML,CSS,js.

**Database server:-** Microsoft SQL server. **Web server:-** Internet information server.

**4.2 Technology Used :**

**HTML :**

HTML (Hypertext Markup Language): HTML is the standard markup language used to create the structure of web pages. It defines elements such as headings, paragraphs, links, and images, allowing for the organization and presentation of content on the web.

**CSS :**

CSS is used to style HTML elements, controlling the visual appearance of web pages. It enables the customization of colors, fonts, spacing, and layout, ensuring a consistent and aesthetically pleasing design across the site.

**JAVASCRIPT :**

JavaScript is a versatile scripting language that adds interactivity and dynamic functionality to web pages. It can be used for tasks such as form validation, DOM manipulation, event handling, and asynchronous communication with servers.

**JAVA:**

Java is a class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. It is intended to let application developers write once, and run anywhere (WORA), meaning that compiled Java code can run on all platforms that support Java without the need for recompilation. Java was first released in 1995 and is widely used for developing applications for desktop, web, and mobile devices. Java is known for its simplicity, robustness, and security features, making it a popular choice for enterprise-level applications.

**Features Of Java-**

**Simple**

Java is very easy to learn, and its syntax is simple, clean and easy to understand.

According to Sun Microsystem, Java language is a simple programming language

**Object-oriented**

Java is an [object-oriented](https://www.javatpoint.com/java-oops-concepts) programming language. Everything in Java is an object. Object-oriented means we organize our software as a combination of different types of objects that incorporate both data and behaviour.

Object-oriented programming (OOPs) is a methodology that simplifies software development and maintenance by providing some rules.

**Platform Independent**

Java is platform independent because it is different from other languages like [C,](https://www.javatpoint.com/c-programming-language-tutorial) [C++,](https://www.javatpoint.com/cpp-tutorial) etc. which are compiled into platform specific machines while Java is a write once, run anywhere language. A platform is the hardware or software environment in which a program runs.

**Secured**

Java is best known for its security. With Java, we can develop virus-free systems. **Robus**

The English mining of Robust is strong. Java is robust because:

* It uses strong memory management.
* There is a lack of pointers that avoids security problems. o Java provides automatic garbage collection which runs on the Java Virtual Machine to get rid of objects which are not being used by a Java application anymore. o There are exception handling and the type checking mechanism in Java. All these points make Java robust.

**Architecture-neutral**

Java is architecture neutral because there are no implementation dependent features, for example, the size of primitive types is fixed.

In C programming, int data type occupies 2 bytes of memory for 32-bit architecture and 4 bytes of memory for 64-bit architecture. However, it occupies 4 bytes of memory for both 32 and 64-bit architectures in Java.

**Portable**

Java is portable because it facilitates you to carry the Java bytecode to any platform. It doesn't require any implementation.

**High-performance**

Java is faster than other traditional interpreted programming languages because Java bytecode is "close" to native code. It is still a little bit slower than a compiled language (e.g., C++). Java is an interpreted language that is why it is slower than compiled languages, e.g., C, C++, etc.

**Distributed**

Java is distributed because it facilitates users to create distributed applications in Java. RMI and EJB are used for creating distributed applications. This feature of Java makes us able to access files by calling the methods from any machine on the internet.

**Multi-threaded**

A thread is like a separate program, executing concurrently. We can write Java programs that deal with many tasks at once by defining multiple threads. The main advantage of multi-threading is that it doesn't occupy memory for each thread. It shares a common memory area. Threads are important for multi-media, Web applications, etc.

**System Analysis And Design**

**5.1 Feasibility Study :**

The main objective of feasibility study is to test the technical, social and economic of developing a system. This is done by investigation the existing system in the area under investigation and generation idea about the new system. Prior to the system developed a thorough study of the system is carried out involves……. o Identification of user requirement. o Identification how different tasks are carried out.

o Identification whether proposed system can meet the user requirement. o Providing technical, economical, operational feasibility of the proposed system.

**The details of the feasibility study are given below:-**

### TECHNICAL FEASIBILITY :-

o The system is developed by using Eclipse and JDK 1.8 which has already installed on the computer system. The machine configuration also supports the system. o The system being user friendly, data centric & reports generation is made easy. o Easy retrieval and access of data is provided.

### OPERATIONAL FEASIBILITY :-

* Cost of implementation of the system as well as the installation that to consider in the operational feasibility. After implementation of the system there is need to arrange training program for users of the system.
* Expenditure for this system is also a part of this of his study.

### ECONOMIC FEASIBILITY:-

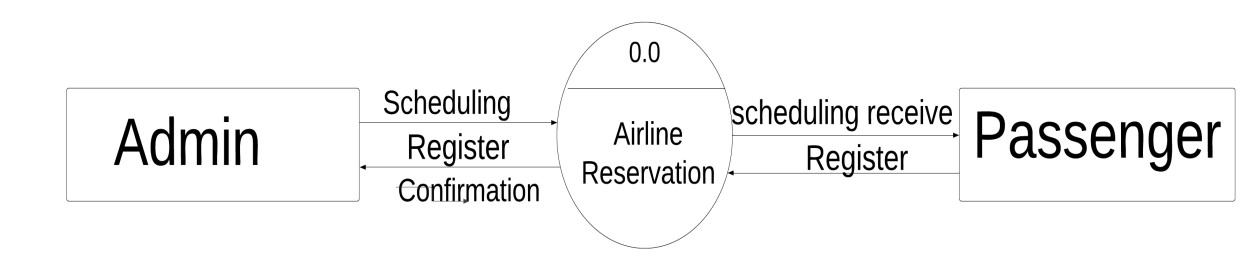
Economical feasibility is basically a cost benefit analysis.

The cost concerned is….

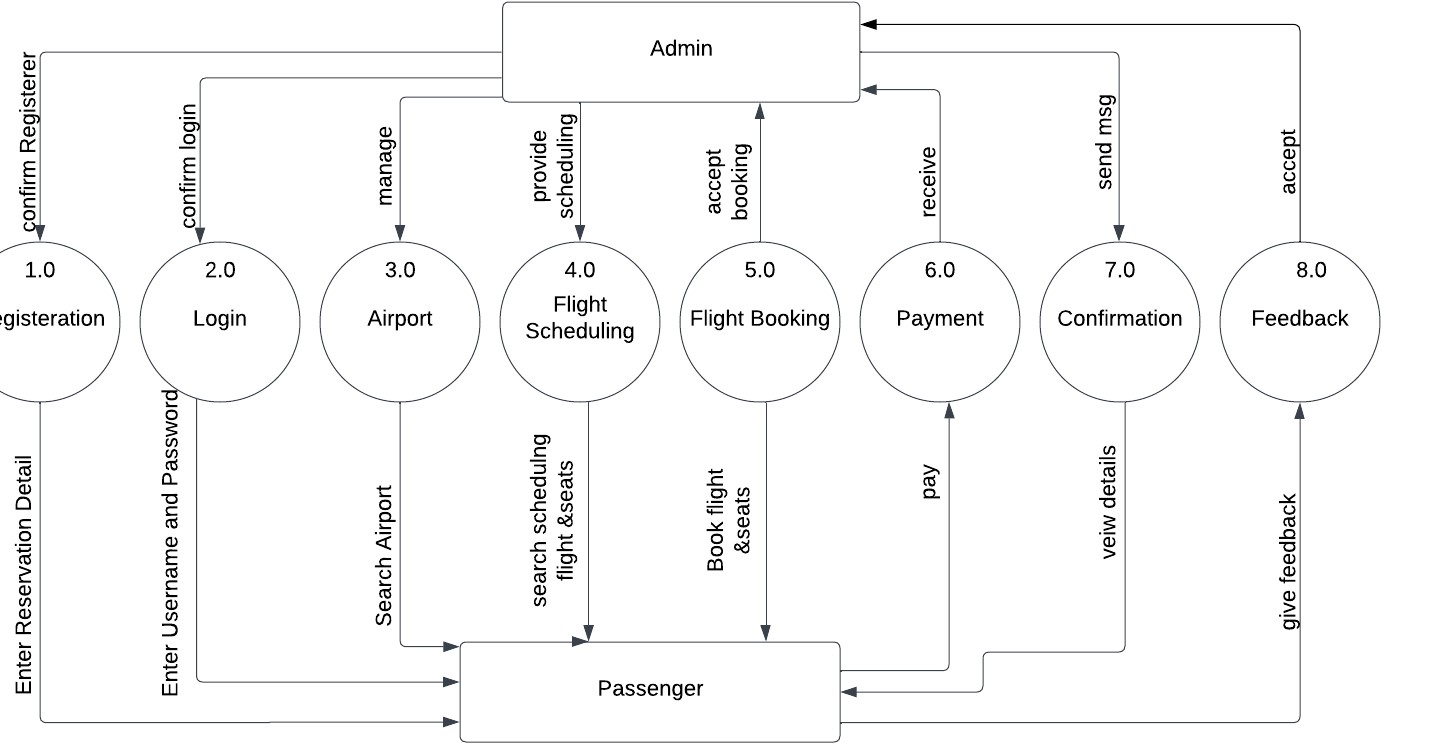
* The cost for system development. o The cost of hardware, software for the system is presented economical.
* The benefit can be seen in form cost cutting due to fast working. o The user training is also included in cost of making the software, so it is beneficial deal.

**5.2 Data Flow Diagram :**

|  |
| --- |
| 0th LEVEL DFD-AIRLINE RESERVAtION SYStEM |

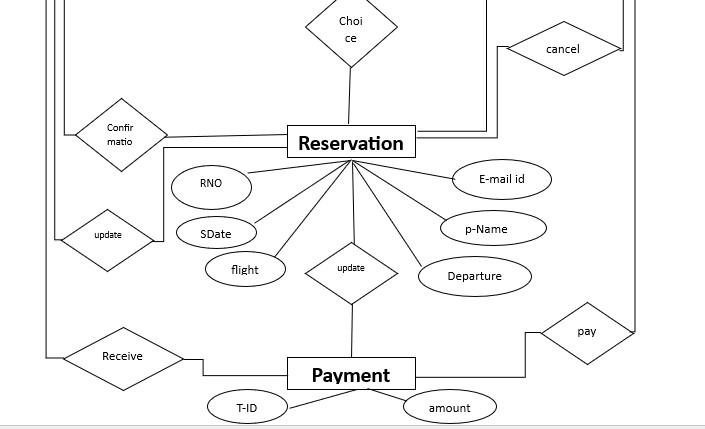
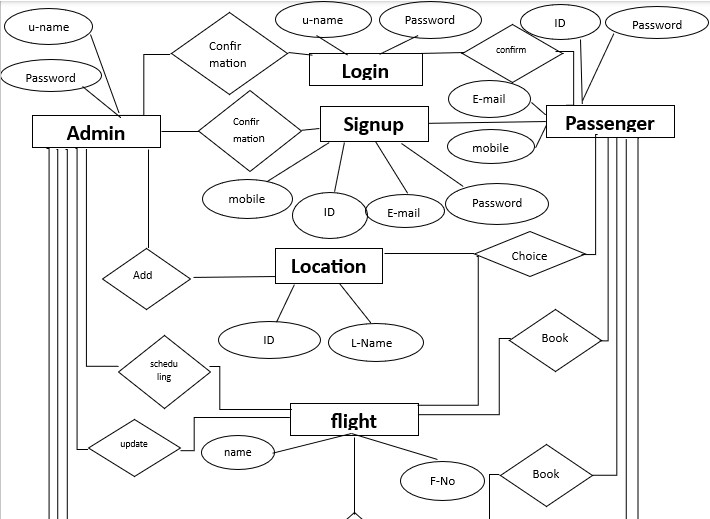


1St LEVEL DFD-AIRLINE RESERVAtION SYStEM



|  |  |  |
| --- | --- | --- |
| Airline Reservation System | |  |
|  | 2ND LEVEL DFD-AIRLINE RESERVAtION SYStEM |
|  |

**5.4 Entity Relationship diagram**



**5.6 Database Structure :**

ADMIN LOGIN:-



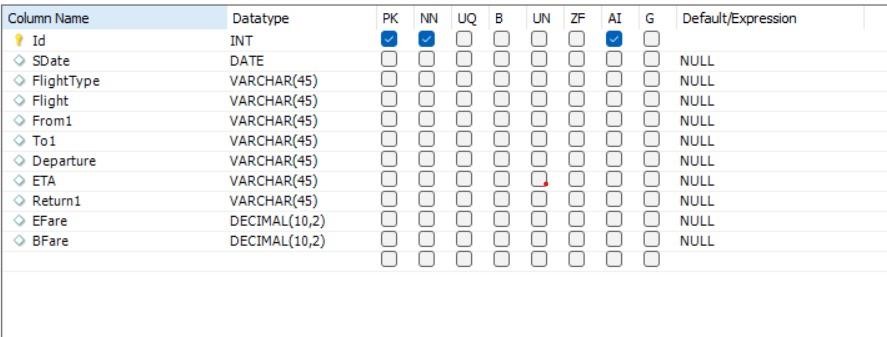
FEEDBACK:-



FLIGHT:-



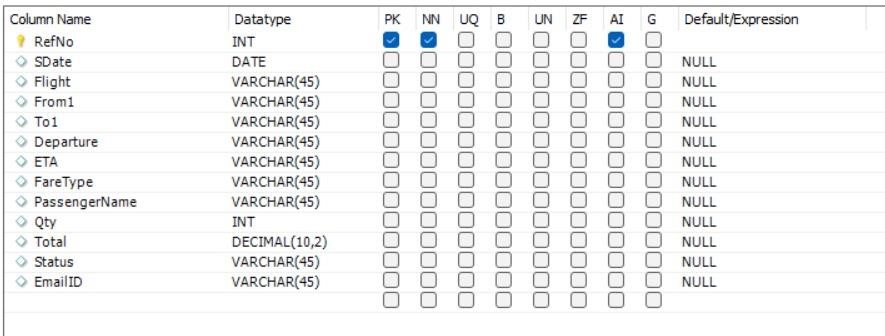
FLIGHT SCHEDULE:-



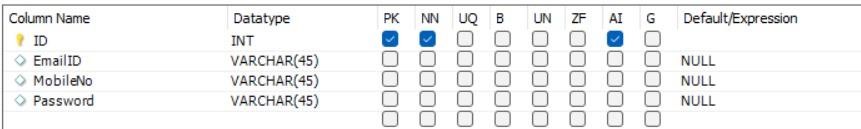
LOCATION:-



RESERVATION:-



SIGNUP:-

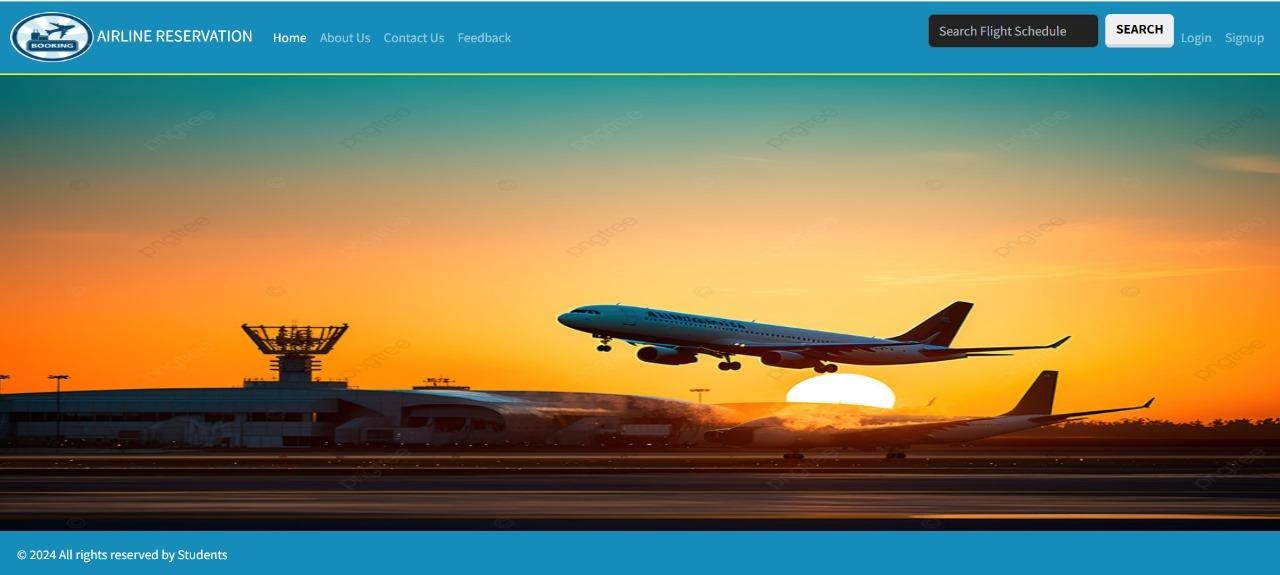


PAYMENT:-

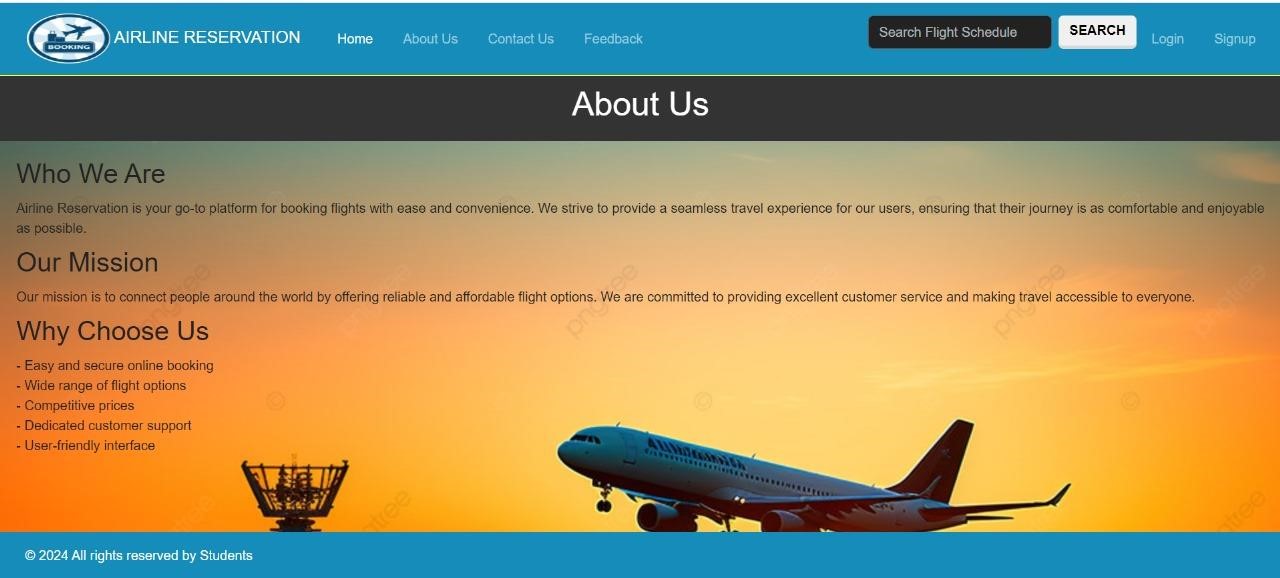


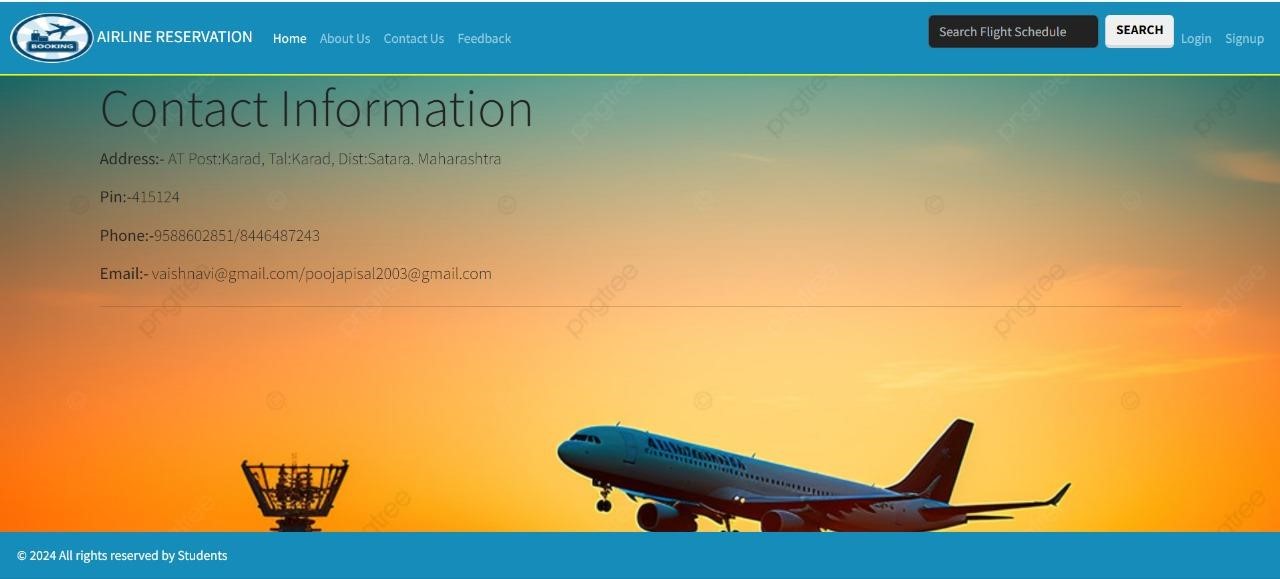
**User Interface Screen-Shot**

**HOME PAGE:-**



**ABOUT US PAGE:-**

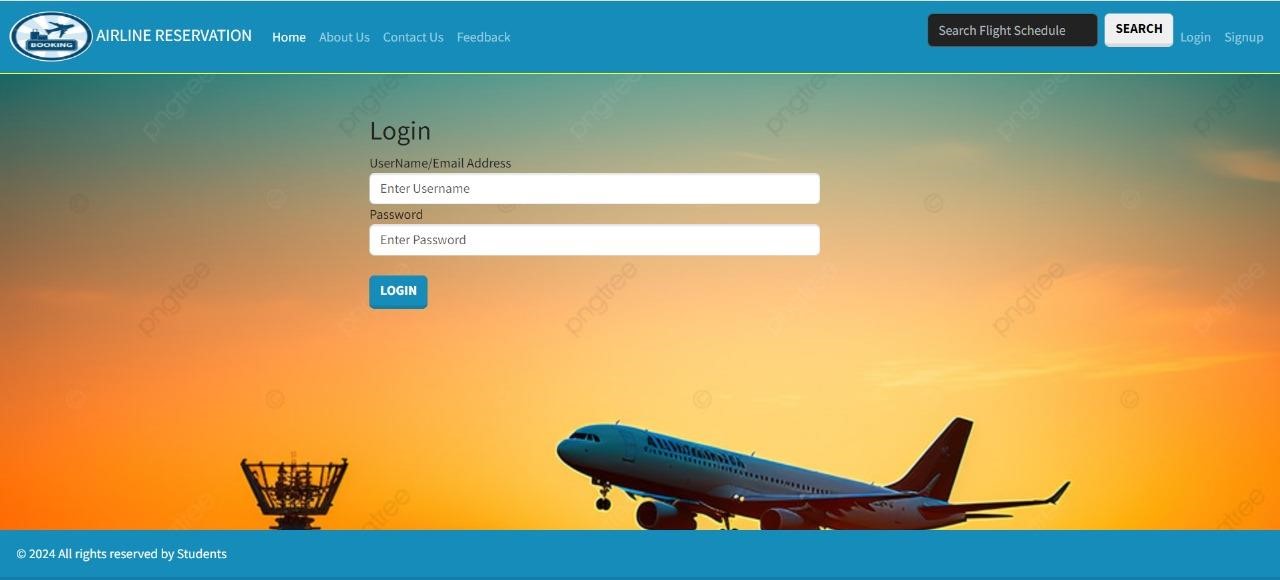


**CONTACT INFORMATION PAGE:**

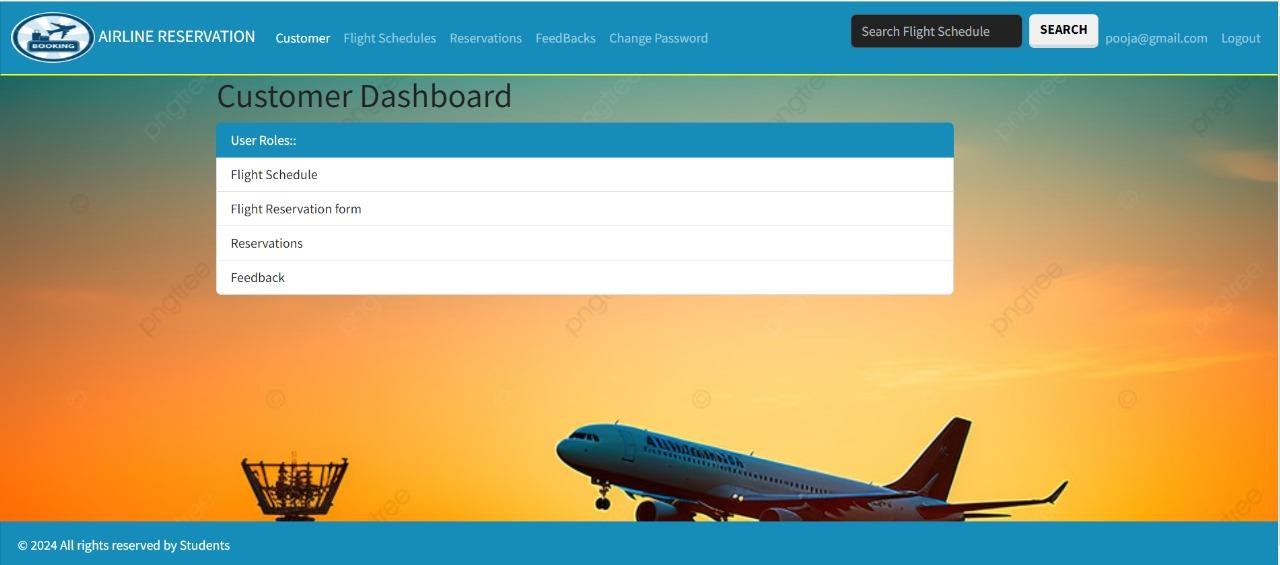
**SIGN UP PAGE:-**



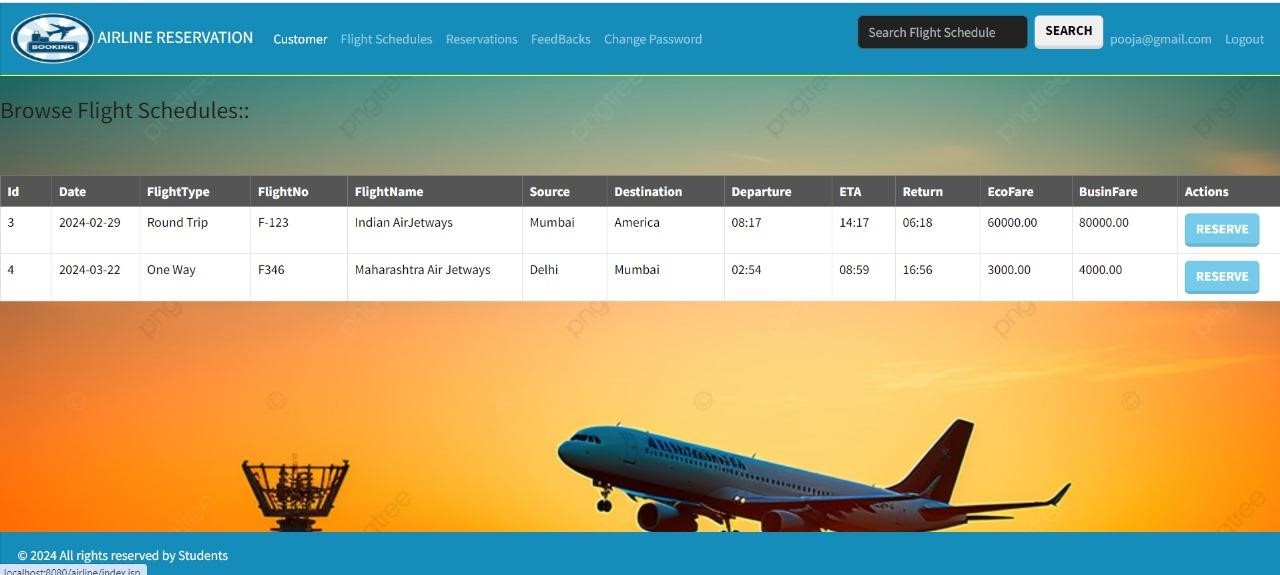
**LOGIN PAGE:-**



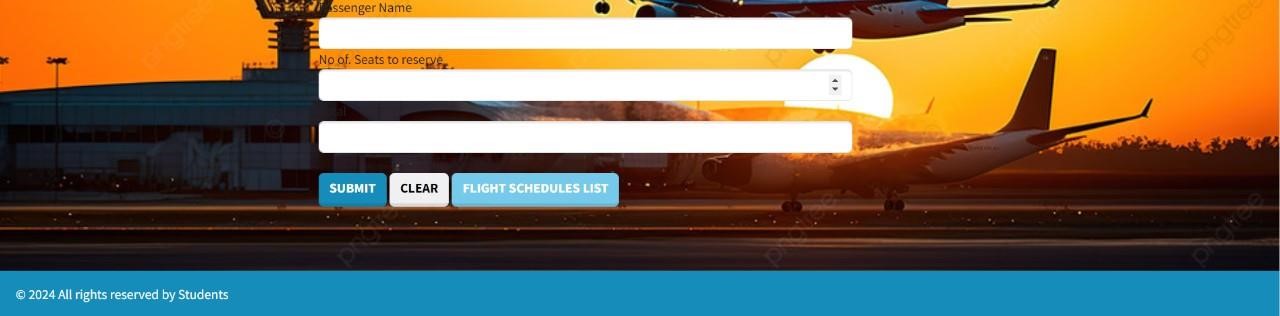
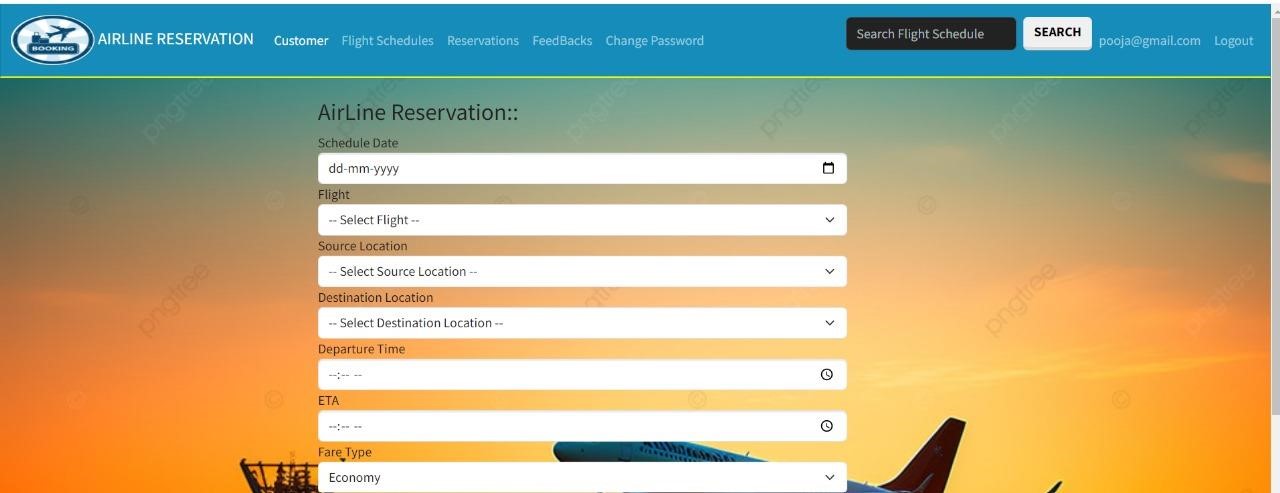
**CUSTOMER DASHBOARD PAGE:-**



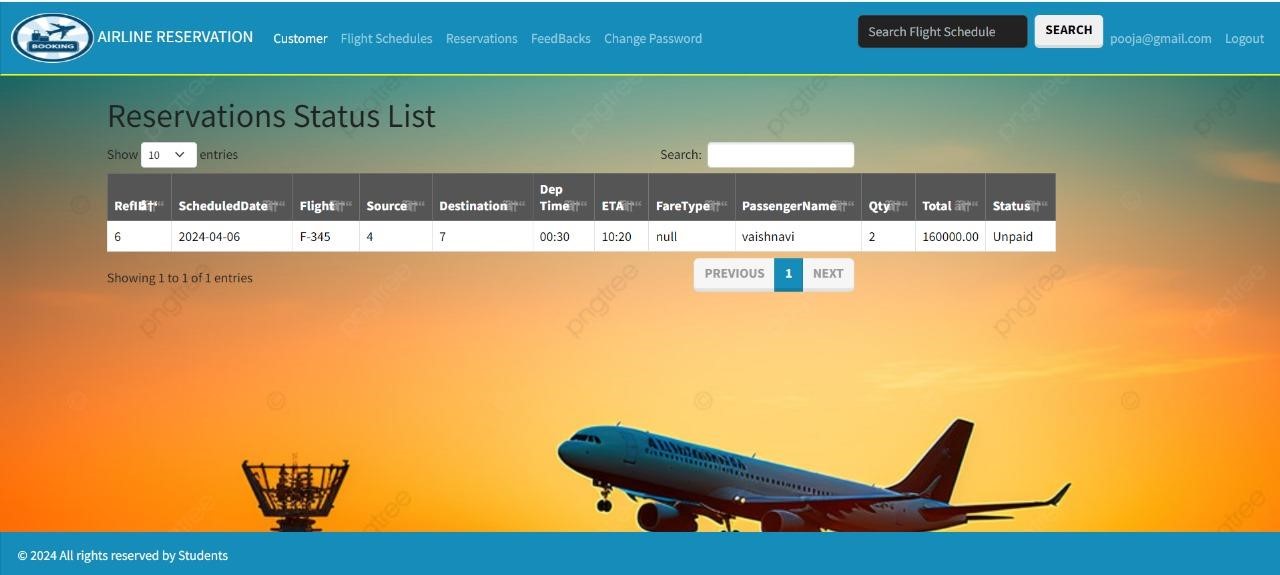
**FLIGHT SCHEDULE PAGE:-**



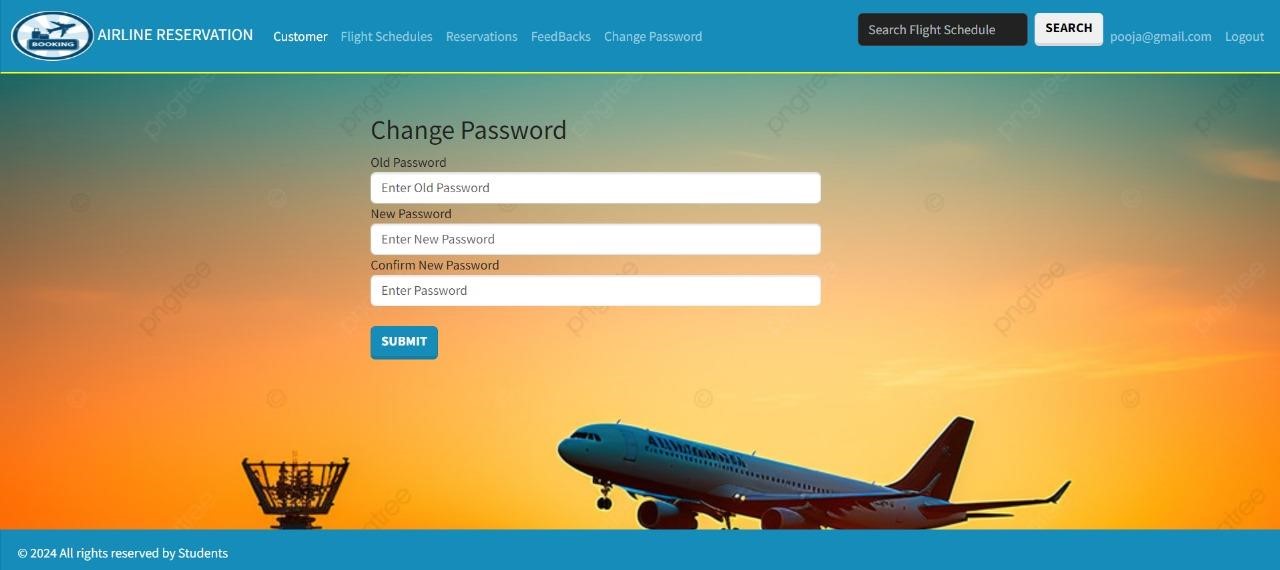
**FLIGHT RESERVATION PAGE:-**



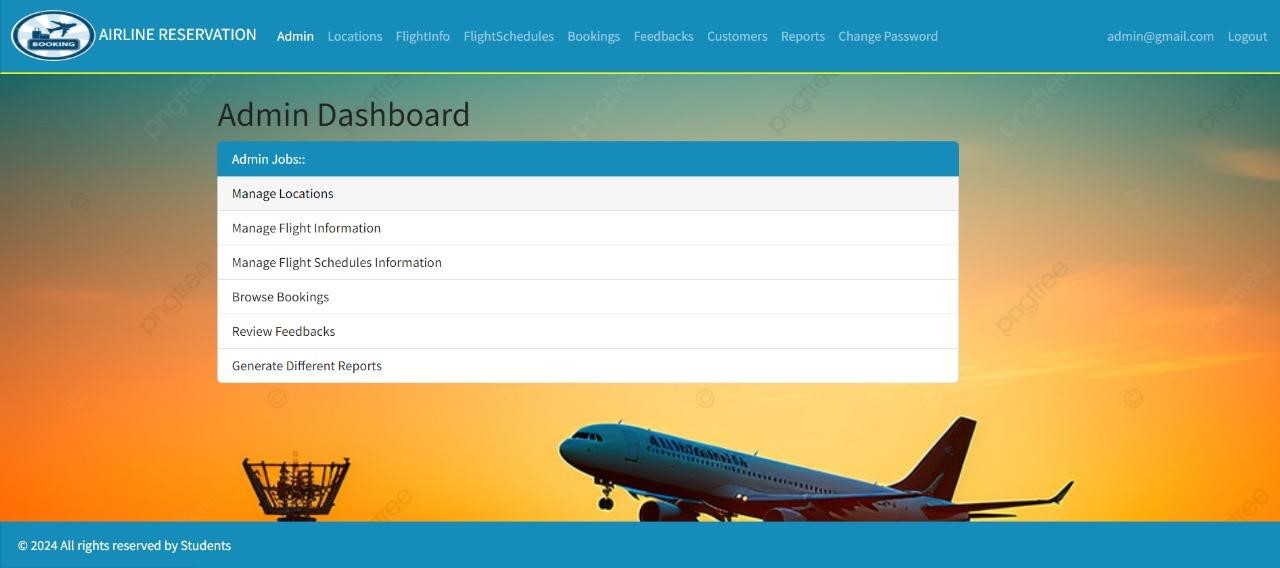
**RESERVATION STATUS LIST PAGE:-**



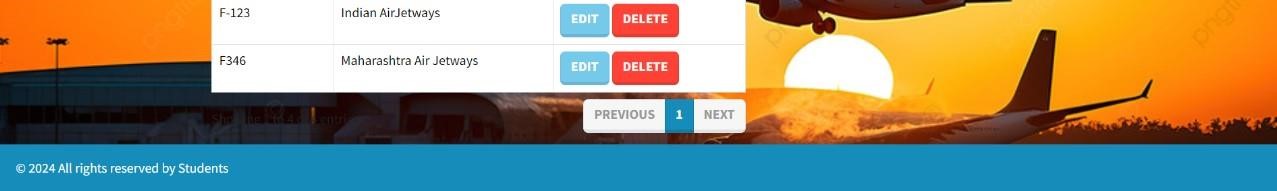
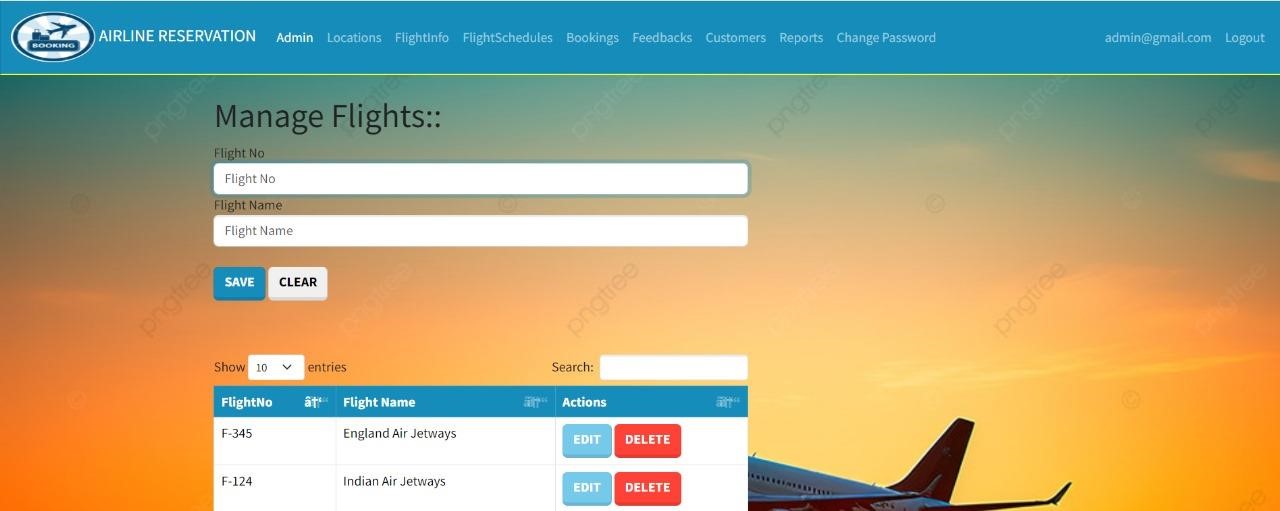
**CHANGE PASSWORD PAGE:-**



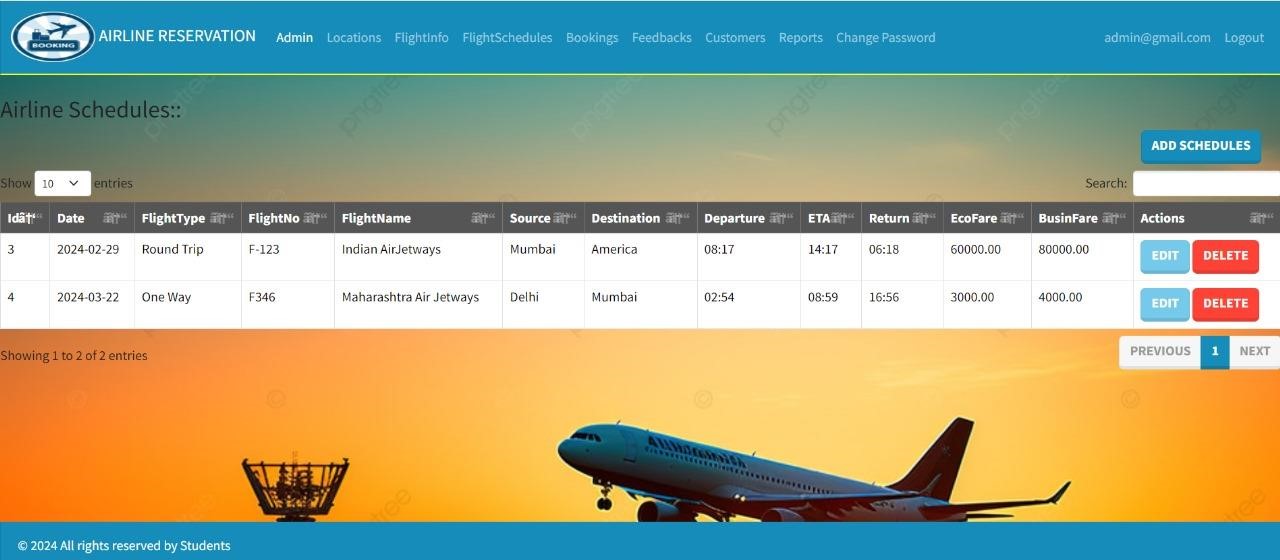
**ADMIN DASHBOARD PAGE:-**



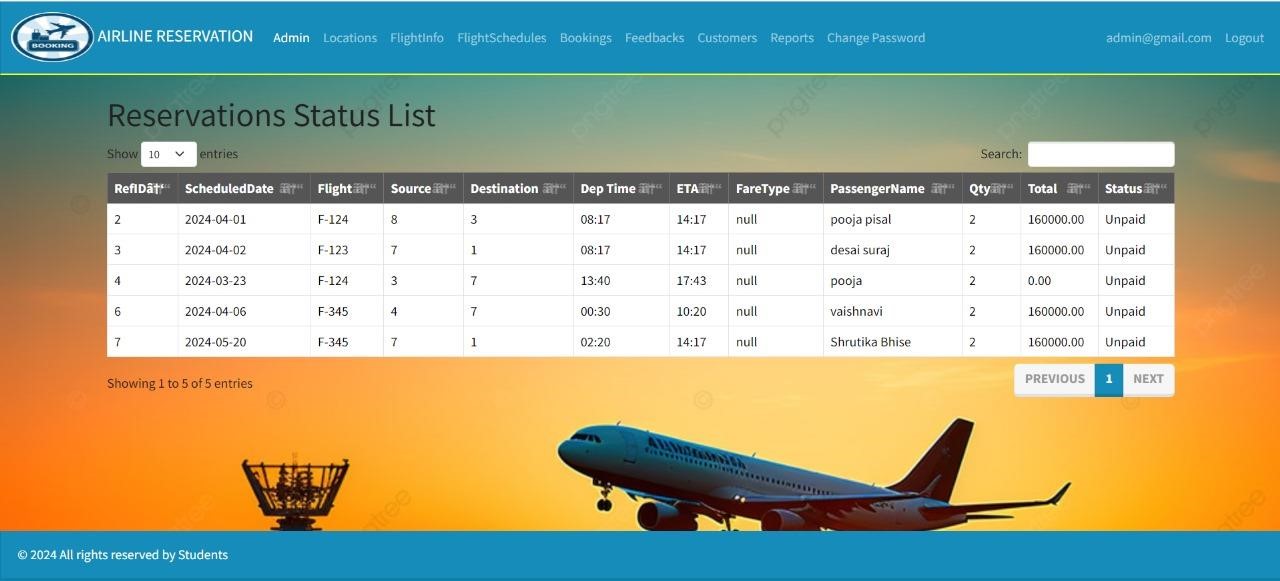
**MANAGE LOCATION PAGE:-**



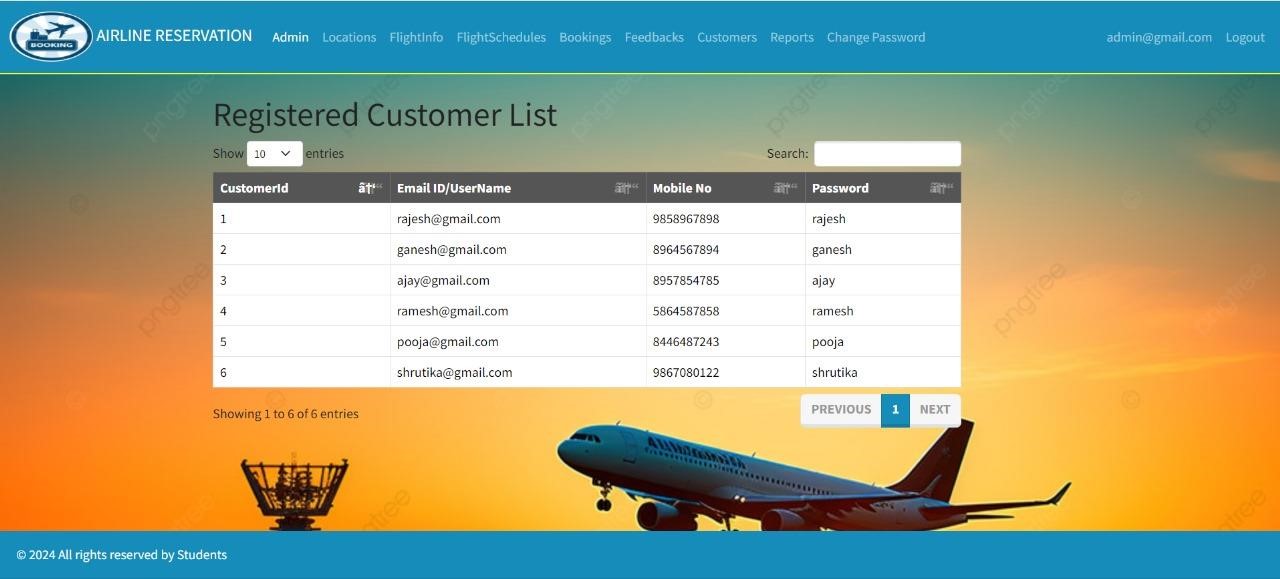
**AIRLINE SCHEDULE PAGE:-**



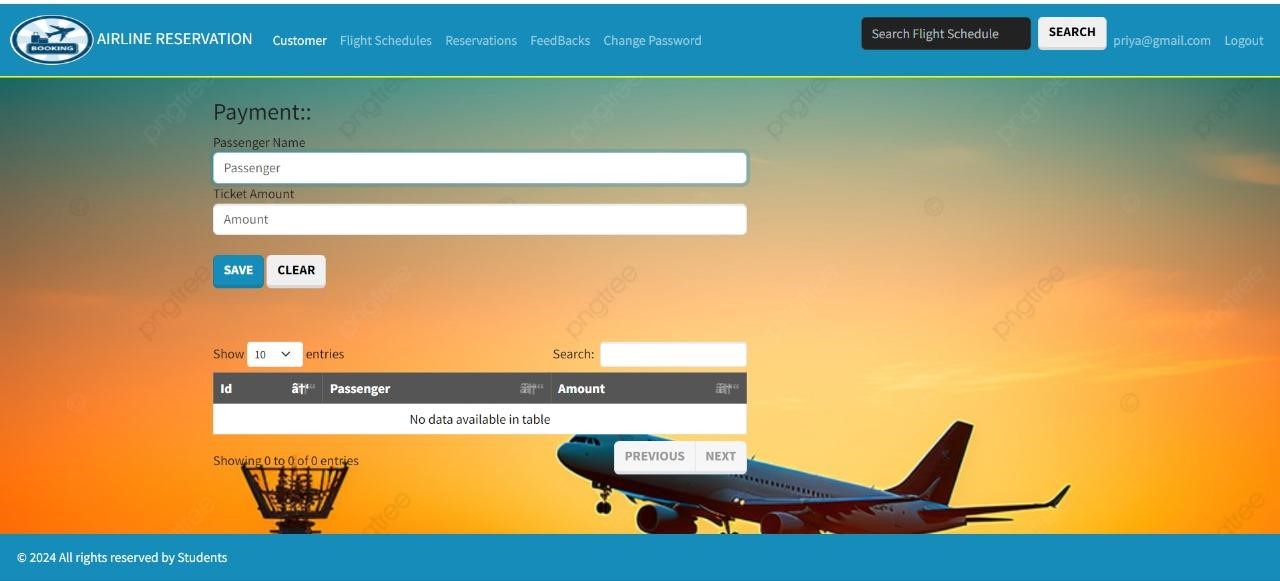
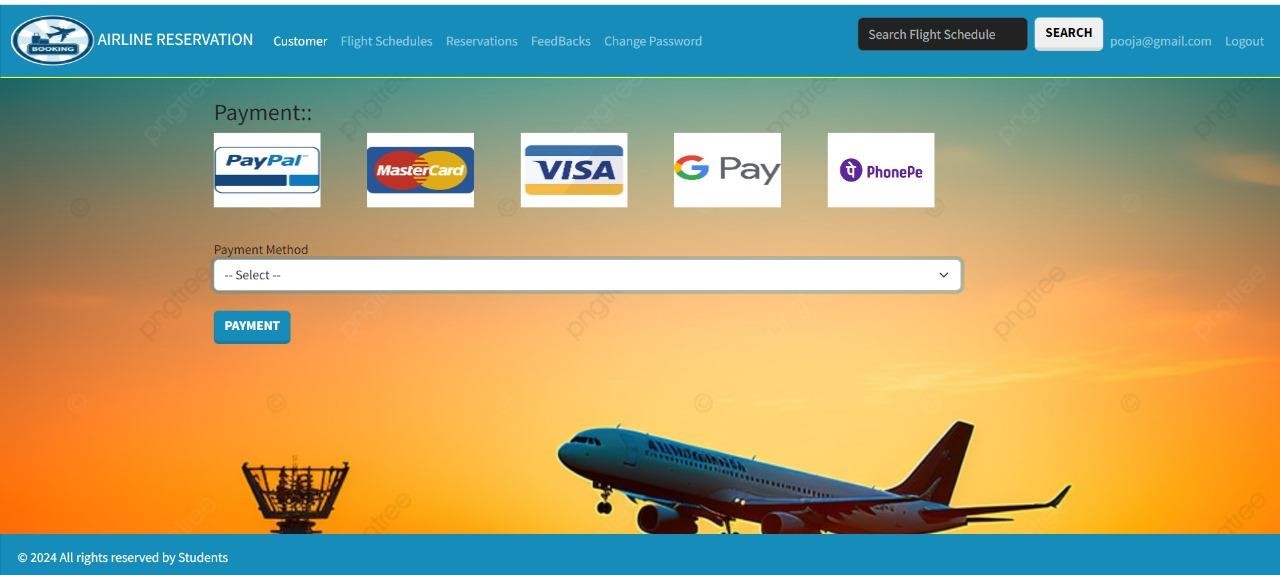
**RESERVATION STATUS LIST PAGE:-**



**REGISTERED CUSTOMER LIST PAGE:-**



**PAYMENT PAGE:-**



**Report**

**REGISTERED USER REPORT**



**LOCATION LIST REPORT**



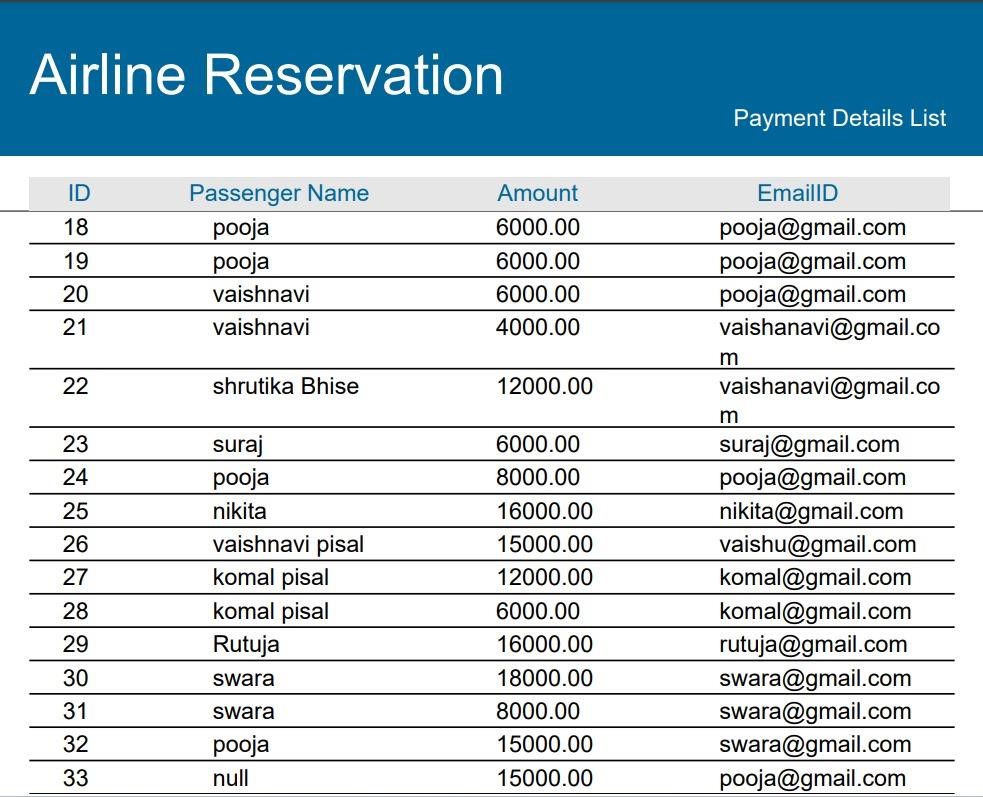
**FLIGHT SCHEDULE LIST REPORT**



**FLIGHT LIST REPORT**



**PAYMENT DETAIL LIST**



## • 6.2 Coding

**1] HEADER:-**

<%@ include file="header.jsp"%>

<!-- Index Page Specific Contents -->

<img src="/airline/images/imag.jpg" style="height:80vh;width:100%" alt="NA"/> <%@ include file="footer.jsp"%>

**2]FOOTER:-**

<%@page import="java.time.LocalDate"%>

<br/>

<br/>

<br/>

<nav class="navbar navbar-expand-lg bg-primary fixed-bottom" style="marigintop:200px" data-bs-theme="dark"> <div class="container-fluid">

<ul class="navbar-nav me-auto">

<li class="nav-item">

<a class="nav-link active" href="#">&copy; <%=LocalDate.now().getYear() %> All rights reserved by Students

</a>

</li>

</ul>

</div> </nav>

<script src="/airline/js/sweetalert.min.js"></script>

<script src="/airline/js/jquery-3.6.0.js"></script>

<script src="/airline/js/DataTables/datatables.js"></script>

<script src="/airline/js/bootstrap.js"></script>

<script src="/airline/js/jquery.validate.js"></script>

<script src="/airline/js/additional-methods.js"></script>

<%

if(!msg.equals(""))

{

%>

<script> swal("Airline Reservation Ticket Booking","<%=msg%>","<%=icon%>"); </script>

<%

}

%>

</body>

</html>

**3]INDEX:-**

<%@ include file="header.jsp"%>

<!-- Index Page Specific Contents -->

<img src="/airline/images/imag.jpg" style="height:80vh;width:100%" alt="NA"/>

<%@ include file="footer.jsp"%>

**4]SIGN UP:-**

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

<%@ include file="header.jsp"%>

<%

if(request.getParameter("btnsignup")!=null)

{

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

String mobile=request.getParameter("txtmobile"); String pass=request.getParameter("txtpass");

db.executeSql("Insert into Signup (EmailID,MobileNo,Password) values(?,?,?)", email,mobile,pass);

msg="You have successfully registered with Site";

}

%>

<!-- Signup Page Specific Contents -->

<div class="container">

<form method="post" id="form1">

<div class="col-5 offset-3">

<br/>

<br/>

<h2>Signup/Create Account</h2>

<div class="form-group">

Email Address

<input type="text" name="txtemail" id="txtemail" class="form-control" placeholder="Enter Username"/>

</div>

<div class="form-group">

Mobile No

<input type="text" name="txtmobile" id="txtmobile" class="form-control" placeholder="Enter Mobile No"/>

</div>

<div class="form-group">

Password

<input type="password" name="txtpass" id="txtpass" class="form-control" placeholder="Enter Password"/>

</div>

<div class="form-group">

Confirm Password

<input type="password" name="txtcpass" id="txtcpass" class="form-control" placeholder="Enter New Password"/>

</div>

<br/>

<input type="submit" name="btnsignup" value="Signup" class="btn btn-primary"/>

</div>

</form>

</div>

<%@ include file="footer.jsp"%>

<script>

$(function(){

$("#form1").validate({ rules:{ txtemail:{ required:true, email:true

},

txtmobile:{ required:true, pattern:/^\d{10}$/

},

txtpass:{ required:true

},

txtcpass:{ required:true, equalTo:"#txtpass"

}

},

messages:{ txtemail:{

required:"EmailID is required", email:"Invalid Email ID"

},

txtmobile:{

required:"Mobile No is required", pattern:"Mobile No allows only 10 digits"

},

txtpass:{

required:"Password is required"

},

txtcpass:{

required:"Confirm Password is required", equalTo:"Password Mismatch"

}

}

});

});

</script>

**5] LOGIN:-**

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

<%@ include file="header.jsp"%>

<%

if(request.getParameter("btnlogin")!=null) //Login button clicked

{

String user=request.getParameter("txtuser");

String pass=request.getParameter("txtpass");

//admin email id ==> admin@gmail.com

if(user.contains("admin")){ //if user string contains admin word then it is admin

//Validate it against adminlogin table

ResultSet rs=db.getRows("select \* from AdminLogin where UserName=? and

Password=?", user,pass);

if(rs.next()){ //true/false

//redirect to admin dashboard session.setAttribute("user", user); session.setAttribute("pass",pass); session.setAttribute("type","admin"); response.sendRedirect("/airline/admin/admin.jsp");

}else{

session.setAttribute("user",null); session.setAttribute("pass",null); session.setAttribute("type",null); msg="Invalid UserName/Password... Try again...";

}

}else{ //otherwise it is customer

//Validate it against signup table

ResultSet rs=db.getRows("select \* from Signup where EmailID=? and

Password=?", user,pass);

if(rs.next()){ //true/false

//redirect to customer dashboard session.setAttribute("user", user); session.setAttribute("pass",pass); session.setAttribute("type","customer"); if(request.getParameter("pid")!=null){

response.sendRedirect("/airline/user/reserve.jsp?pid="+request.getParameter("pid"));

}else{

response.sendRedirect("/airline/user/user.jsp");

}

}else{

session.setAttribute("user",null); session.setAttribute("pass",null); session.setAttribute("type",null); msg="Invalid UserName/Password... Try again...";

}

}

}

%>

<!-- Login Page Specific Contents -->

<div class="container">

<form method="post" id="form1">

<div class="col-5 offset-3">

<br/>

<br/>

<h2>Login</h2> <div class="form-group">

UserName/Email Address

<input type="text" name="txtuser" id="txtuser" class="form-control" placeholder="Enter Username"/>

</div>

<div class="form-group">

Password

<input type="password" name="txtpass" id="txtpass" class="form-control" placeholder="Enter Password"/>

</div>

<br/>

<input type="submit" name="btnlogin" value="Login" class="btn btn-primary"/>

</div>

</form>

</div>

<%@ include file="footer.jsp"%>

<script>

$(function(){

$("#form1").validate({ rules:{ txtuser:{ required:true

},

txtpass:{ required:true

}

},

messages:{ txtuser:{

required:"UserName is required"

},

txtpass:{

required:"Password is required"

}

}

});

});

</script>

**6]CONTACT:-**

<%@ include file="header.jsp"%>

<!-- Index Page Specific Contents -->

<div class="container">

<div class="jumbotron">

<h1 class="display-3">Contact Information</h1>

<p class="lead"><b> Address:-</b> AT Post:Karad, Tal:Karad, Dist:Satara.

Maharashtra</p>

<p class="lead"> <b>Pin:-</b>415124</p>

<p class="lead"> <b>Phone:-</b>9588602851/8446487243</p>

<p class="lead"> <b>Email:-</b> vaishnavi@gmail.com/poojapisal2003@gmail.com</p>

<hr class="my-4">

</div>

</div>

<%@ include file="footer.jsp"%>

**7]FEEDBACK:-**

<%@page import="java.text.SimpleDateFormat"%>

<%@page import="java.util.Date"%>

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

<%@ include file="header.jsp"%>

<%

if(request.getParameter("btnsubmit")!=null)

{

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

String feedback=request.getParameter("txtfeedback");

Date dt = new Date(); //Current date and time

SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd HH:mm:ss");

String fdate=sdf.format(dt);

db.executeSql("Insert into Feedback (FeedbackDateTime,EmailID,FeedbackText) values(?,?,?)", fdate,email,feedback);

msg="Thanks for your feedback!";

}

%>

<!-- Feedback Page Specific Contents -->

<div class="container">

<form method="post" id="form1">

<div class="col-5 offset-3">

<br/>

<br/>

<h4>Your Query/Feedback</h4><hr/>

<div class="form-group">

Email ID

<input type="text" name="txtemail" id="txtemail" class="form-control" placeholder="Enter Username"/>

</div>

<div class="form-group">

Feedback

<textarea name="txtfeedback" class="form-control" rows="10"></textarea>

</div>

<br/>

<input type="submit" name="btnsubmit" value="Submit" class="btn btn-primary"/>

</div>

</form>

</div>

<%@ include file="footer.jsp"%>

<script>

$(function(){

$("#form1").validate({

rules:{ txtemail:{ required:true, email:true

},

txtfeedback:{ required:true

}

},

messages:{ txtemail:{

required:"EmailID is required", email:"Invalid Email ID"

},

txtfeedback:{

required:"Feedback is required"

}

}

});

});

</script>

**8]RESERVATION:-**

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

<%@ include file="../header.jsp"%>

<div class="col-7 offset-1">

<br/>

<h1>Reservations Status List</h1>

<table id="table1" class="table table-bordered">

<thead class="table-dark">

<tr class="bg-primary">

<th>RefID</th>

<th>ScheduledDate</th>

<th>Flight</th>

<th>Source</th>

<th>Destination</th>

<th>Dep Time</th>

<th>ETA</th>

<th>FareType</th>

<th>PassengerName</th>

<th>Qty</th>

<th>Total</th>

<th>Status</th>

</tr>

</thead>

<tbody>

<%

ResultSet rs=db.getRows("select \* from Reservations where sdate>curdate() and EmailId=?",session.getAttribute("user"));

while(rs.next()){

%>

<tr>

<td><%=rs.getString(1) %></td>

<td><%=rs.getString(2) %></td>

<td><%=rs.getString(3) %></td>

<td><%=rs.getString(4) %></td>

<td><%=rs.getString(5) %></td>

<td><%=rs.getString(6) %></td>

<td><%=rs.getString(7) %></td>

<td><%=rs.getString(8) %></td>

<td><%=rs.getString(9) %></td>

<td><%=rs.getString(10) %></td>

<td><%=rs.getString(11) %></td>

<td><%=rs.getString(12) %></td>

</tr>

<%

}

%>

</tbody>

</table>

</div>

<%@ include file="../footer.jsp"%>

<script>

$(function(){

$("#table1").DataTable(); //Apply DataTable library on Table whose ID is table1

});

</script>

**9]RESERVE:-**

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

<%@ include file="../header.jsp"%>

<%

String

id="",sdate="",flight="",source="",dest="",dept="",eta="",ftype="",fare="",efare="",bfare="" ,seats="",name="",total="",btntext="Submit";

String fname="";

String title="AirLine Reservation"; if(session.getAttribute("user")==null){

response.sendRedirect("../login.jsp?pid="+request.getParameter("pid")); return;

}

if(request.getParameter("btnsave")!=null){ id=request.getParameter("txtid"); sdate=request.getParameter("txtsdate"); flight=request.getParameter("txtbus"); source=request.getParameter("txtloc1"); dest=request.getParameter("txtloc2"); dept=request.getParameter("txtdept"); eta=request.getParameter("txteta"); ftype=request.getParameter("txtftype"); name=request.getParameter("txtname"); fare=request.getParameter("txtfare"); seats=request.getParameter("txtseats"); total=request.getParameter("txttotal");

if(request.getParameter("btnsave").equals("Submit")){ int kid=db.executeSqlId("Insert into Reservations

(SDate,Flight,From1,To1,Departure,ETA,FareType,PassengerName,Qty,Total,Status,emailID

) values(?,?,?,?,?,?,?,?,?,?,?,?)",

sdate,flight,source,dest,dept,eta,ftype,name,seats,total,"paid",session.getAttribute("user"));

session.setAttribute("kid",kid); msg="Flight is reserved successfully..."; btntext="Checkout";

}else{

response.sendRedirect("/airline/user/checkout.jsp");

}else{ if(request.getParameter("pid")!=null){

ResultSet rs=db.getRows("select \* from FlightSchedules where

Id=?",request.getParameter("pid"));

if(rs.next()){ id=rs.getString(1); sdate=rs.getString(2); flight=rs.getString(4); source=rs.getString(5); dest=rs.getString(6); dept=rs.getString(7); eta=rs.getString(8);

efare=rs.getString(10);

bfare=rs.getString(11); title="FLight Reservation"; btntext="Submit";

}

}

}

%>

<div class="col-5 offset-3">

<br/>

<h3><%=title%>::</h3>

<form method="post" id="form1">

<input type="hidden" name="txtid" value="<%=id%>"/>

<div class="form-group">

Schedule Date

<input name="txtsdate" id="txtsdate" type="date" class="form-control" value="<%=sdate%>"/>

</div>

<div class="form-group">

Flight

<select name="txtbus" id="txtbus" class="form-select">

<option value="">-- Select Flight --</option>

<%

ResultSet rs=db.getRows("select \* from Flight"); while(rs.next()){

%>

<option value="<%=rs.getString(1)%>" <%=flight.equals(rs.getString(1))?"selected":"" %>><%=rs.getString(1)+" | "+rs.getString(2) %></option>

<%

}

%>

</select>

</div>

<div class="form-group">

Source Location

<select name="txtloc1" id="txtloc1" class="form-select">

<option value="">-- Select Source Location --</option>

<%

rs=db.getRows("select \* from Locations"); while(rs.next()){

%>

<option value="<%=rs.getString(1)%>" <%=source.equals(rs.getString(1))?"selected":"" %>><%=rs.getString(2) %></option>

<%

}

%>

</select>

</div>

<div class="form-group">

Destination Location

<select name="txtloc2" id="txtloc2" class="form-select">

<option value="">-- Select Destination Location --</option>

<%

rs=db.getRows("select \* from Locations"); while(rs.next()){

%>

<option value="<%=rs.getString(1)%>" <%=dest.equals(rs.getString(1))?"selected":"" %>><%=rs.getString(2) %></option>

<%

}

%>

</select>

</div>

<div class="form-group">

Departure Time

<input name="txtdept" id="txtdept" type="time" class="form-control" value="<%=dept%>"/>

</div>

<div class="form-group">

ETA

<input name="txteta" id="txteta" type="time" class="form-control" value="<%=eta%>"/> </div>

<div class="form-group">

Fare Type

<select name="ftype" id="ftype" class="form-select">

<option value="Economy">Economy</option>

<option value="Business">Business</option>

</select>

</div>

<div class="form-group">

Passenger Name

<input name="txtname" id="txtname" class="form-control" value="<%=name%>"/> </div>

<div class="form-group">

No of. Seats to reserve

<input name="txtseats" id="txtseats" type="number" class="form-control" value="<%=seats%>"/>

</div>

<div class="form-group">

Total

<input type="hidden" name="txtefare" id="txtefare" class="form-control" value="<%=efare%>"/> <input type="hidden" name="txtbfare" id="txtbfare" class="form-control" value="<%=bfare%>"/>

<input name="txttotal" id="txttotal" class="form-control" readonly/>

</div>

<br/>

<input type="submit" name="btnsave" value="<%=btntext %>" class="btn btn-primary"/>

<a href="addschedules.jsp" class="btn btn-secondary">Clear</a>

<a href="flightschedules.jsp" class="btn btn-info">Flight Schedules List</a>

</form>

<br/>

<br/>

</div>

<%@ include file="../footer.jsp"%>

<script>

$(function(){

$("#txtseats").change(function(){ var y=$("#ftype").val(); if(y=="Economy"){

var x=$(this).val()\*$("#txtefare").val();

$("#txttotal").val(x); }else if(y=="Business"){ var x=$(this).val()\*$("#txtbfare").val();

$("#txttotal").val(x);

}

});

});

/\*$(function(){

$("#form1").validate({

rules:{ txtprodname:{ required:true

},

txtcatid:{ required:true

},

txtprice:{ required:true, number:true //12 12.34

},

txtimage:{ required:true

}

},

messages:{ txtprodname:{

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | required:"Product Name required" |
|  |  |  | }, |
|  |  |  | txtcatid:{ |
|  |  |  | required:"Please select category" |
|  |  |  | }, |
|  |  |  | txtprice:{ |
|  |  |  | required:"Product Price required", |
|  |  |  | number:"Product price should be numeric" |
|  |  |  | }, |
|  |  |  | txtimage:{ |
|  |  |  | required:"Product Image is required" |
|  |  |  | } |
|  |  | } |  |
|  |  |  |  |
| });  \*/ | }); |  |  |
| </script> **10]USER:-** | |

<%@ include file="../header.jsp"%>

<div class="row">

<div class="col-7 offset-2">

<h1>Customer Dashboard</h1>

<div class="list-group">

<a href="#" class="list-group-item list-group-item-action active">User Roles::</a>

<a href="flightschedules.jsp" class="list-group-item list-group-item-action">Flight Schedule</a>

<a href="reserve.jsp" class="list-group-item list-group-item-action">Flight Reservation form</a>

<a href="reservations.jsp" class="list-group-item list-group-item-action">Reservations</a> <a href="/airline/feedback.jsp" class="list-group-item list-group-itemaction">Feedback</a>

</div>

</div>

</div>

<%@ include file="../footer.jsp"%>

**11]ADD SCHEDULE:-**

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

<%@ include file="../header.jsp"%>

<%

String id="",sdate="",type="",flight="",source="",dest="",dept="",eta="",return1="",efare="",bfare ="",btntext="Save";

String fname="";

String title="Add Flight Schedules";

if(request.getParameter("btnsave")!=null){ id=request.getParameter("txtid"); sdate=request.getParameter("txtsdate"); type=request.getParameter("txttype"); flight=request.getParameter("txtflight"); source=request.getParameter("txtloc1"); dest=request.getParameter("txtloc2"); dept=request.getParameter("txtdept"); eta=request.getParameter("txteta"); return1=request.getParameter("txtreturn"); efare=request.getParameter("txtefare"); bfare=request.getParameter("txtbfare");

if(request.getParameter("btnsave").equals("Save")){

db.executeSql("Insert into flightSchedules

(SDate,FlightType,flight,From1,To1,Departure,ETA,Return1,EFare,BFare) values(?,?,?,?,?,?,?,?,?,?)", sdate,type,flight,source,dest,dept,eta,return1,efare,bfare); msg="Flight Schedules information is saved successfully...";

}else{

db.executeSql("Update flightSchedules set

SDate=?,FlightType=?,flight=?,From1=?,To1=?,Departure=?,ETA=?,Return1=?,EFare=?,BF are=? where Id=?", sdate,type,flight,source,dest,dept,eta,return1,efare,bfare,id); msg="Flight Schedules information is updated successfully...";

}

}else{ if(request.getParameter("eid")!=null){

ResultSet rs=db.getRows("select \* from FlightSchedules where

Id=?",request.getParameter("eid"));

if(rs.next()){ id=rs.getString(1); sdate=rs.getString(2); type=rs.getString(3); flight=rs.getString(4); source=rs.getString(5); dest=rs.getString(6); dept=rs.getString(7); eta=rs.getString(8); return1=rs.getString(9); efare=rs.getString(10); bfare=rs.getString(11); title="Edit Flight Schedules"; btntext="Update";

}

}

}

%>

<div class="col-5 offset-3">

<br/>

<h3><%=title%>::</h3>

<form method="post" id="form1">

<input type="hidden" name="txtid" value="<%=id%>"/>

<div class="form-group">

Schedule Date

<input name="txtsdate" id="txtsdate" type="date" class="form-control" value="<%=sdate%>"/>

</div>

<div class="form-group">

Flight Type

<select name="txttype" id="txttype" class="form-select">

<option value="">-- Select Flight Type --</option>

<option value="Round Trip" <%=type.equals("Round Trip")?"selected":"" %>>Round Trip</option>

<option value="One Way" <%=type.equals("One Way")?"selected":"" %>>One

Way</option>

</select>

</div>

<div class="form-group">

Flight

<select name="txtflight" id="txtflight" class="form-select">

<option value="">-- Select flight --</option>

<%

ResultSet rs=db.getRows("select \* from flight"); while(rs.next()){

%>

<option value="<%=rs.getString(1)%>" <%=flight.equals(rs.getString(1))?"selected":"" %>><%=rs.getString(1)+" | "+rs.getString(2) %></option>

<%

}

%>

</select>

</div>

<div class="form-group">

Source Location

<select name="txtloc1" id="txtloc1" class="form-select">

<option value="">-- Select Source Location --</option>

<%

rs=db.getRows("select \* from Locations"); while(rs.next()){

%>

<option value="<%=rs.getString(1)%>" <%=source.equals(rs.getString(1))?"selected":"" %>><%=rs.getString(2) %></option>

<%

}

%>

</select>

</div>

<div class="form-group">

Destination Location

<select name="txtloc2" id="txtloc2" class="form-select">

<option value="">-- Select Destination Location --</option>

<%

rs=db.getRows("select \* from Locations"); while(rs.next()){

%>

<option value="<%=rs.getString(1)%>" <%=dest.equals(rs.getString(1))?"selected":""

%>><%=rs.getString(2) %></option>

<%

}

%>

</select>

</div>

<div class="form-group">

Departure Time

<input name="txtdept" id="txtdept" type="time" class="form-control" value="<%=dept%>"/>

</div>

<div class="form-group">

ETA

<input name="txteta" id="txteta" type="time" class="form-control" value="<%=eta%>"/> </div>

<div class="form-group">

Return

<input name="txtreturn" id="txtreturn" type="time" class="form-control" value="<%=return1%>"/>

</div>

<div class="form-group">

Economy Fare

<input name="txtefare" id="txtefare" type="number" class="form-control" value="<%=efare%>"/>

</div>

<div class="form-group">

Business Fare

<input name="txtbfare" id="txtbfare" class="form-control" value="<%=bfare%>"/>

</div>

<br/>

<input type="submit" name="btnsave" value="<%=btntext%>" class="btn btn-primary"/>

<a href="/airline/user/addschedules.jsp" class="btn btn-secondary">Clear</a>

<a href="flightschedules.jsp" class="btn btn-info">flight Schedules List</a>

</form>

<br/>

<br/>

</div>

<%@ include file="../footer.jsp"%>

<script>

/\*$(function(){

$("#form1").validate({

rules:{ txtprodname:{ required:true

},

txtcatid:{ required:true

},

txtprice:{ required:true, number:true //12 12.34

},

txtimage:{ required:true

}

},

messages:{ txtprodname:{

required:"Product Name required"

},

txtcatid:{

required:"Please select category"

},

txtprice:{

required:"Product Price required", number:"Product price should be numeric"

},

txtimage:{

required:"Product Image is required"

}

}

});

});

\*/

</script>

**12]ADMIN:-**

<%@ include file="../header.jsp"%>

<div class="row">

<div class="col-7 offset-2">

<br/>

<h1>Admin Dashboard</h1>

<div class="list-group">

<a href="#" class="list-group-item list-group-item-action active">Admin Jobs::</a>

<a href="locations.jsp" class="list-group-item list-group-item-action">Manage Locations</a>

<a href="flight.jsp" class="list-group-item list-group-item-action">Manage Flight Information</a>

<a href="flightschedules.jsp" class="list-group-item list-group-item-action">Manage Flight Schedules Information</a>

<a href="reservations.jsp" class="list-group-item list-group-item-action">Browse Bookings</a>

<a href="feedbacks.jsp" class="list-group-item list-group-item-action">Review Feedbacks</a>

<a href="reportlist.jsp" class="list-group-item list-group-item-action">Generate Different Reports</a>

</div>

</div>

</div>

<%@ include file="../footer.jsp"%>

**13]CUSTOMER LIST:-**

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

<%@ include file="../header.jsp"%>

<div class="col-7 offset-2">

<br/>

<h1>Registered Customer List</h1>

<table id="table1" class="table table-bordered">

<thead class="table-dark">

<tr class="bg-primary">

<th>CustomerId</th>

<th>Email ID/UserName</th>

<th>Mobile No</th>

<th>Password</th>

</tr>

</thead>

<tbody>

<%

ResultSet rs=db.getRows("select \* from Signup"); while(rs.next()){

%>

<tr>

<td><%=rs.getString(1) %></td>

<td><%=rs.getString(2) %></td>

<td><%=rs.getString(3) %></td> <td><%=rs.getString(4) %></td>

</tr>

<%

}

%>

</tbody>

</table>

</div>

<%@ include file="../footer.jsp"%>

<script>

$(function(){

$("#table1").DataTable(); //Apply DataTable library on Table whose ID is table1

});

</script>

**User Manual**

When you start system firstly the Homepage will displayed then if you what to know about us just click on about us then you can contact us then you can login if you does not login you can sign up and then login in. After successful login main window is displayed on your screen. There is have Menu bar Top of the system Horizontality.

**Admin :**

When you choose this Admin Login then you can see the all of Forms .There is

List of menu bar on Main form ,list of menu bar items –Manage location , Manage Flight information , Manage flight schedule information , Browse Booking , Feedback . In Flight schedule you can see flight schedule. In Reservation you can see reservation status.

In Feedback you can see feedback.

**User :**

When you choose this User Login then you can see the all of Forms .There is List of menu bar on Main form ,list of menu bar items –Flight schedule , Reservation Form , Reservations , Feedback . In Flight schedule you can see flight schedule.

And reserve the flight you can see reservation status.

In Feedback you can give feedback.

**Future Inhancements**

There is possibility of following enhancements in future, in our application

1. Add SMS facility about appointment details.
2. Add SMS facility about order dispatch.
3. Make web site compatible for web hosting.
4. Design android app to access our web application.
5. Seats availability is not checked for booking that can be included in future 6. Payment option after booking or checking is not included

**Advantages Of System**

* **Freedom of Choice**: Passengers can compare flight prices and timings, choose specific dates, and find the most convenient options. o **Regular Updates**: Airlines provide timely updates on offers, discounts, and promotions via phone and email. o **User-Friendly Interface**: The reservation system offers a fully customized and easy-to-use interface for booking flights.
* **Real-Time Information**: Passengers receive real-time updates on flight details, including departure times, delays, and gate changes.
* **Cancellation and Refunds**: The system streamlines the cancellation process and ensures prompt refunds. o **Mobile Accessibility**: Users can access the system via mobile devices, making booking convenient and flexible.

**Limitation of System**

* Inability of passengers to select their preferred seat(s) from the reservation system.
* No option of passengers printing their boarding pass from the existing system. o Non-notification of passengers of flight cancellation or delays. o Passengers don‘t have access to aircraft maintenance report to ease the fears associated with air travel and its disasters. o Manpower.

**Conclusion**

Finally, we can conclude that the system we had developed will eliminate the existing system’s drawbacks and limitations to maximum extent. And provide the user with a product of high quality, standard sand excellence. Hence, it will be very profitable to the and satisfaction will also be achieved because the delay and in convenience caused due to existing system will be eliminated.

We have learnt many technologies Like HTML5, CSS3, JSP Framework, JAVA and MySQL Server in detail, being in this project. The System Code Activity is entirely done under Eclipse IDE. And the use of AJAX components would make the application interactive and prevents annoying post backs.

The main constraint of this project will be the length of time available to work on the system. The development of any piece of software is usually a lengthy procedure with many different phases involved. With only a short period of time to develop this project an examination of development process will have to be carried out and only the most necessary steps will be taken. This problem is exacerbated by the fact that the project will be carried out alone, whereas normally software is developed in a team. System is more user friendly and can access from PC as well as from Phone.

**Bibliography**

**Websites**

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