



VIT[®]

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

CSE3001-Software Engineering

PROJECT REPORT

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PROJECT TITLE

Just fly Airline Reservation System

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OVERVIEW OF THE PROJECT:

This project represents the initial version of the Airline Booking system. All requirements listed herein describe a self-contained system. This project will allow a user to book flights, check flights, do account maintenance, and query flight information at a high level. The goal is to allow customers greater and easier access to the airline's booking system, twenty-four hours a day.

Product features: we have divided the project into 7 main features

1. Login
2. Enrolment
3. Book flights
4. Cancel ticket
5. Delete flight schedule
6. Add Flight schedules
7. View Passengers List

PRODUCT FUNCTIONS:

1. Search for a flight:

Using this function a customer is able to search for one-way, round-trip, and multiple destination flights by choosing specific dates and destinations

2. Book flights:

This function allows customers to book flights by choosing ticket types and processing online payments.

3. Add New flights:

The function grants the administrator the privilege of adding new flights to the system

4. Remove Flights:

With the help of this function, administrator removes the flights from the system that are canceled for whatever reason.

5. View Passenger List:

With the help of this function, the administrator removes the flights from the system that are canceled for whatever reason.

SCOPE OF THE PROJECT:

The airline booking website is an application stored in the user server. The purpose of the website is to resolve the client to allow website users to perform tasks related to booking an airline flight. Non-member users are only allowed to search for available flights; nonmember users are required to create an account in order to reserve a seat or to book a flight. Member users have the right to search for available flights toto reserve a seat, book a flight, cancel a flight, and edit their member information. Member users are required to login into their accounts prior to flight booking.

FUNCTIONAL REQUIREMENTS:

User Requirements:

1. User will have an account in the system
2. Users can book flight tickets by entering their arrival and destination places
3. User can make payment for the ticket booking
4. Users can contact administration if they have any issues
5. Users can cancel the ticket if they require
6. User can see their booking history in their account

Admin Requirements:

1. Admin can add/update/delete flight details
 2. Admin can make changes in the system
- The system should save the information of the users and their booking history

NON-FUNCTIONAL REQUIREMENTS:

1. System should have an Authentication and Authorization System (AAS) for logins.
2. System should grant administrative privileges only to the one who logins with a predefined administrative username and password.
3. System should grant administrative privileges only to the one who logins with a predefined administrative username and password.
4. System should be manageable in web-browsers of Internet Explorer, Google Chrome, Mozilla Firefox, Opera, and Safari
5. System should display a warning message if the customer input for full name label is out of defined standard

SOFTWARE REQUIREMENT SPECIFICATION:

3.1. System Feature:

System Feature 1 (Home) Description:

The software should provide various flight details available to make the user reserve flight tickets. Once the user clicks on book ticket for a respective the number of seats which the user-chosen should be reserved for 10mins.

Responses Sequence:

- Once the user search for the flight the user should be able to see all the available flight details with price.
- If the user clicks on book ticket on a particular flight then they should the detailed description of the flight like departure time, arrival time, class, weight.
- Once users accept that they should be able to passenger details.
- When the user clicks on book ticket the number of tickets going to be booked should be reserved for 10mins.
- . After entering the details of the passenger user should be directed to the payment page and complete the booking.

System Feature 2 (Payment Section) Description:

After making payment the user should be able to book details and a copy of it should be sent to the user's mail id.

Response Sequence:

Once the user completes the booking successfully they should get a mail of their payment receipt and ticket.

System Feature 3 (Message) Description:

On the before of travel, the user should be intimated about the documents required for travel and the timings for web check-in.

Response Sequence:

Before the day of travel, the passenger should be intimated about the documents required to travel through mail consisting of flight tickets and other details.

System Feature 4 (Cancellation):

If the user feels to cancel the flight ticket, they should be able to cancel before 7 days of travel.

Response Sequence:

- If the passenger wants to cancel the flight ticket they should first login to their account.
- Once login they should be able to cancel by clicking on order history.
- Once they click on cancel ticket they should be displayed the cancellation fees and if they agree the ticket should be canceled and the payment should be reflected in their account.

System Feature 5 (Admin Panel) Description:

Admin can make changes in the website like adding new flight details, view list of passengers who booked flight tickets, and the person who had raised the complaints.

Response Sequences:

- Admin should first log in to the admin panel.
- Admin should see the number of tickets booked on a particular day.
- Admin should see the homepage of admin panel as soon as after login page.
- Admin should have options add new flight, edit flight details, Send a message to the passenger of a particular, Should able to see passenger details.

EXTERNAL INTERFACE REQUIREMENTS:

1. User Interface:

Once the user enters the system they should be shown the homepage. If the user wrong details, they should be able to see an error message in a popup window. Users should be returned to home when they click on the logo of the company irrespective of any page they are being. If the user clicks on book tickets they should be first directed to the login page.

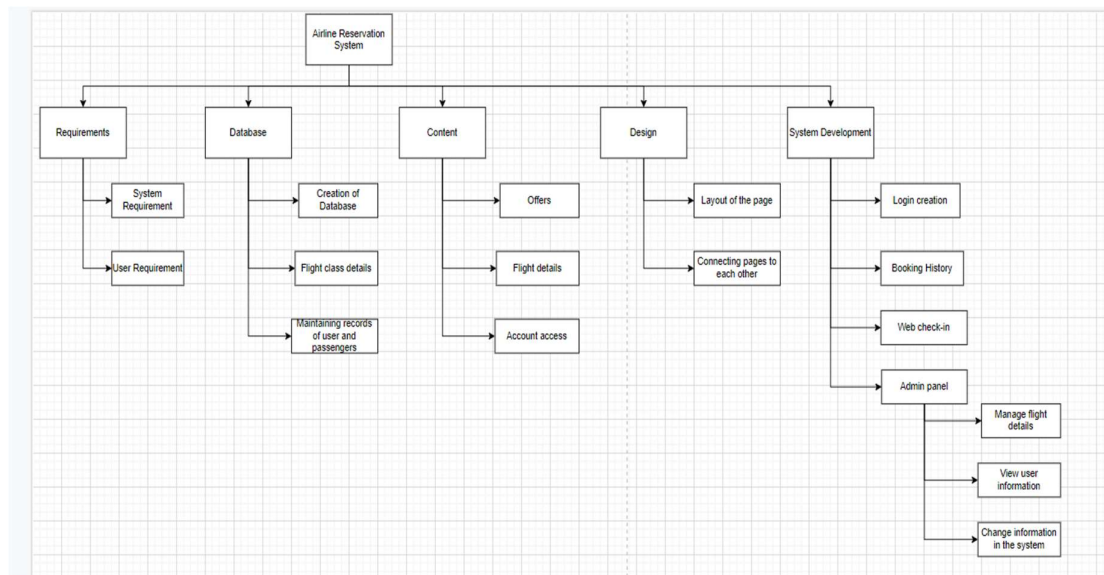
2. Hardware Interface:

The software should be supported by both mobile and PCs irrespective of any model.

3. Communication Interface:

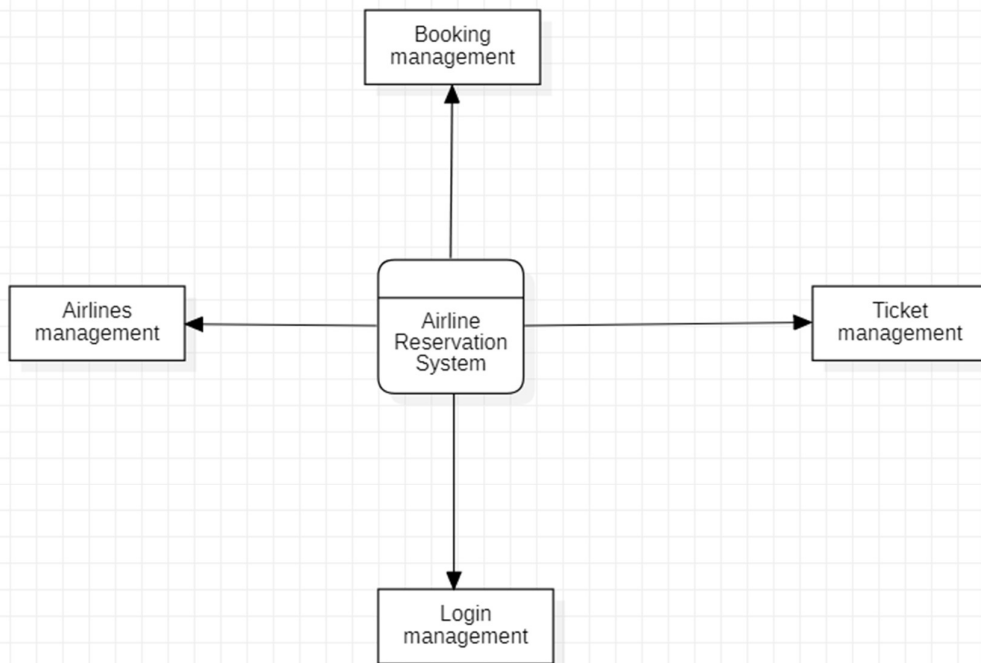
The software should be SSL encrypted so that the user data are secured and prevent unauthorized access to the system. The Hyper Text Transfer Protocol (HTTPS) will use an SSL Digital Certificate protocol to encrypt communication between the application, FCA Servers, and databases.

WORK BREAKDOWN STRUCTURE:

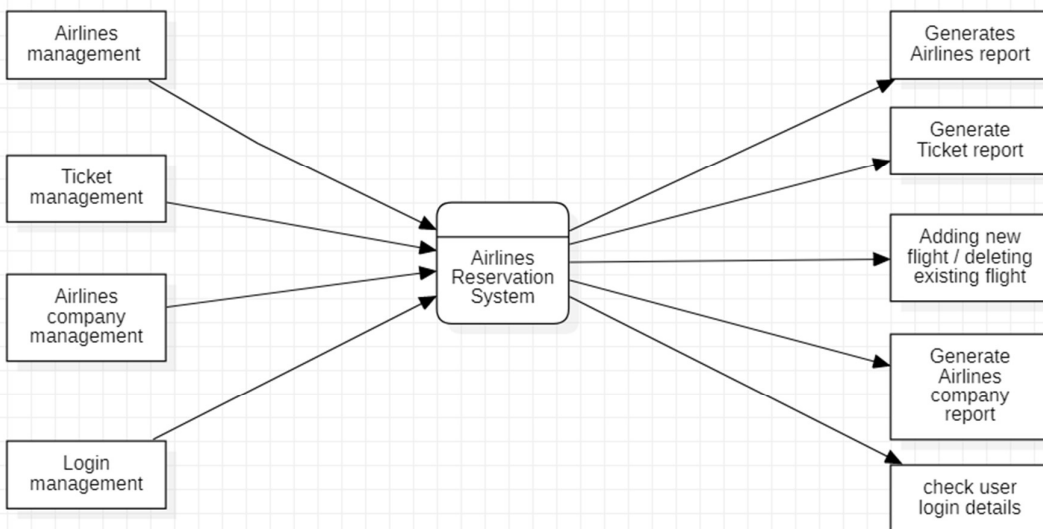


DATA FLOW DIAGRAM:

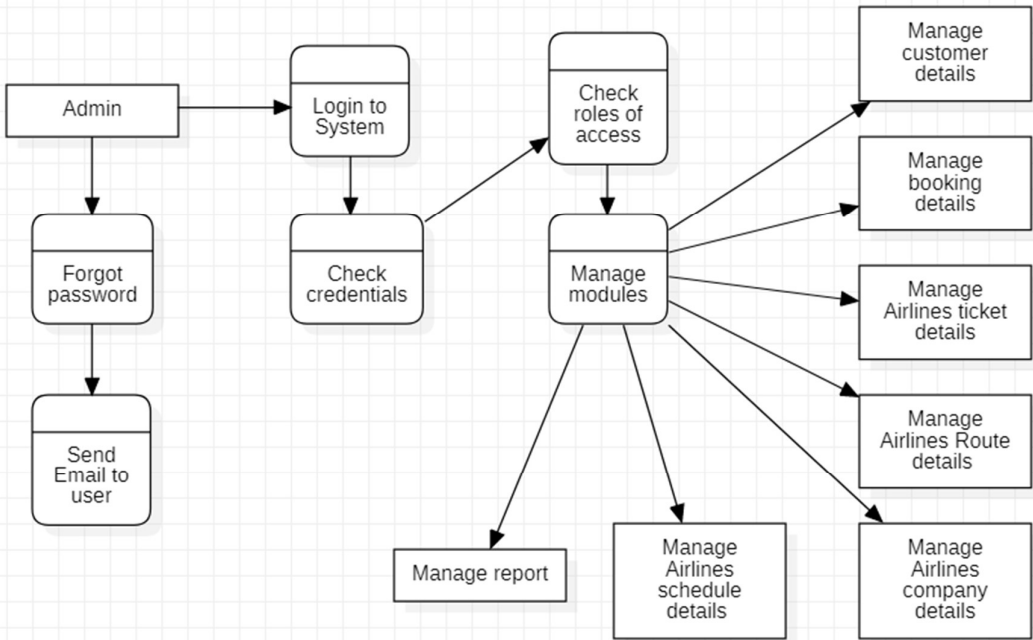
1. Zero Level:



2. First level:



3. Second level:



USE CASE DESCRIPTION:

Usecase 1: Signup

Use Case Element	Description
Use Case Number	1
Application	Airline Reservation System
Use Case Name	Signup Page
Use Case Description	Users can signup and create an account in the system
Primary Actor	Any Users of the system Database
Precondition	<ul style="list-style-type: none">• Should have a proper internet connection• Should have smart device• Should have valid mail -ID
Postcondition	<ul style="list-style-type: none">• User will have an account• Information should be saved in the database of the system
Trigger	The user wants to create an account in the system
Basic flow	<ol style="list-style-type: none">1. Users click on signup2. User enters their name, address, email-id respectively.3. User enters Password and necessary details.4. User click on create account button.5. Use case ends
Alternate Flow	1A1. If the user enters a password that does not satisfy the minimum criteria <ol style="list-style-type: none">1. System will display an error message2. System will again load the signup page3. Use case returns step 2 and continue.

Usecase 2: Searching Flight

Use Case Element	Description
Use Case Number	2
Application	Airline Reservation System
Use Case Name	Search flight
Use Case Description	User can enter necessary details and get various available flight details.
Primary Actor	Users, System Database
Precondition	<ul style="list-style-type: none">• Users should have smart device and proper internet connection• Users should have departure and arrival place and date of travel.• Users can login into account before searching (optional).
Postcondition	<ul style="list-style-type: none">• User will get flight details which are available based on their search.
Trigger	Users enter departure and arrival place and get flight information.
Basic flow	<ol style="list-style-type: none">1. User enter the departure airport code2. System will display the respective airport name.3. User need to enter the destination airport code.4. System will display the respective airport name.5. User enter the number of passengers.6. User enter the class type7. System will show the flight which is available based on their search.8. Use case ends
Alternate Flow	6A1. If the system cannot find any flight details <ol style="list-style-type: none">1. System will display message “no flights available”2. User will be redirected to search page.3. The use case return to step 1 and continues.

Use case 3: Booking Ticket

Use Case Element	Description
Use Case Number	3
Application	Airline Reservation System
Use Case Name	Book ticket
Use Case Description	Users can book tickets for their journey after their flight searching
Primary Actor	Users
Precondition	<ul style="list-style-type: none">• Users must have account in the system
Postcondition	<ul style="list-style-type: none">• Users will get ticket confirmation
Trigger	User will book tickets and make payment
Basic flow	<ol style="list-style-type: none">1. User click on book tickets2. Users enter the details of passenger's name, Passport number, age, mobile number.3. After entering those details user clicks on make payment4. User make payment after entering these details.5. System will show the passenger information for rechecking.6. System stores the information in to the database.7. Use case ends
Alternate Flow	<p>4A1.After entering the details of the passengers and if the payment fails</p> <ul style="list-style-type: none">• User will be directed to complaint raising page.• User will enter the issue they faced while booking• System will issue a ticket number for the user's complaint.• System will send an intimation the admin about the issue.

Usecase 4: Raise complaint

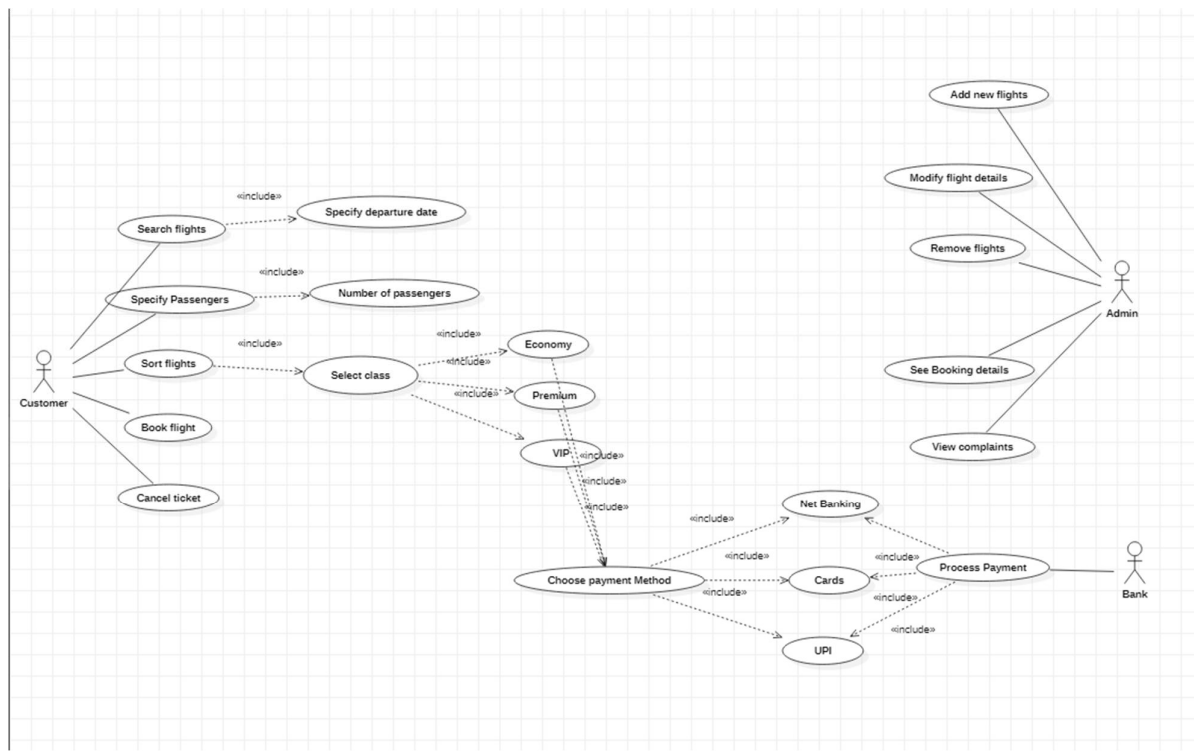
Use Case Element	Description
Use Case Number	4
Application	Airline Reservation System
Use Case Name	Complaint raising
Use Case Description	Users can raise complaint if they face any issue in the system
Primary Actor	Users, Admin Panel
Precondition	<ul style="list-style-type: none">• User must have an issue related to the system• User must have an account in the system
Postcondition	<ul style="list-style-type: none">• User will get ticket number for their complaint
Trigger	User can file a complaint and get resolved
Basic flow	<ol style="list-style-type: none">1. User enters the Name and email-ID2. System will check those information3. System will allow the user to enter the issue4. User enter the issue5. User can enter issue related documents6. System will intimate the admin about the issue7. Use case ends
Alternate Flow	<p>2A1. System will check the name and email-id</p> <ol style="list-style-type: none">1. If it exist in the system will allow the user to continue2. If not, system will show signup page3. Usw case return and continues from step 1

Usecase5:Cancel Booking

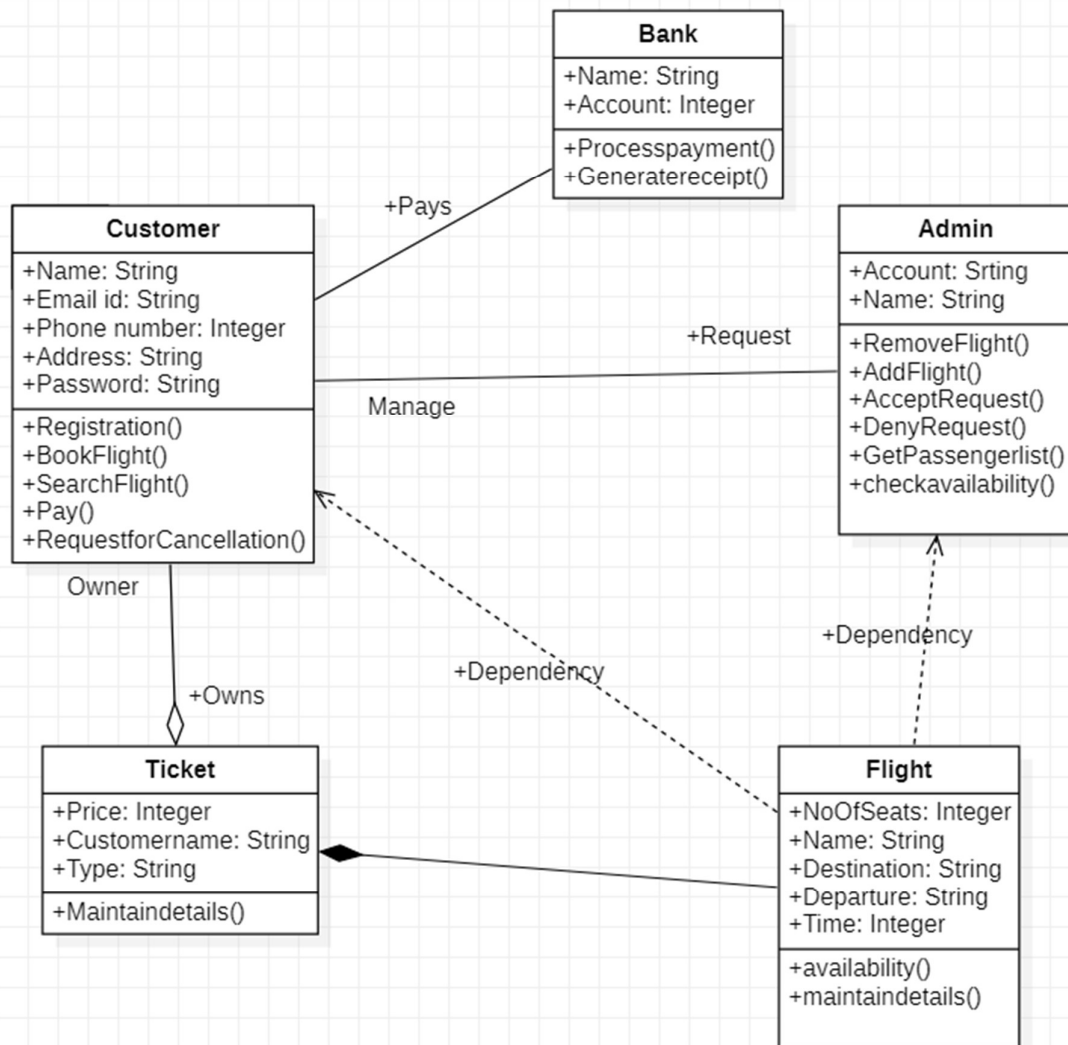
Use Case Element	Description
Use Case Number	6
Application	Airline Reservation System
Use Case Name	Cancel ticket
Use Case Description	User can able to cancel the ticket before 7 days of travel without any cancellation fees
Primary Actor	User, System database
Precondition	<ul style="list-style-type: none">• User should have an account in the system• User should have booked their tickets in the system
Postcondition	User will able to cancel the tickets and amount will be reflected to their bank account
Trigger	User will cancel the ticket and amount will be given to user through their bank account
Basic flow	<ol style="list-style-type: none">1. User will login to the account2. System will open the user's account3. User click on Cancel booking4. User enters the PNR number5. Ticket will be cancelled6. Use case ends
Alternate Flow	

USE CASE DIAGRAM:

Description: In the use case diagram given below, we have displayed how our users interact with the system to accomplish their goals and responsibilities. Here in our diagram, we have 4 actors (Customer, Administrator, Bank), 3 of which are the main users (Customer, Administrator, Support Staff). In every use case mentioned in the diagram, the actions of the users are described, and how these use cases are related to one another is represented by the help of arrows. In our Use case diagram, all functionalities of the system are displayed. Customers can search for flights based on dates and destination, specify the passengers (how many adults, children, or infants), request cancellation, book a flight, choose the ticket type, and proceed with the payment. The payment is processed by the Bank. Another actor, the Administrator, is responsible for adding new flights, modifying flight details, and removing flights. The Administrator is also responsible for adding new flights, modifying flight details, and removing flights. The Administrator is also responsible for adding new flights, modifying flight details, and removing flights. The Administrator is also responsible for adding new flights, modifying flight details, and removing flights.



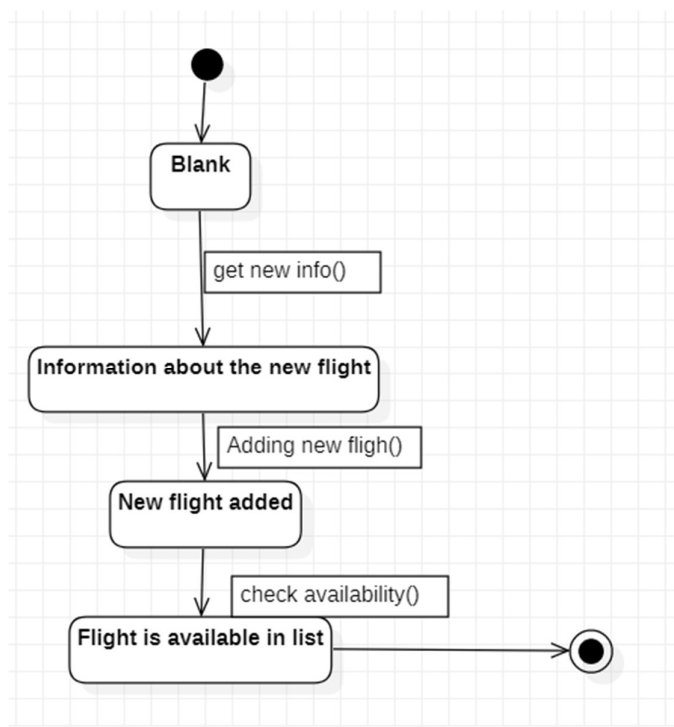
CLASS DIAGRAM:

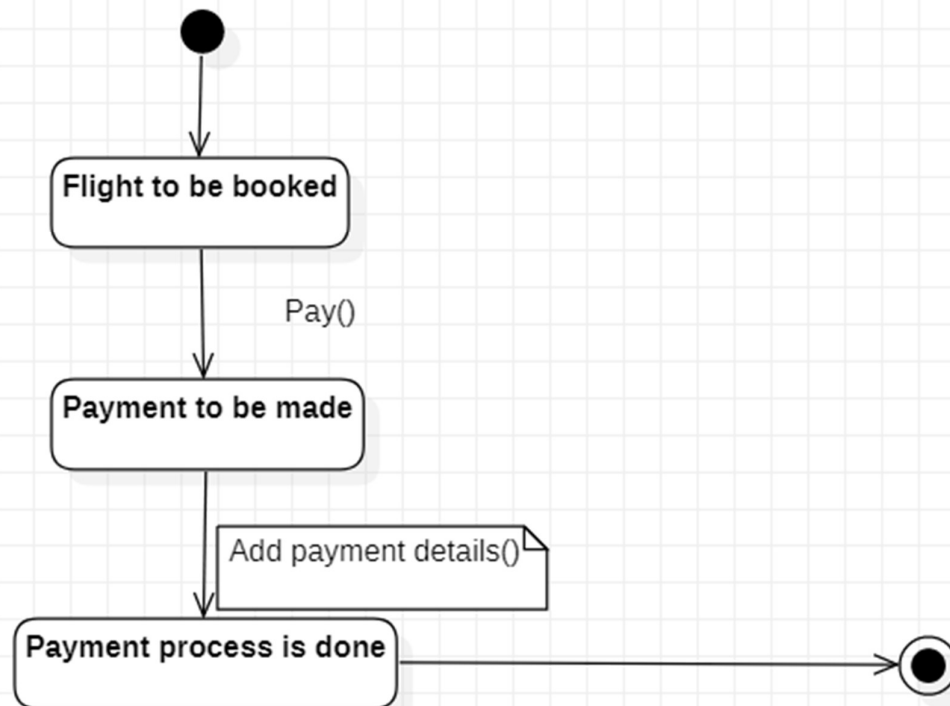
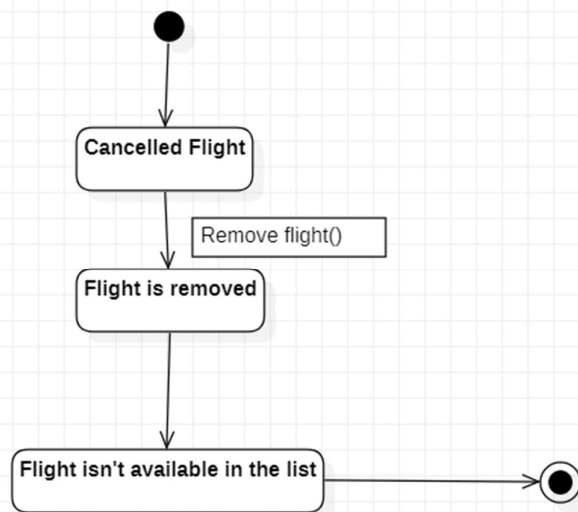


STATE DIAGRAM:

Description: As visible in the class diagram, the administrator can add or remove flights to the system. In state diagrams, these functionalities are displayed as finite states. In the first diagram, the administrator gets information about a new flight, adds the flight to the system, and is visible to the rest of the users of the system. The second one displays the administrator being informed of a canceled flight, removing it, and checking whether it is still available on the system. In the third diagram, booking flights and making payment functionalities of customers are explained. Here, the customer books a flight, he/she is asked to proceed with payment, and the process is finished if the customer has enough funds to make payment. In the last diagram, the bank handles the payment made by the customer. Bank receives information about the payment, processes the payment, and generates the receipt.

Adding new flight:





MANUAL TEST CASE:

Pre-condition	The user should have a proper internet connection and an account in the system				
Dependencies:	Login page				
Test Priority	High				
Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result
TC001	Adding flight	To add the flight information into the system	Type the flight number,destination,arrival,departure time,cost of economy class,cost of business class	flight number,time,cost of travel,destination and arrival places	Flight details should be added into database and show flights details added successfully.
TC002	Adding flight	To add the flight information into the system	Type the flight number,destination,arrival,departure time	Flight number,time,destination and arrival places	Cost of travel is not entered it displays the error.
TC003	View Booking List	To view the booked tickets through the system	Tap on View list booked tickets and enter the flight number and departure date	List of Passengers	List of passengers booked tickets is shown
TC004	View Booking List	To view the booked tickets through the system	Tap on View list booked tickets and enter the flight number	List of Passengers	Error shown because of not entering departure date
TC005	Deleting flight	To delete the flight information from the system	Tap on Delete flight details and enter the flight number and departure date	Flight details	The flight information will be deleted if the flight is in the system or else no flight details found
TC006	Deleting flight	To delete the flight information from the system	Tap on Delete flight details and enter the flight number and departure date	Flight details	The flight details are incorrect so it is showing error
TC007	Adding Aircraft	To add the airline's Flight number and its capacity	Tap on add new aircraft details and enter the flight number and the capacity of the flight.	Flight number,aircraft	The aircraft is added and it is successful.
TC008	Adding Aircraft	To add the airline's Flight number and its capacity	Tap on add new aircraft details and enter the flight number.	Flight number,aircraft	Showing error to add the capacity of the flight
TC009	Activate Aircraft	To activate the flight number which is added into the system	Tap on activate aircraft and enter the flight number and click on activate	Flight number	It shows aircraft is activated successfully
TC010	Activate Aircraft	To activate the flight number which is added into the system	Tap on activate aircraft and enter the flight number and click on activate	Flight number	Due to incorrect flight number it show enter the correct aircraft number.
TC011	Deleting aircraft	To delete the aircraft details from the system	Tap on delete aircraft and enter the flight number and click on activate	Flight number	The desired flight number is deleted successfully.
TC012	Deleting aircraft	To delete the aircraft details from the system	Tap on delete aircraft and enter the flight number and click on activate	Flight number	The desired flight number is not found in the system and it shows the error

TC013	Search flight	To search flight in our system by entering the necessary details	Tap on book flight tickets and enter the destination, departure and the number of passengers	List of available flights	The flight which are available on the system are displayed
TC014	Search flight	To search flight in our system by entering the necessary details	Tap on book flight tickets and enter the destination, departure and the number of passengers	List of available flights	No flights are available in the system so it displayed error message
TC015	Book flight	To book flight ticket after searching flights	Tap on book ticket and enter the passenger information and the other facilities if required	Entering details into the system	After entering the details of the passenger it shows the total cost of travel
TC016	Book flight	To book flight ticket after searching flights	Tap on book ticket and enter the passenger information and the other facilities if required	Entering details into the system	Due to unfiled columns it shows error and asked to enter the details properly.
TC017	Making payment	To make payment for the flight ticket after entering the passenger information	Tap on make payment and the select the payment mode	Payment data	Payment should be successful and it should generate a unique PNR number
TC018	Making payment	To make payment for the flight ticket after entering the passenger information	Tap on make payment and the select the payment mode	Payment data	Due to incorrect option the payment is failed and it shows the error message
TC019	Delete Booking	To delete the flight ticket after booking through the system	Tap on delete flight booking and enter the ticket number and click on cancel ticket	Ticket number	Ticket is cancelled with 15% cancellation charges and the amount should be reflected back to the bank account
TC020	Delete Booking	To delete the flight ticket after booking through the system	Tap on delete flight booking and enter the ticket number and click on cancel ticket	Ticket number	Ticket number is wrong It should display the error message

OPERATING ENVIRONMENT:

The designed system is thought to be a website and will be available via any web browser application. It will not be dependent on the technical capabilities or operating system of the user's device.

IMPLEMENTATION CODE:

Home Page:

```
<?php
    session_start();
?>
<html>
    <head>
        <title>
            Welcome to Air space
        </title>
        <link rel="stylesheet" type="text/css" href="css/style.css"/>
        <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
        <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
        <link rel="stylesheet" href="https://pro.fontawesome.com/releases/v5.10.0/css/all.css">
    </head>
    <body>

        <div>

            <ul>
                <li></li>
                <li><h1 id="title"> JUST FLY </h1></li>
                <li><a href="home_page.php"><i class="fa fa-home" aria-hidden="true"></i>
Home</a></li>

                <li>
                    <?php

                        if(isset($_SESSION['login_user'])&&$_SESSION['user_type']=='Customer')
                        {
                            echo "<a href=\"book_tickets.php\"><i class=\"fa
fa-ticket\" aria-hidden=\"true\"></i> Book Tickets</a>";
                        }
                        else
                        if(isset($_SESSION['login_user'])&&$_SESSION['user_type']=='Administrator')
                        {
                            echo "<a href=\"admin_ticket_message.php\"><i
class=\"fa fa-ticket\" aria-hidden=\"true\"></i> Book Tickets</a>";
                        }
                        else
                        {
                            echo "<a href=\"login_page.php\"><i class=\"fa
fa-ticket\" aria-hidden=\"true\"></i> Book Tickets</a>";
                        }
                    }
                </li>
                <li><a href="home_page.php"><i class="fa fa-plane" aria-hidden="true"></i>
About Us</a></li>
                <li><a href="home_page.php"><i class="fa fa-phone" aria-hidden="true"></i>
Contact Us</a></li>

                <li>
                    <?php

                        if(isset($_SESSION['login_user'])&&$_SESSION['user_type']=='Customer')
                        {
                            echo "<a href=\"customer_homepage.php\"><i
class=\"fa fa-sign-in\" aria-hidden=\"true\"></i> Login</a>";
                        }
                    }
                </li>
            </ul>
        </div>
    </body>
</html>
```

```

else
if(isset($_SESSION['login_user'])&&$_SESSION['user_type']=='Administrator')
{
echo "<a href='\"admin_homepage.php\"'><i
class='\"fa fa-sign-in\"' aria-hidden='\"true\"'></i> Login</a>";
}
else
{
echo "<a href='\"login_page.php\"'><i class='\"fa
fa-sign-in\"' aria-hidden='\"true\"'></i> Login</a>";
}
?>
</li>
</ul>
</div>

<div class="welcome_text text-center">
<section class="text-center"><br>Welcome to JustFly</section>
<br>

<div class=" container row justify-content-around md-auto" id="dialog-box0">
<div class="col-3" id="dialog-box">Login <i class='far fa-arrow-alt-circle-right' style='font-
size:36px'></i> </div>
<div class="col-3" id="dialog-box">select flight<i class='far fa-arrow-alt-circle-right'
style='font-size:36px'></i> </div>
<div class="col-3" id="dialog-box">Book ticket<i class='fas fa-plane-departure' style='font-
size:36px'></i></div>
</div>
</div>


<!--check out adding local host in links and other places

shift login/logout buttons to right side
-->
</body>
<footer class="footer text-center bg-dark text-light">
Team JUSTFLY
</footer>
</html>

```

Login Page:

```
<?php
    session_start();

?>
<html>
    <head>
        <title>
            Account Login
        </title>
        <style>
            input {
                border: 1.5px solid #030337;
                border-radius: 4px;
                padding: 7px 30px;
            }
            input[type=submit] {
                background-color: #030337;
                color: white;
                border-radius: 4px;
                padding: 7px 45px;
                margin: 0px 60px;
            }
        </style>
        <link rel="stylesheet" type="text/css" href="css/style.css"/>
        <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
        <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
    </head>
    <body>
        <div>
            <ul>
                <li></li>
                <li><h1 id="title"> JUST FLY </h1></li>
                <li><a href="home_page.php"><i class="fa fa-home" aria-hidden="true"></i>
Home</a></li>
                <li><a href="login_page.php"><i class="fa fa-ticket" aria-hidden="true"></i> Book
Tickets</a></li>
                <li><a href="home_page.php"><i class="fa fa-plane" aria-hidden="true"></i>
About Us</a></li>
                <li><a href="home_page.php"><i class="fa fa-phone" aria-hidden="true"></i>
Contact Us</a></li>
                <li><a href="login_page.php"><i class="fa fa-sign-in" aria-hidden="true"></i>
Login</a></li>
            </ul>
        </div>
        <br>
        <br>
        <br>
        <div class="conatiner">
            <div class="row justify-content-around">
                <form class="float_form" style="padding-left: 40px" action="login_handler.php" method="POST">
                    <fieldset>
                        <legend>Login Details:</legend>
                        <strong>Username:</strong><br>
                        <input type="text" name="username" placeholder="Enter your username"
required><br><br>
                        <strong>Password:</strong><br>
                        <input type="password" name="password" placeholder="Enter your password"
required><br><br>
                        <strong>User Type:</strong><br>
```

```

        Customer <input type='radio' name='user_type' value='Customer' checked/>
Administrator <input type='radio' name='user_type' value='Administrator'/>
        <br>
        <?php
            if(isset($_GET['msg']) && $_GET['msg']=='failed')
            {
                echo "<br>
                <strong style='color:red'>Invalid
                <br><br>";
            }
        ?>
        <input type="submit" name="Login" value="Login">
    </fieldset>
    <br>
    <a href="new_user.php"><i class="fa fa-user-plus" aria-hidden="true"></i> Create New User
Account?</a>
    </form>
</div>
</div>
</body>
</html>

```


New User:

```
<html>
  <head>
    <title>
      Create New User Account
    </title>
    <style>
      input {
        border: 1.5px solid #030337;
        border-radius: 4px;
        padding: 7px 30px;
      }
      input[type=submit] {
        background-color: #030337;
        color: white;
        border-radius: 4px;
        padding: 7px 45px;
        margin: 0px 135px;
      }
    </style>
    <link rel="stylesheet" type="text/css" href="css/style.css"/>
    <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
  </head>
  <body>
    <div>
      <ul>
        <li></li>
        <li><h1 id="title"> JUST FLY </h1></li>
        <li><a href="home_page.php"><i class="fa fa-home" aria-hidden="true"></i>
Home</a></li>
        <li><a href="login_page.php"><i class="fa fa-ticket" aria-hidden="true"></i> Book
Tickets</a></li>
        <li><a href="home_page.php"><i class="fa fa-plane" aria-hidden="true"></i>
About Us</a></li>
        <li><a href="home_page.php"><i class="fa fa-phone" aria-hidden="true"></i>
Contact Us</a></li>
        <li><a href="login_page.php"><i class="fa fa-sign-in" aria-hidden="true"></i>
Login</a></li>
      </ul>
    </div>
    <br>
    <form class="center_form" action="new_user_form_handler.php" method="POST"
id="new_user_from">
      <h2><i class="fa fa-user-plus" aria-hidden="true"></i> CREATE NEW USER ACCOUNT</h2>
      <br>
      <table cellpadding='10'>
        <strong>ENTER LOGIN DETAILS</strong>
        <tr>
          <td>Enter a valid username </td>
          <td><input type="text" name="username" required><br><br></td>
        </tr>
        <tr>
          <td>Enter your desired password </td>
          <td><input type="password" name="password"
required><br><br></td>
        </tr>
        <tr>
          <td>Enter your email ID</td>
          <td><input type="text" name="email" required><br><br></td>
        </tr>
      </table>
    </form>
  </body>
</html>
```

```

</table>
<br>
<table cellpadding='10'>
  <strong>ENTER CUSTOMER'S PERSONAL DETAILS</strong>
  <tr>
    <td>Enter your name </td>
    <td><input type="text" name="name" required><br><br></td>
  </tr>
  <tr>
    <td>Enter your phone no.</td>
    <td><input type="text" name="phone_no" required><br><br></td>
  </tr>
  <tr>
    <td>Enter your address</td>
    <td><input type="text" name="address" required><br><br></td>
  </tr>
</table>
<br>
<input type="submit" value="Submit" name="Submit">
<br>
</form>
</body>
</html>

```

Admin Homepage:

```
<?php
    session_start();

?>
<html>
    <head>
        <title>
            Welcome Administrator
        </title>
        <link rel="stylesheet" type="text/css" href="css/style.css"/>
        <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
        <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">
    </head>
    <body>
        <div>
            <ul>
                <li></li>
                <li><h1 id="title"> JUST FLY </h1></li>
                <li><a href="admin_homepage.php"><i class="fa fa-home" aria-
hidden="true"></i> Home</a></li>
                <li><a href="admin_homepage.php"><i class="fa fa-desktop" aria-
hidden="true"></i> Dashboard</a></li>
                <li><a href="logout_handler.php"><i class="fa fa-sign-out" aria-
hidden="true"></i> Logout</a></li>
            </ul>
        </div>

        <div class="conatiner">
            <div class="row justify-content-around">
                <div class="col-12">
                    <h2 >Welcome Administrator!</h2>

                    <table cellpadding="5">

                        <tr>
                            <td class="admin_func"><a href="admin_view_booked_tickets.php"><i class="fa
fa-plane" aria-hidden="true"></i> View List of Booked Tickets for a Flight</a>
                        </td>
                        </tr>
                        <tr>
                            <td class="admin_func"><a href="add_flight_details.php"><i class="fa fa-plane"
aria-hidden="true"></i> Add Flight Schedule Details</a>
                        </td>
                        </tr>
                        <!-- <tr>
                            <td class="admin_func"><a href="modify_flight_details.php"><i class="fa fa-
plane" aria-hidden="true"></i> Modify Flight Schedule Details</a>
                        </td>
                        </tr>
                        -->
                        <tr>
                            <td class="admin_func"><a href="delete_flight_details.php"><i class="fa fa-
plane" aria-hidden="true"></i> Delete Flight Schedule Details</a>
                        </td>
                        </tr>
                        <tr>
                            <td class="admin_func"><a href="add_jet_details.php"><i class="fa fa-plane"
aria-hidden="true"></i> Add Aircrafts Details</a>
                        </td>
```

```

        </tr>
        <tr>
            <td class="admin_func"><a href="activate_jet_details.php"><i class="fa fa-plane"
aria-hidden="true"></i> Activate Aircraft</a>
            </td>
        </tr>
        <tr>
            <td class="admin_func"><a href="deactivate_jet_details.php"><i class="fa fa-
plane" aria-hidden="true"></i> Deactivate Aircraft</a>
            </td>
        </tr>
    </table>
</div>
</div>
</div>
</body>
</html>

```

Add Flight Details:

```

<?php
    session_start();
?>
<html>
    <head>
        <title>
            Add Flight Schedule Details
        </title>
        <style>
            input {
                border: 1.5px solid #030337;
                border-radius: 4px;
                padding: 7px 30px;
            }
            input[type=submit] {
                background-color: #030337;
                color: white;
                border-radius: 4px;
                padding: 7px 45px;
                margin: 0px 200px;
            }
        </style>
        <link rel="stylesheet" type="text/css" href="css/style.css"/>
        <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
    </head>
    <body>
        <div>
            <ul>
                <li></li>
                <li><h1 id="title"> JUST FLY </h1></li>
                <li><a href="admin_homepage.php"><i class="fa fa-home" aria-
hidden="true"></i> Home</a></li>
                <li><a href="admin_homepage.php"><i class="fa fa-desktop" aria-
hidden="true"></i> Dashboard</a></li>
                <li><a href="logout_handler.php"><i class="fa fa-sign-out" aria-
hidden="true"></i> Logout</a></li>
            </ul>
        </div>
        <form action="add_flight_details_form_handler.php" method="post">
            <h2>ENTER THE FLIGHT SCHEDULE DETAILS</h2>
            <?php

```

```

        if(isset($_GET['msg']) && $_GET['msg']=='success')
        {
            echo "<strong style='color: green'>The Flight Schedule has been
successfully added.</strong>

            <br>
            <br>";
        }
        else if(isset($_GET['msg']) && $_GET['msg']=='failed')
        {
            echo "<strong style='color: red'>*Invalid Flight Schedule Details, please
enter again.</strong>

            <br>
            <br>";
        }
    ?>
<table cellpadding="5">
    <tr>
        <td class="fix_table">Flight Number</td>

    </tr>
    <tr>
        <td class="fix_table"><input type="text" name="flight_no"
required></td>

    </tr>
</table>
<br>
<hr>
<table cellpadding="5">
    <tr>
        <td class="fix_table">Origin</td>
        <td class="fix_table">Destination</td>

    </tr>
    <tr>
        <td class="fix_table"><input type="text" name="origin"
required></td>
        <td class="fix_table"><input type="text" name="destination"
required></td>

    </tr>
</table>
<br>
<hr>
<table cellpadding="5">
    <tr>
        <td class="fix_table">Departure Date</td>
        <td class="fix_table">Arrival Date</td>

    </tr>
    <tr>
        <td class="fix_table"><input type="date" name="dep_date"
required></td>
        <td class="fix_table"><input type="date" name="arr_date"
required></td>

    </tr>
</table>
<br>
<hr>
<table cellpadding="5">
    <tr>
        <td class="fix_table">Departure Time</td>
        <td class="fix_table">Arrival Time</td>

    </tr>
    <tr>

```

```

                                <td class="fix_table"><input type="time" name="dep_time"
required></td>
                                <td class="fix_table"><input type="time" name="arr_time"
required></td>
                                </tr>
                            </table>
                            <br>
                            <hr>
                            <table cellpadding="5">
                                <tr>
                                    <td class="fix_table">Number of Seats in Economy Class</td>
                                    <td class="fix_table">Number of Seats in Business Class</td>
                                </tr>
                                <tr>
                                    <td class="fix_table"><input type="number" name="seats_eco"
required></td>
                                    <td class="fix_table"><input type="number" name="seats_bus"
required></td>
                                </tr>
                            </table>
                            <br>
                            <hr>
                            <table cellpadding="5">
                                <tr>
                                    <td class="fix_table">Ticket Price(Economy Class)</td>
                                    <td class="fix_table">Ticket Price(Business Class)</td>
                                </tr>
                                <tr>
                                    <td class="fix_table"><input type="number" name="price_eco" required>
                                    </td>
                                    <td class="fix_table"><input type="number" name="price_bus" required>
                                    </td>
                                </tr>
                            </table>
                            <br>
                            <hr>
                            <table cellpadding="5">
                                <tr>
                                    <td class="fix_table">Jet ID</td>
                                    <td class="fix_table"><input type="text" name="jet_id" required>
                                    </td>
                                </tr>
                            </table>
                            <br>
                            <input type="submit" value="Submit" name="Submit">
                        </form>
                        <!--check out adding local host in links and other places
-->
                    </body>
</html>

```

Book Tickets:

```
<?php
    session_start();

?>
<html>
    <head>
        <title>
            View Available Flights
        </title>
        <style>
            input {
                border: 1.5px solid #030337;
                border-radius: 4px;
                padding: 7px 30px;
            }
            input[type=submit] {
                background-color: #030337;
                color: white;
                border-radius: 4px;
                padding: 7px 45px;
                margin: 0px 127px;
            }
            input[type=date] {
                border: 1.5px solid #030337;
                border-radius: 4px;
                padding: 5.5px 44.5px;
            }
            select {
                border: 1.5px solid #030337;
                border-radius: 4px;
                padding: 6.5px 75.5px;
            }
        </style>
        <link rel="stylesheet" type="text/css" href="css/style.css"/>
        <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
    </head>
    <body>
        <div>
            <ul>
                <li></li>
                <li><h1 id="title"> JUST FLY </h1></li>
                <li><a href="customer_homepage.php"><i class="fa fa-home" aria-
hidden="true"></i> Home</a></li>
                <li><a href="customer_homepage.php"><i class="fa fa-desktop" aria-
hidden="true"></i> Dashboard</a></li>
                <li><a href="home_page.php"><i class="fa fa-plane" aria-hidden="true"></i>
About Us</a></li>
                <li><a href="home_page.php"><i class="fa fa-phone" aria-hidden="true"></i>
Contact Us</a></li>
                <li><a href="logout_handler.php"><i class="fa fa-sign-out" aria-
hidden="true"></i> Logout</a></li>
            </ul>
        </div>
        <form action="view_flights_form_handler.php" method="post">
            <h2>SEARCH FOR AVAILABLE FLIGHTS</h2>
            <table cellpadding="5">
                <tr>
                    <td class="fix_table">Enter the Origin</td>
                    <td class="fix_table">Enter the Destination</td>
                </tr>
            </table>
        </form>
    </body>
</html>
```

```

        <tr>
            <td class="fix_table">
                <input list="origins" name="origin" placeholder="From"
                    required>
                <datalist id="origins">
                    <option value="bangalore">
                </datalist>
                <!-- <input type="text" name="origin" placeholder="From"
                    required> --></td>
            <td class="fix_table">
                <input list="destinations" name="destination"
                    placeholder="To" required>
                <datalist id="destinations">
                    <option value="mumbai">
                    <option value="mysore">
                    <option value="mangalore">
                    <option value="chennai">
                    <option value="hyderabad">
                </datalist>
                <!-- <input type="text" name="destination"
                    placeholder="To" required> --></td>
        </tr>
    </table>
    <br>
    <table cellpadding="5">
        <tr>
            <td class="fix_table">Enter the Departure Date</td>
            <td class="fix_table">Enter the No. of Passengers</td>
        </tr>
        <tr>
            <td class="fix_table"><input type="date" name="dep_date" min=
                <?php
                    $todays_date=date('Y-m-d');
                    echo $todays_date;
                ?>
                max=
                <?php
                    $max_date=date_create(date('Y-m-d'));
                    date_add($max_date,date_interval_create_from_date_string("90 days"));
                    echo date_format($max_date,"Y-m-d");
                ?> required></td>
            <td class="fix_table"><input type="number" name="no_of_pass"
                placeholder="Eg. 5" required></td>
        </tr>
    </table>
    <br>
    <table cellpadding="5">
        <tr>

```


AUTOMATED TESTING (SELENIUM):

1. Activate Flight Number:

✓ Activate Flight Number http://localhost/airline2/home_page.php

	Command	Target	Value
1	✓ open	http://localhost/airline2/admin_homepage.php	
2	✓ set window size	830x762	
3	✓ click	linkText=Activate Aircraft	
4	✓ click	name=jet_id	
5	✓ type	name=jet_id	10006
6	✓ click	name=Activate	
7	✓ click	linkText=Home	

Runs: 1 Failures: 0

Log Reference

- 2. setWindowSize on 830x762 OK 15:09:54
- 3. click on linkText=Activate Aircraft OK 15:09:54
- 4. click on name=jet_id OK 15:09:54
- 5. type on name=jet_id with value 10006 OK 15:09:54
- 6. click on name=Activate OK 15:09:54
- 7. click on linkText=Home OK 15:09:55

'Activate Flight Number' completed successfully 15:09:55

Log for activating flight number:

- Running 'Activate Flight Number' 14:55:03
- 1.open on http://localhost/airline2/admin_homepage.php OK 14:55:03
- 2.setWindowSize on 830x762 OK 14:55:03
- 3.click on linkText=Activate Aircraft OK 14:55:04
- 4.click on name=jet_id OK 14:55:04
- 5.type on name=jet_id with value 10006 OK 14:55:04
- 6.click on name=Activate OK 14:55:04
- 7.click on linkText=Home OK 14:55:05

'Activate Flight Number' completed successfully

2.Adding New Flight:

The screenshot displays the Selenium IDE interface. The top toolbar shows standard IDE controls. The main area contains a test script for 'Addnewflight' with the following commands:

Step	Command	Target	Value
1	open	/airline2/login_page.php	
2	set window size	830x762	
3	click	name=username	
4	type	name=username	justfly
5	click	name=password	
6	type	name=password	justfly
7	click	css=input:nth-child(15)	
8	click	name=Login	
9	click	linkText=Add Flight Schedule Details	

Below the script, there are input fields for Command, Target, Value, and Description. At the bottom, a log shows the execution results:

Log	Reference
3. click on name=username OK	15:19:45
4. type on name=username with value justfly OK	15:19:46
5. click on name=password OK	15:19:46
6. type on name=password with value justfly OK	15:19:46
7. click on css=input:nth-child(15) OK	15:19:46
8. click on name=Login OK	15:19:46

Log for adding new flight:

- Running 'Addnewflight' 09:51:51
- 1.open on /airline2/login_page.php OK 09:51:51
- 2.setWindowSize on 830x762 OK 09:51:51
- 3.click on name=username OK 09:51:51
- 4.type on name=username with value justfly OK 09:52:05
- 5.click on name=password OK 09:52:05
- 6.type on name=password with value justfly OK 09:52:05
- 7.click on css=input:nth-child(15) OK 09:52:06
- 8.click on name=Login OK 09:52:06
- 9.click on linkText=Add Flight Schedule Details OK 09:52:06
- 10.click on name=flight_no OK 09:52:06
- 11.type on name=flight_no with value AA101 OK 09:52:07
- 12.type on name=flight_no with value AA102 OK 09:52:07
- 13.click on name=origin OK 09:52:07
- 14.type on name=origin with value bangalore OK 09:52:07
- 15.click on name=destination OK 09:52:07
- 16.type on name=destination with value lucknow OK 09:52:08
- 17.click on name=dep_date OK 09:52:08
- 18.type on name=dep_date with value 0002-12-15 OK 09:52:08
- 19.type on name=dep_date with value 0020-12-15 OK 09:52:08
- 20.type on name=dep_date with value 0202-12-15 OK
- 21.type on name=dep_date with value 2021-12-15 OK 09:52:09
- 22.click on name=arr_date OK 09:52:09
- 23.type on name=arr_date with value 0002-12-15 OK 09:52:09
- 24.type on name=arr_date with value 0020-12-15 OK 09:52:09
- 25.type on name=arr_date with value 0202-12-15 OK 09:52:09

- 26.type on name=arr_date with value 2021-12-15 OK09:52:09
- 27.click on name=dep_time OK09:52:10
- 28.type on name=dep_time with value 09:00 OK09:52:10
- 29.click on name=arr_time OK09:52:10
- 30.type on name=arr_time with value 13:00 OK09:52:10
- 31.click on name=seats_eco OK09:52:10
- 32.type on name=seats_eco with value 45 OK09:52:10
- 33.click on name=seats_bus OK09:52:11
- 34.type on name=seats_bus with value 30 OK09:52:11
- 35.click on name=price_eco OK09:52:11
- 36.type on name=price_eco with value 4500 OK09:52:11
- 37.click on name=price_bus OK09:52:11
- 38.type on name=price_bus with value 6000 OK09:52:12
- 39.click on name=jet_id OK09:52:12
- 40.type on name=jet_id with value 10003 OK09:52:12
- 41.click on name=Submit OK09:52:12
- 42.click on linkText=Home OK09:52:12

'Addnewflight' completed successfully

3. Deleting flight schedule

Delete existing flight
http://localhost/airline2/home_page.php

Command	Target	Value
4 ✓ click	name=flight_no	
5 ✓ type	name=flight_no	AA102
6 ✓ click	name=departure_date	
7 ✓ type	name=departure_date	0002-12-15
8 ✓ type	name=departure_date	0020-12-15
9 ✓ type	name=departure_date	0202-12-15
10 ✓ type	name=departure_date	2021-12-15
11 ✓ click	name=Delete	
12 click	linkText=Home	

Command
Target
Value
Description

Runs: 0 Failures: 0

Log Reference

6. click on name=departure_date OK 15:25:12
7. type on name=departure_date with value 0002-12-15 OK 15:25:12
8. type on name=departure_date with value 0020-12-15 OK 15:25:12
9. type on name=departure_date with value 0202-12-15 OK 15:25:12
10. type on name=departure_date with value 2021-12-15 OK 15:25:12
11. click on name=Delete OK 15:25:12

Log for deleting flight schedule

- Running 'Delete existing flight'15:03:31
- 1.open on http://localhost/airline2/admin_homepage.php OK15:03:32
- 2.setWindowSize on 830x762 OK15:03:32
- 3.click on linkText=Delete Flight Schedule Details OK15:03:32
- 4.click on name=flight_no OK15:03:32
- 5.type on name=flight_no with value AA102 OK15:03:33
- 6.click on name=departure_date OK15:03:33
- 7.type on name=departure_date with value 0002-12-15 OK15:03:33
- 8.type on name=departure_date with value 0020-12-15 OK15:03:33

- 9.type on name=departure_date with value 0202-12-15 OK15:03:33
- 10.type on name=departure_date with value 2021-12-15 OK15:03:34
- 11.click on name=Delete OK15:03:34
- 12.click on linkText=Home OK15:03:34

'Delete existing flight' completed successfully

4. Login

Command	Target	Value
1. ✓ open	/airline2/login_page.php	
2. ✓ set window size	830x762	
3. ✓ click	name=username	
4. ✓ type	name=username	justfly
5. ✓ click	name=password	
6. ✓ type	name=password	justfly
7. ✓ click	css=input:nth-child(15)	
8. ✓ click	name=Login	
9. click	linkText=Logout	

Runs: 0 Failures: 0

Log	Reference
3. click on name=username OK	15:26:32
4. type on name=username with value justfly OK	15:26:33
5. click on name=password OK	15:26:33
6. type on name=password with value justfly OK	15:26:33
7. click on css=input:nth-child(15) OK	15:26:33
8. click on name=Login OK	15:26:33

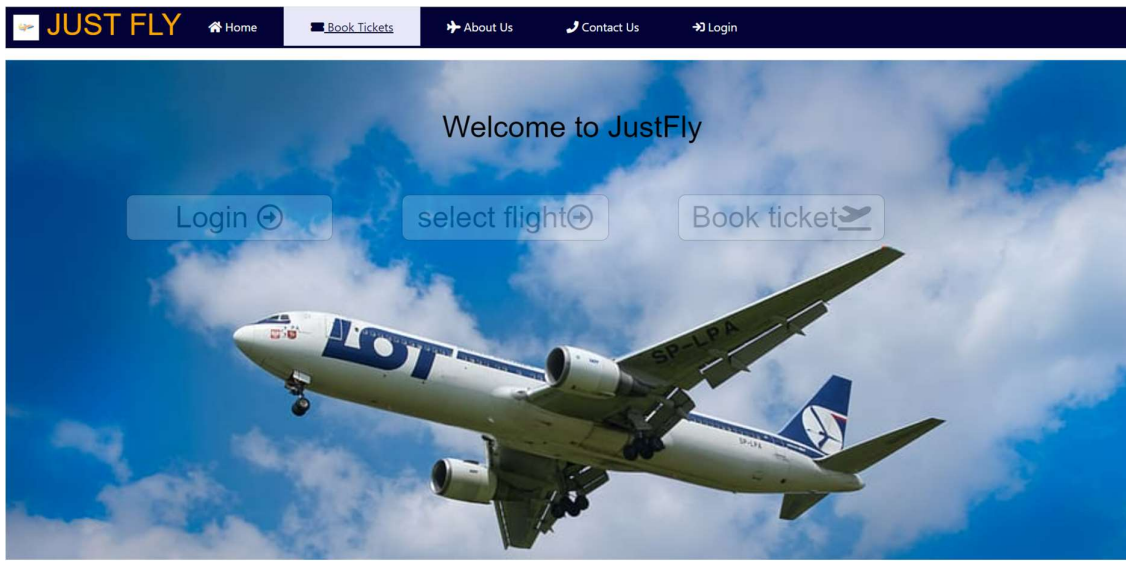
Log for login:

- Running 'Login'15:00:23
- 1.open on /airline2/login_page.php OK15:00:23
- 2.setWindowSize on 830x762 OK15:00:23
- 3.click on name=username OK15:00:23
- 4.type on name=username with value justfly OK15:00:24
- 5.click on name=password OK15:00:24
- 6.type on name=password with value justfly OK15:00:24
- 7.click on css=input:nth-child(15) OK15:00:24
- 8.click on name=Login OK15:00:24
- 9.click on linkText=Logout OK15:00:25
- 10.click on linkText=Login OK15:00:25
- 11.click on name=username OK15:00:26
- 12.type on name=username with value justfly OK15:00:26
- 13.click on name=password OK15:00:26
- 14.type on name=password with value abcd OK15:00:26
- 15.click on css=input:nth-child(15) OK15:00:26
- 16.click on name=Login OK15:00:26
- 17.close OK15:00:27

'Login' completed successfully

WEBSITE PICTURES:

Homepage:



Login page:

The screenshot shows the login page of the JustFly website. It features the same dark blue navigation bar as the homepage. The main content area is white and contains the following elements: the heading 'Login Details:-', a 'Username:' label above a text input field containing 'justfly', a 'Password:' label above a password input field with masked characters, a 'User Type:' label with two radio button options: 'Customer' (selected) and 'Administrator', a dark blue 'Login' button, and a link at the bottom that says 'Create New User Account?' with a plus icon.


Admin Homepage:


 **JUST FLY** [Home](#) [Dashboard](#) [Logout](#)

Welcome Administrator!

- ✕ View List of Booked Tickets for a Flight
- ✕ Add Flight Schedule Details
- ✕ Delete Flight Schedule Details
- ✕ Add Aircrafts Details
- ✕ Activate Aircraft
- ✕ Deactivate Aircraft

Account Registration page:

 **JUST FLY** [Home](#) [Book Tickets](#) [About Us](#) [Contact Us](#) [Login](#)

 **CREATE NEW USER ACCOUNT**

ENTER LOGIN DETAILS

Enter a valid username

Enter your desired password

Enter your email ID


ENTER CUSTOMER'S PERSONAL DETAILS

Enter your name

Enter your phone no.

Enter your address


User Homepage:

 **JUST FLY** [Home](#) [Dashboard](#) [About Us](#) [Contact Us](#) [Logout](#)

Welcome justfly

- ✕ Book Flight Tickets
- ✕ View Booked Flight Tickets
- ✕ Cancel Booked Flight Tickets

Searching of Flights:

 **JUST FLY**

[Home](#) [Dashboard](#) [About Us](#) [Contact Us](#) [Logout](#)

SEARCH FOR AVAILABLE FLIGHTS


Enter the Origin

From

Enter the Destination

To


Enter the Departure Date

dd-mm-yyyy 

Enter the No. of Passengers

Eg. 5

Enter the Class

Economy 

Search for Available Flights

CONCLUSION:

This project was done on a small scale with a minimal user interface. The project can be improved with a better Front-end user interface and connections from real airline companies and online travel agencies.

REFERENCES:

- <https://www.freestudentprojects.com/studentprojectreport/project-synopsis/online-air-ticketing/>
- https://www.academia.edu/23567842/Software_Requirements_Specification_for_Airline_Flight_Booking_System_Software_Requirements_Specification_for_Airline_flight_booking_system
- https://www.youtube.com/watch?v=25AiXy8e09E&ab_channel=EasyTutorials
- <https://projectsgeek.com/php-projects-source-code>

THANK YOU