

AIRLINE TICKET RESERVATION SYSTEM

*A mini project report submitted in partial fulfilment of the requirement for the
award of the degree of*

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ENGINEERING AND TECHNOLOGY PROGRAM

GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND PG COURSES (A)

Rushikonda, Visakhapatnam – 45

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND PG COURSES (A)

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CERTIFICATE

This is to certify that the project report entitled “**AIRLINE TICKET RESERVATION SYSTEM**” being submitted by B. HARI PRIYA (5191411008), A. HAMSWEETHA (5191411004), E. BALA SUBRAHMANYAM (5191411018) in the partial fulfilment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to Engineering and Technology Program, Gayatri Vidya Parishad College for Degree and PG Courses (A), Visakhapatnam is a record of bonafide work carried out under my guidance and supervision.

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DECLARATION

We hereby declare that the project entitled “**AIRLINE TICKET RESERVATION SYSTEM**” submitted in partial fulfilment of the requirements for the award of Bachelor of Technology in Computer Science and Engineering, to Engineering and Technology Program, Gayatri Vidya Parishad College for Degree and PG Courses (A). We assure that this project is not submitted in any other University or College.

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ABSTRACT

Airline reservation System is a computerized system used to store and retrieve information and conduct transactions related to air travel. The project is aimed at exposing the relevance and importance of Airline Reservation Systems. It is projected towards enhancing the relationship between customers and airline agencies and thereby making it convenient for the customers to book the flights. This software has two parts. First is the user/customer part and the administrator part. User part is used as a front end and administrator is the back end. Administrator is used by airline authority. The system allows the administrator to update the aircraft details by adding or deleting the flight schedule details. These are done to update so that customers will get the right scheduled flights details. Administrator can also add the aircraft details so that the customers will know the correct aircraft details. And the administrator can also activate and deactivate an aircraft, so that the customers can know which aircraft is available.

The main purpose of this software is to create an admin module so that they can add and delete required details for the customers. This software mainly focuses on back end that is Administrator part.

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1. INTRODUCTION

Airline reservation systems are systems that allow an airline to sell their inventory (seats). It contains information on schedules and fares and contains a database of reservations (or passenger name records) and of tickets issued. ARSs are part of passengers services system which are applications supporting the direct contact with the passenger.

A Flight Management System is an on-board multi-purpose navigation, performance, and aircraft operations computer designed to provide virtual data and operational harmony between closed and open elements associated with a flight from pre-engine start and take-off, to landing and engine shut-down.

ARS eventually evolved into the computer reservation system. A computer reservation system is used for the reservations of a particular airline and interfaces with global distribution system which supports travel agencies and other distribution channels in making reservations for most major airlines in a single system.

In the airline industry, available seats are commonly referred to as inventory. The inventory of an airline is generally classified into service classes and any number of fare classes, to which different prices and booking conditions may apply. Fare classes are complicated and vary from airline to airline, often indicated by a one letter code. The meaning of these codes are not often known by the passenger, but conveys information to airline staff, for example they may indicate that a ticket was fully paid, or discounted or purchased through a loyalty scheme, etc. Some seats may not be available for open sale, but reserved for example for connecting flight or loyalty scheme passengers. Overbooking is also a common practice, and is an exception to inventory management principles. One of the core functions of inventory management is inventory control. Inventory control monitors how many seats are available in the different fare classes, and by opening and closing individual fare classes for sale.

2. REQUIREMENTS

2.1 Existing system:

The current reservation system is manual as customers have to contact their agents and book their tickets. This type of system will be tough because each person will inquire about the details and then should remember those details after inquiring them. This is also slow and will create a problem if a person wants to book a ticket quickly, then they have to go through all this process. This is also difficult for the administrative to calculate all the people who booked the tickets and also how many vacant seats are there. Since this requires a lot of time and money and manpower, the Airline Ticket Reservation System is made easier for everyone's convenience.

2.2 Proposed system:

So, the airline ticket reservation system provides an interface for the users to schedule flights and reservations for an Airline service. It is the responsibility of the system to maintain the flight details, flight status, reservation, cancellation process and flight reservation will have all the information required for a ticket. Finally a report is generated about all the required details.

2.3 Project Specifications:

The project entitled "Airlines ticket reservation system" is a computerized system that provides customers with access to airline ticket reservations in a public domain without the need for a human agent.

Thousands of flight tickets get booked every day and if there is no online system the staff should be increased so directly affecting the profit margins so if an online system is developed it will be more efficiency.

Advantages of a online reservation system is-

1. Improve customer access
2. Facilitate the offering of more services
3. Increase customer loyalty
4. Attract new customers
5. Reduce customer attrition

2.4 Hardware Requirements:

System: 64 bit.

HDD: 40GB

RAM:1GB

2.5 SOFTWARE REQUIREMENTS:

Operating System: Windows 10

Web Server: XAMPP

Platform: Visual Code Studio

Database: My SQL

Database connectivity: PHP

Language: HTML, CSS, Java Script

Windows operating system:

Microsoft Windows is a multitasking operating system developed by Microsoft Corporation which uses Graphical User Interface to interact with the users. Microsoft was originally named

“Traf-O-Data” in 1972, was renamed as “Micro-soft” in November 1975, then “Microsoft” on November 26, 1976. Microsoft entered the marketplace in August 1981 by releasing version 1.0 of the operating system Microsoft DOS (MS-DOS), a 16-bit command line operating system. Bill Gates and Paul Allen founded Microsoft and windows operating system has been its primary product. A program that is written to run under MS operating System is the Windows Application. Examples of applications that run on Windows OS are the Microsoft Outlook, Internet Explorer, Remote Desktop Condition, Snipping Tool, and numerous others. These applications provide great functionality for users to do their day to day activities. Every application that is developed, for them to launch on windows, should be compatible with the Windows operating system.

Advantages of Windows:

- Desktop as well as tablet-friendly OS
- Switch between applications is very easy
- Not much technical knowledge is required to operate windows
- Windows OS is the dominant OS and enjoys more than 90% of Market share

- MS OS have a great support community and it also has the largest number of applications • provides a powerful set of Enterprise focused Operating System, Applications and the services

MYSQL Database:

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons –

- MySQL is released under an open-source license. So you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA etc.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most appreciated language for web development.
- MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).
- MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.
- MySQL – The MySQL database server manages the databases and tables, controls user access and processes the SQL queries.
- MySQL-client – MySQL client programs, which make it possible to connect to and interact with the server.
- MySQL-level – Libraries and header files that come in handy when compiling other programs that use MySQL.
- MySQL-shared – Shared libraries for the MySQL client.
- MySQL-bench – Benchmark and performance testing tools for the MySQL database server.

Coding Language:

Characteristics of a coding Language –

- A programming language must be simple, easy to learn and use, have good readability and human recognizable.
- Abstraction is a must-have Characteristics for a programming language in which ability to define the complex structure and then its degree of usability comes.
- A portable programming language is always preferred.
- Programming language's efficiency must be high so that it can be easily converted into a machine code and executed consumes little space in memory.
- A programming language should be well structured and documented so that it is suitable for application development.
- Necessary tools for development, debugging, testing, maintenance of a program must be provided by a programming language.
- A programming language should provide single environment known as Integrated Development Environment (IDE).
- A programming language must be consistent in terms of syntax and semantics.

3. SYSTEM DESIGN

System Design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. In System design, developers:

- Define design goals of the project
- Decompose the system into smaller sub systems
- Design hardware/software strategies
- Design persistent data management strategies
- Design global control flow strategies
- Design access control policies and

System design is not algorithmic. It is decomposed of several activities. They are:

- Identify Design Goals
- Design the initial subsystem decomposition

System Design is the transform of analysis model into a system design model. Developers define the design goals of the project and decompose the system into smaller subsystems that can be realized by individual teams. Developers also select strategies for building the system, such as the hardware/software platform on which the system will run, the persistent data management strategy, the goal control flow the access control policy and the handling of boundary conditions. The result of the system design is model that includes a clear description of each of these strategies, subsystem decomposition, and a UML deployment diagram representing the hardware/software mapping of the system.

3.1 Design Goals

Design goals are the qualities that the system should focus on. Many design goals can be inferred from the non-functional requirements or from the application domain.

User friendly: The system is user friendly because it is easy to use and understand.

Reliability: Proper checks are there for any failure in the system if they exist.

3.2 System Architecture

As the complexity of systems increases, the specification of the system decomposition is critical. Moreover, subsystem decomposition is constantly revised whenever new issues are addressed. Subsystems are merged into alone subsystem, a complex subsystem is split into parts, and some

subsystems are added to take care of new functionality. The first iterations over the subsystem decomposition can introduce drastic changes in the system design model.

3.3 System Design

The overall aim of the project is to reduce the manual work and provide the overall information and content to the citizens. The Gram panchayat management system design consists of registration of a citizen, login through the individuals Aadhar number and the password provided during the registration which ensures security of an individual's profile, various kinds of bills payments are available in the system, the transaction history of individual is also provided which avoids the confusion for the user.

3.4 UML Diagrams

A UML diagram is a diagram based on the UML (Unified Modelling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system.

UML is a modern approach to modelling and documenting software. In fact, it's one of the most popular business process modelling techniques. It is based on diagrammatic representations of software components. As the old proverb says: "a picture is worth a thousand words". By using visual representations, we are able to better understand possible flaws or errors in software or business processes.

Mainly UML has been used as a general-purpose modelling language in the field of software engineering. However, it has now found its way into the documentation of several business processes or workflows. For example, activity diagrams, a type of UML diagram, can be used as a replacement for flowcharts. They provide both a more standardized way of modelling workflows as well as a wider range of features to improve readability.

3.4.1 Use Case Diagram

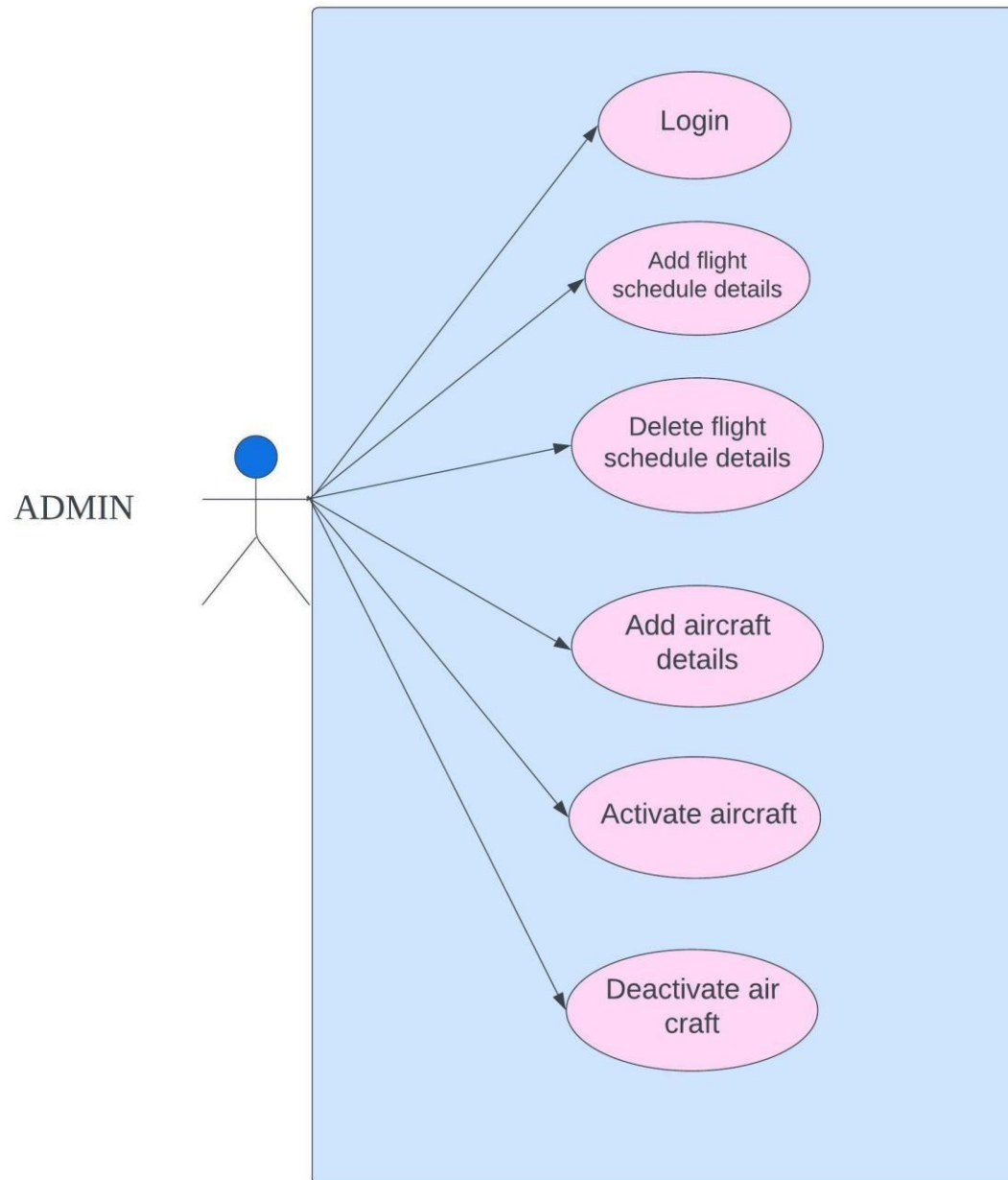
In the Unified Modelling Language (UML), a use case diagram can summarize the details of your system's users (also known as actors) and their interactions with the system. To build one, use a set of specialized symbols and connectors. An effective use case diagram can help the team discuss and represent:

- Scenarios in which system or application interacts with people, organizations, or external systems.
- Goals that your system or application helps those entities (known as actors) achieve.
- The scope of the system.

UML use case diagrams are ideal for:

- Representing the goals of system-user interactions.
- Defining and organizing functional requirements in a system.
- Specifying the context and requirements of a system.
- Modelling the basic flow of events in a use case

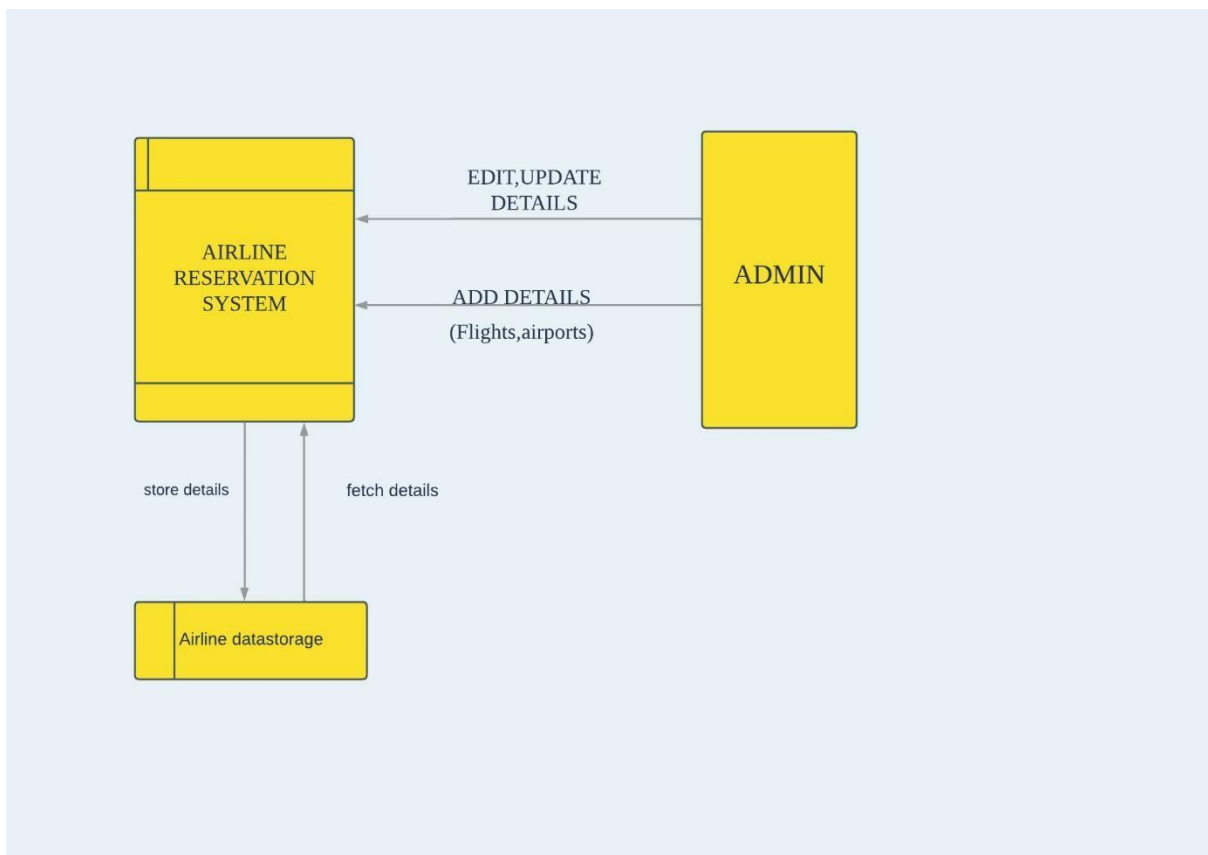
USECASE DIAGRAM:



3.5 Data Flow Diagram

A flowchart is a type of diagram that dictates a workflow or process (such as the completion of a project) from start to finish, making them a great tool for putting complex processes into a visual format that's easy to follow and make sense of. Using a combination of different shapes, colors, and symbols, a flowchart will give you a brief description of each stage of a process, with arrows linking these steps together to indicate the order in which they should be completed.

DATA FLOW DIAGRAM:



4. IMPLEMENTATION

4.1 Creating and Running Web Applications

Step 1: Open Notepad (windows)

Windows 8 or later: Open the Start Screen (the window symbol at the bottom left on your screen). Type Notepad.

Windows 7 or before: Open Start>Programs>Accessories>Notepad Then it opens a new document to place the code.

Step 2: Write HTML and save the file. Write some HTML code in the respective text editor and save in any directory, with an extension “.HTML” and set encoding to (UTF-8) which is preferred encoding for HTML pages.

Step 3: View the HTML page on the browser. Open the saved HTML file in your favourite browser (double click on the file, or right-click and choose “open with”).

4.1.1 RUNNING XAMPP SERVER:

Step 1: Open the XAMPP

Step 2: start MySQL and Apache by clicking start button

Step 3: Open the browser and check for the Apache home page by typing the following
`http://localhost:8080`

4.1.2 RUN THE PROJECT:

Start the XAMPP Server and type the following: `http://localhost:8080/grampanchayat/` The objective of the coding or programming phase is to translate the design of the system produced during the design phase into code in a given programming language, which can be executed by a computer and that performs the computation specified by the design. The coding phase affects

both testing and maintenance. The goal of coding is not to reduce the implementation cost, but the goal should be to reduce the cost of later phases

4.2 Coding Approach

There are two major approaches for coding any software system. They are Top-Down approach and bottom up approach. Bottom-up Approach can best suit for developing the object-oriented systems. During system design phase, we decompose the system into an appropriate number of subsystems, for which objects can be modelled independently. These objects exhibit the way the subsystems perform their operations. Once objects have been modelled, they are implemented by means of coding. Even though related to the same system as the objects are implemented of each other, the Bottom-Up approach is more suitable for coding these objects. In this approach, we first do the coding of objects independently and then we integrate these modules into one system to which they belong. This code will first allow the admin to login with a valid user id and password. After this, admin will select the admission or academic module and enter all the students' details branch wise. TPO will select placement module and enter the details based on academic performance. Reports are generated accordingly and can be viewed by teaching staff and students.

4.3 Information Handling

Any software system requires some amount of information during its operation selection of appropriate data structures can help us to produce the code so that objects of the system can better operate with the available information decreased complexity.

4.4 Programming Style

Programming style deals with act of rules that a programmer must follow so that the characteristics of coding such as Traceability, Understandability, Modifiability, and

Extensibility can be satisfied. In this current system, we followed the coding rules for naming the variables and methods.

4.5 Implementation of Project:

4.3.1 Module-1: Home Page

This module is the main page for our website.

4.3.2 Module-2: Log In

In this module, the admin will login into the account for further usage.

4.3.3 Module-3: View List of Booked tickets for a Flight

In this module, the admin can view the booked tickets for the flights.

4.3.4 Module-4: Add and Delete Flight Schedule Details

In this module, the admin will be able to add and delete the flight schedule details

4.3.5 Module-5: Add Aircraft Details and Activate and Deactivate Aircraft

In this module, the admin can add aircraft details and activate and deactivate aircraft

4.3.6 Databases

In this, we used MYSQL database for storing and retrieving the data from the above modules as required. We created some tables as per the requirements in the schema and named that schema as registration.

This schema includes 4 tables namely-

- Admin table
- Flights details
- Jet_details
- Tickets_details

5.TESTING

Testing is the process of finding differences between the expected behaviour specified by system models and the observed behaviour of the system. Testing is a critical role in quality assurance and ensuring the reliability of development and these errors will be reflected in the code, so the application should be thoroughly tested.

Unit testing finds the differences between the object design model and its corresponding components. Structural testing finds differences between the system design model and a subset of integrated subsystems. Functional testing finds differences between the use case model and the system.

Finally, performance testing, finds differences between non-functional requirements and actual system performance. From modelling point of view, testing is the attempt of falsification of the system with respect to the system models. The goal of testing is to design tests that exercise defects in the system and to reveal problems.

5.1 Testing Activities

Testing a large system is a complex activity and like any complex activity. It has to be broke into smaller activities. Thus, incremental testing was performed on the project i.e., components and subsystems of the system were tested separately before integrating them to form the subsystem for system testing.

5.2 Testing Types

Unit Testing

Unit testing focuses on the building blocks of the software system that is the objects and subsystems. There are three motivations behind focusing on components. First unit testing reduces the complexity of overall test activities allowing focus on smaller units of the system, second unit testing makes it easier to pinpoint and correct faults given that few components are involved in the rest. Third unit testing allows parallelism in the testing activities, that is each component are involved in the test. Third unit testing allows parallelism in the testing activities that is each component can be tested independently of one another. The following are some unit testing techniques.

•**Equivalence testing:** It is a black box testing technique that minimizes the number of test cases. The possible inputs are partitioned into equivalence classes and a test case is selected for each class.

•**Boundary testing:**

It is a special case of equivalence testing and focuses on the conditions at the boundary of the equivalence classes. Boundary testing requires that the elements be selected from the edges of the equivalence classes.

•**Path testing:**

It is a white box testing technique that identifies faults in the implementation of the component the assumption here is that exercising all possible paths through the code at least once. Most faults will trigger failure. This acquires knowledge of source code.

Integrating Testing

Integration testing defects faults that have not been detected. During unit testing by focusing on small groups on components two integrated and tested and once tests do not reveal any new faults, additional components are added to the group. This procedure allows testing of increasing more complex parts on the system while keeping the location of potential faults relatively small. I have used the following approach to implements and integrated testing.

Top-down testing strategy unit tests the components of the top layer and then integrated the components of the next layer down. When all components of the new layer have been tested together, the next layer is selected. This was repeated until all layers are combined and involved in the test.

Validation Testing

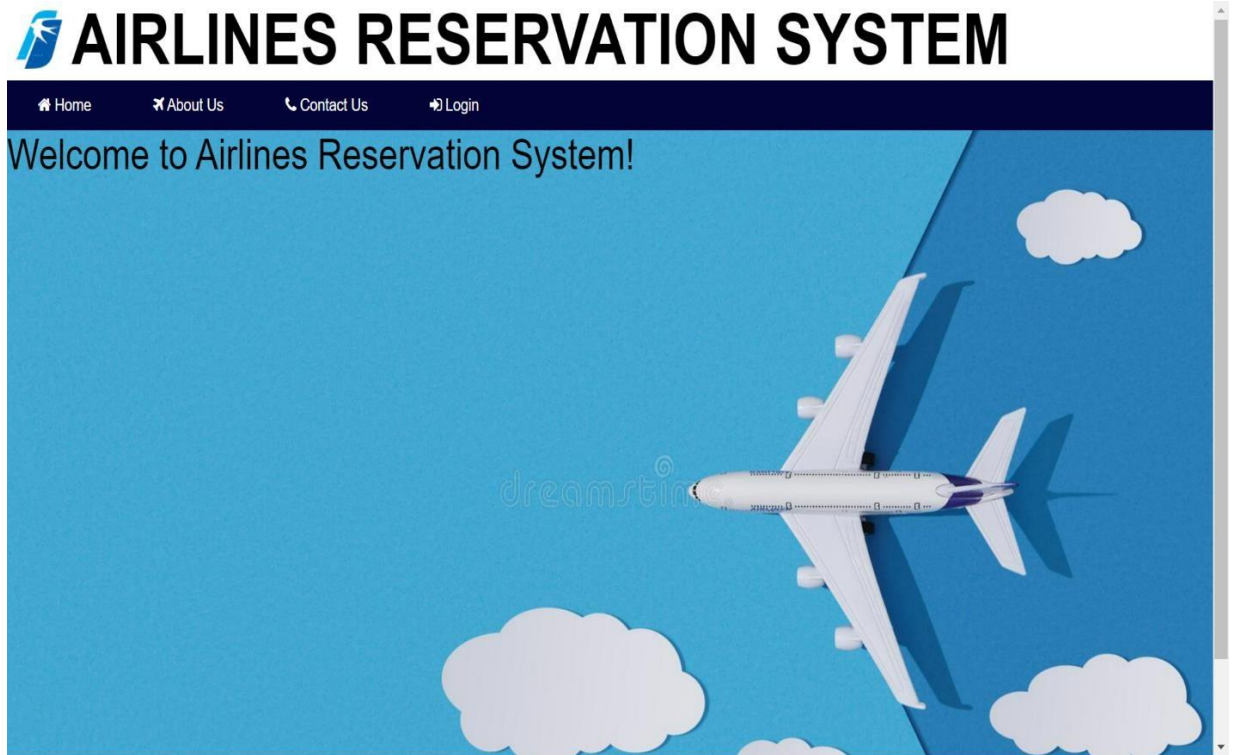
The systems completely assembled as package, the interfacing have been uncovered and corrected, and a final series of software tests are validation testing. The validation testing is nothing but validation success when system functions in a manner that can be reasonably expected by the customer. The system validation had done by series of Black-box test methods.

System Testing

System testing ensures that the complete system compiles with the functional requirements and non-functional requirements of the system, the following are some system testing activities.

6. Results

Home Page:



Login page:

AIRLINES RESERVATION SYSTEM

[Home](#) [About Us](#) [Contact Us](#) [Login](#)

Login Details:-

Username:

admin1

Password:

.....

User Type:

Administrator 

Login

 [Create New User Account?](#)

AIRLINES RESERVATION SYSTEM

[Home](#) [Dashboard](#) [Logout](#)

ENTER THE FLIGHT SCHEDULE DETAILS

Flight Number

AA1029

Origin

Bangalore

Destination

Mumbai

Departure Date

12-06-2022 

Arrival Date

12-06-2022 

Departure Time

10:30 

Arrival Time

01:00 

AIRLINES RESERVATION SYSTEM

[Home](#) [Dashboard](#) [Logout](#)

ENTER THE AIRCRAFTS DETAILS

Enter a valid Jet ID

Enter the Jet Type/Model

Enter the total capacity of the Jet

Submit

AIRLINES RESERVATION SYSTEM

[Home](#) [Dashboard](#) [Logout](#)

ENTER THE FLIGHT SCHEDULE TO BE DELETED

Enter a valid Flight No.

Enter the Departure Date

Delete

AIRLINES RESERVATION SYSTEM

[Home](#) [Dashboard](#) [Logout](#)

ENTER THE AIRCRAFT TO BE DEACTIVATED

Enter a valid Jet ID

Deactivate

AIRLINES RESERVATION SYSTEM

[Home](#) [Dashboard](#) [Logout](#)

ENTER THE AIRCRAFT TO BE ACTIVATED

Enter a valid Jet ID

Activate

7. Sample Code

home_page.php:

```
<?php
    session_start();
?>

<html>
<head>
    <title>
        Welcome to Airlines Reservation System
    </title>
    <link rel="stylesheet" type="text/css" href="css/styles.css"/>
    <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
</head>
<body>
    
    <h1 id="title"
style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <li><a href="home_page.php"><i class="fa fa-home" ariahidden="true"></i>
Home</a></li>
            <!--<li>
        </ul>
    </div>
<?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"
ariahidden="true"></i> About Us</a></li>
    <li><a href="home_page.php"><i class="fa fa-phone"
ariahidden="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>";
    }
    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="container">
        <div class="welcome_text" style="color:black">Welcome to Airlines
Reservation System!</div>
        
    </div>
    <!--check out addling local host in links and other places

        shift login/logout buttons to right side
    -->
</body>
</html>

```

activate_jet_details.php:

```

<?php
    session_start();
?>
<html>
<head>
    <title>
        Activate Aircraft
    </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 67px
        }
    </style>
    <link rel="stylesheet" type="text/css" href="css/styles.css"/>

```

```

        <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
</head>
<body>
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <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="home_page.php"><i class="fa fa-sign-out" ariahidden="true"></i>
Logout</a></li>
        </ul>
    </div>
    <form action="activate_jet_details_form_handler.php" method="post">
        <h2>ENTER THE AIRCRAFT TO BE ACTIVATED</h2>
        <div>
            <?php
                if(isset($_GET['msg']) && $_GET['msg']=='success')
                {
                    echo "<strong style='color: green;'>The Aircraft has
been successfully activated.</strong>
                    <br>
                    <br>";
                }
                else if(isset($_GET['msg']) && $_GET['msg']=='failed')
                {
                    echo "<strong style='color:red;'>*Invalid Jet ID entered, please enter
again.</strong>
                    <br>
                    <br>";
                }
            ?>
            <table cellpadding="5" style="padding-left: 20px;">

```

```

        <tr>
            <td class="fix_table">Enter a valid Jet ID</td>
        </tr>
        <tr>
            <td class="fix_table"><input type="text" name="jet_id"
required></td>
        </tr>
    </table>
    <br>
    <input type="submit" value="Activate" name="Activate">
</div>
</form>
</body>
</html>

```

add_flight_details.php:

```

<?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/styles.css"/>
<link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
</head>
<body>
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <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>

```

```

Class)</td>
        <td class="fix_table">Ticket Price(Business
    </tr>
</table>
<table cellpadding="5">
    <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>
    </tr>
    <tr>
        <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 addling local host in links and other places

-->
</body>

```

```
</html>
```

add_jet_details.php:

```
<?php
    session_start();
?>
<html>
<head>
    <title>
        Add Aircrafts 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 60px
    }
</style>
<link rel="stylesheet" type="text/css" href="css/styles.css"/>
<link rel="stylesheet" href="font-awesome-4.7.0/css/font-awesome.min.css">
</head>
<body>
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <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_jet_details_form_handler.php" method="post">
    <h2>ENTER THE AIRCRAFTS DETAILS</h2>
    <div>
        <?php
            if(isset($_GET['msg']) && $_GET['msg']=='success')
            {
                echo "<strong style='color: green;'>The Aircraft has been successfully
added.</strong>
                    <br><br>";
            }
            else if(isset($_GET['msg']) && $_GET['msg']=='failed')
            {
                echo "<strong style='color:red;'>*Jet ID already exists, please enter a new Jet
ID.</strong>
                    <br><br>";
            }
        ?>
        <table cellpadding="5">
            <tr>
                <td class="fix_table">Enter a valid Jet ID</td>
            </tr>
            <tr>
                <td class="fix_table"><input type="text" name="jet_id"
required></td>
            </tr>
        </table>
        <br>
        <table cellpadding="5">
            <tr>
                <td class="fix_table">Enter the Jet Type/Model</td>
            </tr>

```

```

        <tr>
            <td class="fix_table"><input type="text"
name="jet_type" required></td>
        </tr>
    </table>
    <br>
    <table cellpadding="5">
        <tr>
            Jet</td>
            <td class="fix_table">Enter the total capacity of the
        </tr>
        <tr>
            <td class="fix_table"><input type="number"
name="jet_capacity" required></td>
        </tr>
    </table>
    <br>
    <br>
    <input type="submit" value="Submit" name="Submit">
</div>
</form>
</body>
</html>

```

admin_homepage.php:

```

<?php
    session_start();
?>
<html>
<head>
    <title>
        Welcome Administrator
    </title>
    <link rel="stylesheet" type="text/css" href="css/styles.css"/>
    <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">

```

```

</head>
<body>
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <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>
    <h2>Welcome Administrator!</h2>
    <table cellpadding="5">

        <tr>
            <td class="admin_func"><a
href="admin_view_booked_tickets.php"><i class="fa fa-plane"
ariahidden="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> -->
    </table>

```

```

                <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>
</body>
</html>

```

admin_ticket_message.php:

```

<?php
    session_start();
?>
<html>
<head>
    <title>
        View Available Flights
    </title>
    <link rel="stylesheet" type="text/css" href="css/styles.css"/>
    <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">

```



```

</head>
<body>
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <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>
    <h3>Oops! You need to login with a Customer Account to Book Tickets</h3>
</body>
</html>

```

admin_view_booked_tickets.php:

```

<?php
    session_start();
?>
<html>
<head>
    <title>
        View Booked Tickets
    </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: 0% 15.8%
        }

        input[type=date] {
border: 1.5px solid #030337;
border-radius: 4px;
padding: 5.5px 44.5px;
        }

</style>

<link rel="stylesheet" type="text/css" href="css/styles.css"/>
<link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
</head>
<body>
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <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="admin_view_booked_tickets_form_handler.php"
method="post">
        <h2>VIEW LIST OF BOOKED TICKETS FOR A FLIGHT</h2>
        <div>
            <table cellpadding="5">
                <tr>
                    <td class="fix_table">Enter the Flight No.</td>
                    <td class="fix_table">Enter the Departure Date</td>

```

```

        </tr>
        <tr>
            <td class="fix_table"><input type="text"
name="flight_no" required></td>
            <td class="fix_table"><input type="date"
name="departure_date" required></td>
        </tr>
    </table>
    <br>
    <br>
    <input type="submit" value="Submit" name="Submit">
</div>
</form>
</body>
</html>

```

deactivate_jet_details.php:

```

<?php
    session_start();
?>
<html>
<head>
    <title>
        Deactivate Aircraft
    </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 67px
        }
    </style>

```

```

<link rel="stylesheet" type="text/css" href="css/styles.css"/>
<link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
</head>
<body>
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <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="home_page.php"><i class="fa fa-sign-out"
ariahidden="true"></i> Logout</a></li>
        </ul>
    </div>
    <form action="deactivate_jet_details_form_handler.php" method="post">
        <h2>ENTER THE AIRCRAFT TO BE DEACTIVATED</h2>
        <div>
            <?php
                if(isset($_GET['msg']) && $_GET['msg']=='success')
                {
                    echo "<strong style='color: green'>The Aircraft has been successfully
deactivated.</strong>
                        <br>
                        <br>";
                }
                else if(isset($_GET['msg']) && $_GET['msg']=='failed')
                {
                    echo "<strong style='color:red'>*Invalid Jet ID entered, please enter
again.</strong>
                        <br>
                        <br>";
                }
            ?>
            <table cellpadding="5" style="padding-left: 20px;">

```

```

        <tr>
            <td class="fix_table">Enter a valid Jet ID</td>
        </tr>
        <tr>
            <td class="fix_table"><input type="text" name="jet_id"
required></td>
        </tr>
    </table>
    <br>
    <input type="submit" value="Deactivate" name="Deactivate">
</div>
</form>
</body>
</html>

```

delete_flight_details.php:

```

<?php
    session_start();
?>
<html>
<head>
    <title>
        Delete Flight Schedule Details
    </title>
    <style>
        input {
            border: 1.5px solid
#030337;
            border-radius: 4px;
            padding: 7px 10px;
        }
        input[type=submit] {
            background-color: #030337;
            color: white;
            border-radius: 4px;
            padding: 7px 45px;
            margin: 0px 215px

```

```

        }
        input[type=date] {
            border: 1.5px solid
#030337;        border-radius: 4px;
            padding: 5.5px 30px;
        }
    </style>
    <link rel="stylesheet" type="text/css" href="css/styles.css"/>
    <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
</head>
<body>
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <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="delete_flight_details_form_handler.php" method="post">
        <h2>ENTER THE FLIGHT SCHEDULE TO BE DELETED</h2>
        <div>
            <?php
                if(isset($_GET['msg']) && $_GET['msg']=='success')
                {
                    echo "<strong style='color:green; padding-
left:20px;'>The Flight Schedule has been successfully deleted.</strong>
                    <br>
                    <br>";
                }
                else if(isset($_GET['msg']) && $_GET['msg']=='failed')
                {

```

```

        echo "<strong style='color:red; padding-
left:20px;'>*Invalid Flight No./Departure Date, please enter again.</strong>
        <br>
        <br>";
    }
?>
<table cellpadding="5" style="padding-left: 20px;">
    <tr>
        <td class="fix_table">Enter a valid Flight No.</td>
        <td class="fix_table">Enter the Departure Date</td>
    </tr>
    <tr>
        <td class="fix_table"><input type="text"
name="flight_no" required></td>
        <td class="fix_table"><input type="date"
name="departure_date" required></td>
    </tr>
</table>
<br>
<br>
<input type="submit" value="Delete" name="Delete">
</div>
</form>
</body>
</html>

```

login_handler.php:

```

<html>
<head>
    <title>Login Handler</title>
</head>
<body>
    <?php
        session_start();

```

```

        session_destroy();
    session_start();
    if(isset($_POST['Login']))
    {
        $data_missing=array();
        if(empty($_POST['username']))
        {
            $data_missing[]='Username';
        }
        else
        {
            $user_name=trim($_POST['username']);
        }
        if(empty($_POST['password']))
        {
            $data_missing[]='Password';
        }
        else
        {
            $pass_word=$_POST['password'];
        }
        if(empty($_POST['user_type']))
        {
            $data_missing[]='User Type';
        }
        else
        {
            $user_type=$_POST['user_type'];
            $_SESSION['user_type']=$user_type;
        }

        if(empty($data_missing))
        {
            if($user_type=='Customer')
            {

```



```

require_once('Database Connection file/mysql_connect.php');
$query="SELECT count(*) FROM Customer where customer_id=? and pwd=?";
$stmt=mysqli_prepare($dbc,$query);

mysqli_stmt_bind_param($stmt,"ss",$user_name,$pass_word);
mysqli_stmt_execute($stmt);
mysqli_stmt_bind_result($stmt,$cnt);
mysqli_stmt_fetch($stmt);
//echo $cnt;
mysqli_stmt_close($stmt);
mysqli_close($dbc);

/*$affected_rows=mysqli_stmt_affected_rows($stmt);
$response=@mysqli_query($dbc,$query);
echo $affected_rows;
*/
if($cnt==1)
{
    echo "Logged in <br>";
    $_SESSION['login_user']=$user_name;
    echo $_SESSION['login_user'].
    header("location:
is logged in";
customer_homepage.php");
}
else
{
    echo "Login Error";
    session_destroy();

header('location:login_page.php?msg=failed');
}
}
else if($user_type=='Administrator')
{
    require_once('Database Connection file/mysql_connect.php');
    $query="SELECT count(*) FROM Admin where admin_id=? and pwd=?";
    $stmt=mysqli_prepare($dbc,$query);

    mysqli_stmt_bind_param($stmt,"ss",$user_name,$pass_word);

```

```

                                mysqli_stmt_execute($stmt);
                                mysqli_stmt_bind_result($stmt,$cnt);
mysqli_stmt_fetch($stmt);                                //echo $cnt;
                                mysqli_stmt_close($stmt);
                                mysqli_close($dbc);

/*$affected_rows=mysqli_stmt_affected_rows($stmt);
                                $response=@mysqli_query($dbc,$query);
                                echo $affected_rows;
                                */
                                if($cnt==1)
                                {
                                        echo "Logged in <br>";
                                        $_SESSION['login_user']=$user_name;
                                        echo $_SESSION['login_user']." is
logged in";

                                        header('location:admin_homepage.php');
                                }
                                else
                                {
                                        echo "Login Error";
                                        session_destroy();
                                }
                                header('location:login_page.php?msg=failed');
                                }
                                }
                                else
                                {
                                        echo "The following data fields were empty<br>";
                                        foreach($data_missing as $missing)
                                        {
                                                echo $missing ."<br>";
                                        }
                                }
                                }
                                else
                                {
                                        echo "Submit request not received";

```

```

        }
    ?>
</body> </html>
login_page.php:

<?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/styles.css"/>
    <link rel="stylesheet" href="font-awesome-4.7.0\css\font-awesome.min.css">
</head>
<body style="background-image:url(C:/xampp/htdocs/ars6.jpg)">
    
    <h1 id="title" style="color:black">
        AIRLINES RESERVATION SYSTEM
    </h1>
    <div>
        <ul>
            <li><a href="home_page.php"><i class="fa fa-home"
ariahidden="true"></i> Home</a></li>

```

```

        <!--<li><a href="login_page.php"><i class="fa fa-ticket"
ariahidden="true"></i> Book Tickets</a></li>-->
        <li><a href="home_page.php"><i class="fa fa-plane"
ariahidden="true"></i> About Us</a></li>
        <li><a href="home_page.php"><i class="fa fa-phone"
ariahidden="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>
<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
Username/Password</strong>
            <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>
        </body>
    </html>
```

logout_handler.php:

```
<html>
<head>
    <title>Logout Handler</title>
</head>
<body>
    <?php
        session_start();
        session_destroy();
        header("location: home_page.php");
    ?>
</body>
</html>
```

8. Conclusion

The administrator can login and add or delete the flight schedule details and can also add the aircraft details. And the admin can activate and deactivate the aircraft. So, this admin module will be able to control and edit the required flight schedule details, so that it will be helpful to the users. The admin module also focuses on updating the flight schedule details.

9.References

1. <https://www.w3schools.com>
2. <https://www.javatpoint.com>
3. <https://www.quora.com>