

**PROJECT REPORT ON  
WEB DEVELOPMENT ABOUT A SERVICE SYSTEM NAMED  
“AIRLINE SERVICES”**

**BY**

**MUNSHI RANA AHMED  
ID: 162-15-762**

This Report Presented in Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

**Mohammad Monirul Islam**  
Senior Lecturer  
Department of CSE  
Daffodil International University



**DAFFODIL INTERNATIONAL UNIVERSITY  
DHAKA, BANGLADESH  
SEPTEMBER 2022**

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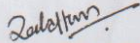
This Project/internship titled "AIRLINE SERVICES", submitted by Munshi Rana Ahmed, ID No: 162-15-762 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on September 14 2022.

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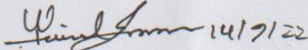
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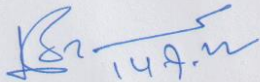
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Faculty of Science & Information Technology  
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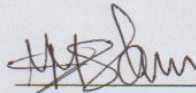
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## DECLARATION

I officially certify that i completed this project under Mr. Mohammad Monirul Islam's guidance as Senior Lecturer in the Department of Computer Science at Daffodil International University. Additionally, we certify that no portion of this project or any element of it has been submitted to another institution for the purpose of receiving a degree or certification.

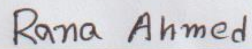
**Supervised by:**



**Mr Mohammad Monirul Islam**

Senior Lecturer  
Department of CSE  
Daffodil International University

**Submitted by:**



**Munshi Rana Ahmed**  
ID: 162-15-762  
Department of CSE  
Daffodil International University

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Finally, we must respectfully thank you for your patience and ongoing support of us

## **ABSTRACT**

This project is a web-based project "Airline Services". Through the system, people can easily book their flights and they can predict their flight price so that they can find a best air journey in lowest available price and we also focus on the safety of airline. Through the system people can easily find their best suitable airlines to see the safety percentage of the airlines. There are several types of features in this system which make it different from other airline service website such as predict price, fatalities predictor. Fatalities predictor is not properly complete yet because dataset is not available but in future, I will fix it and work it with broadly that's why this feature added to the system. people can easily give their feedback about the flight and the whole system and the admin panel can take care of their needs based on that feedback. I have tried to give an idea about the ticket price which is the main feature of my whole system. so that people can know about the ticket price before the travelling somewhere and can prepare accordingly. after providing the necessary information for the flight booking, the user can only book if there are seats on the flight and if not, then passenger will see not available. then passenger can search another flight and after booking the seat the user can cancel his flight if he wants to use the whole system user must be register and login with the system.

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# **CHAPTER 01**

## **INTRODUCTION**

### **1.2 Introduction**

Users or consumers in the airline industry today can reserve a seat or book a flight from anywhere in the world as long as they are connected to the internet. Passengers now have a simpler time flying by air because airline reservations or booking are readily available with just a click. Currently, air travel is the fastest form of transportation. Today, thousands of people frequently use the airline industry to get where they're going swiftly. The majority of people utilize airplanes to travel to far-off states, nations, and continents because boats, railroads, and other modes of transportation cannot cross the Atlantic or Pacific oceans. Airline Service systems include passenger reservations, flight schedules, and ticket records. An airline's direct distribution sends information to both their internal reservation system and the GDS. Online or mobile app users who make reservations are included in the second category of direct distribution channels.

### **1.2 Purpose**

The objective of this project is customer satisfaction in airlines industry of Bangladesh to compare low cost and full-service airlines and develop this project to provide better solutions to the problems faced by the user and another objective of this project is customer safety. Before choose an airline.

### **1.3 Project Overview**

Each day, our technology advances. The government requires the aviation service project due to the rapid advancement of technology worldwide. By the end of the project, a fair system prototype will have been created, offering answers to the issues that have been found and enhancing the performance and revenue of the businesses. This system is going to be a web-based one that can control the entire registration and booking process online. It will be kept secret what information each registered consumer has. Customers who must initially wait at the embassy will benefit from the suggested system's time savings.

## **1.4 Problem Statement**

The main problem of Bangladesh airline industry is their facilities the facilities of Bangladesh airline industry are very bad compared to any other airline industry. Ticket booking at the embassy requires a lot of waiting time and so Bangladesh Airline Industry has done this. Don't worry about passenger safety. So, my project is working to get rid of this problem.

## **1.5 Background**

I am very interested in doing this project because airline services are very popular all over the world but most of the online services in Bangladesh lack some air services. So, I am very interested to do this project.

People will be very interested in my project because they can book their flight from home through online and all the process becomes easier than before.

The range of airline service operations includes numerous operations. It starts off with service details. Users can view the services offered by the airline service center at this time.

The second topic is location detection. Users need to enter the location and destination and instantly he will get the ticket for booking.

The system offers a log-in authority, third. Members have access to this system. Here those who want to book tickets need to register their details online. not an associate can only see the web system's minimal user interface.

## **1.6 Project benefits and beneficiaries**

- All users will benefit
- Job seekers will benefit
- All customers will benefit as they can easily book tickets online
- The organization will also benefit

## **1.7 Goals**

In order to ascertain the relationship between service quality and customer satisfaction dimensions in airline services, this study compared customer satisfaction and service quality with airline quality dimensions. This system's major goal is to offer clients a better and more convenient way to reserve airline services. Users must register through the registration page on the website before they can view the numerous airline services offered by the airline service center. It is an online system for booking services. Since it has been used in other nations, Bangladesh is the only place where this conservation technique has been used. This system was created to manage the booking process online instead of using the outdated manual methods that were previously used.

## **1.8 Project Scope**

Through this system people can easily book their flight tickets online and they can find their suitable and safe journey. They also communicate with the admin and they can send their feedback as considering their feedback the admin can take steps to update this system.

## **1.9 Stakeholders**

In my project "Airline Service" there are five types of stakeholders namely:

- Organization
- Shareholders
- Project Developer
- Employees
- Users

Brief details about the stakeholders are given below.

- Organization: In my project the organization is Airline Industry of Bangladesh who organized this project.
- Shareholders: Those who share with the project organization are the shareholders.
- Project Developers: Project developers perform project design and development activities as

per customer specifications and are also responsible for designing, testing and maintaining database management systems.

- Employees: Those who are involved in the work activities of the organization and help in conducting the activities in a proper manner
- Users: Users who use the system and for whom the system is designed.

## 1.10 Project Schedule

Table 1.10: Project schedule

<b>Activities</b>	<b>Duration (in week)</b>	<b>Total week</b>
Brainstorming	Week-0,1, Week-0,2	2
Problem identification	Week-0,2, Week-0,4	3
Requirements analysis	Week-0,5	1
Sketching	Week-6	1
Design specification	Week-7, Week-8	2
Database design	Week-9	1
Implementation	Week-10 - Week13	4
Testing	Week-14	2
Delivery	Week-15	1

## 1.11 Release Plan

The release plan is given below:

Table 1.11: Release plan

<b>Version</b>	<b>Feature</b>	<b>Date</b>
V0.1	System design	28-07-2022
V0.2	View services, Search-flight, Book flight, Find safe journey, Feedback, Admin conformation.	15-8-20202

## **CHAPTER 02**

### **BACKGROUND**

#### **2.1 Preliminaries/Terminologies**

Use cases and customer needs aid in the establishment the architecture of the system during the preliminary design stage of software development. Some of the components that should be included in the design This type of document includes user interface papers, entity relationship diagrams, screen navigation, and system architecture documents. The preliminary design will offer a visual depiction of the system at the start of the project using these inputs. As developers, we frequently receive assignments and want to jump right without fully committing to development comprehending the customer's need. Preliminary designs, on the other hand, aid Software Development by providing a software plan and guaranteeing shared understanding. I have tried whole project responsive and user friendly, which help us get more customers.

#### **2.2 Related Works**

- Flight Expert
- Amy
- ShareTrip
- Momondo
- Kayak
- Expedia
- Priceline



## **2.3 Comparative Analysis**

Business, travel, and the quick movement of people and things between sites around the world are all made easier by air travel. As stated by the U.S. International, national, regional, and cargo are the four main segments of the airline sector according to the Department of Transportation. The airline industry is very seasonal and competitive. Energy prices and unanticipated economic downturns can also have an impact on profits. We ensure high quality service between another platform.

## **2.4 Scope of the Problem**

Over the past few months, the aviation industry has been slowly entering a recession. This is the result of a number of concurrently negative variables that are having an adverse impact on the sector. Poor performance and low earnings are the results of this. Following the terrorist attacks in the United States, the industry's collapse accelerated dramatically, making it more urgent to pinpoint the root causes of the issues being faced and seek out any potential solutions.

Businesses might attempt reducing the number of flights used. The price of gasoline and maintenance would go down as a result. These underutilized planes and other assets could be sold by the companies in order to raise cash. However, doing so would necessitate the cancellation of some routes, putting the airline at danger of losing customers who depend on those routes to rival airlines.

## **2.5 Challenges**

- Requirement collection
- Requirement analysis
- Price
- Membership Programs
- Real-time visibility
- Better seating
- Better disruption handling

# CHAPTER 03

## REQUIREMENT SPECIFICATION

### 3.1 Business Process Modeling

The following figure 3.1 shows the Business Process Model of our system

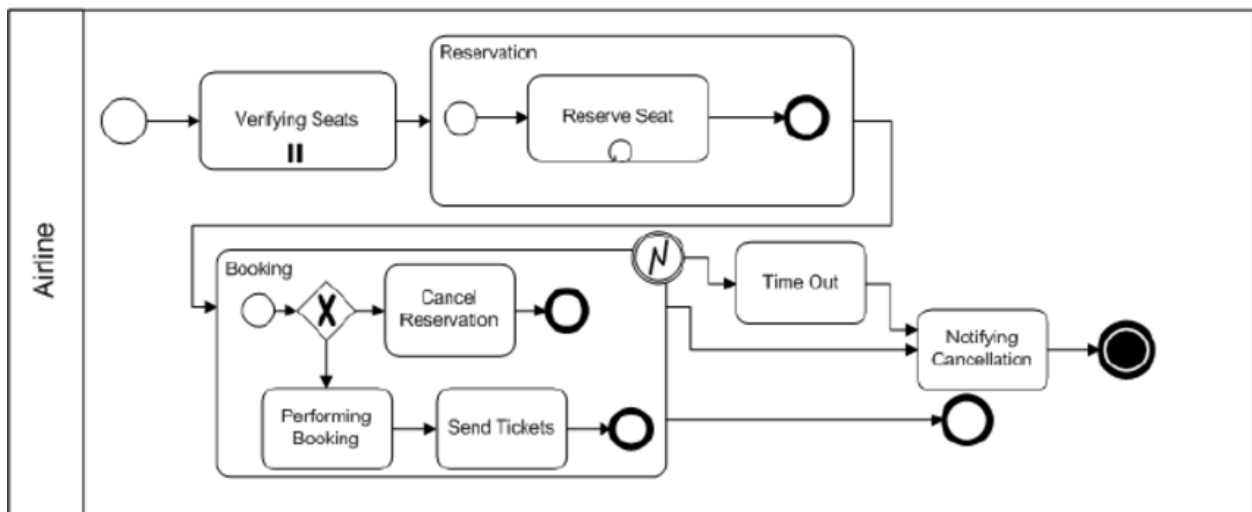


Figure 3.1: Business Process Model

### 3.2 Requirement Collection and Analysis

1. Windows 10 Operating System
2. Visual Studio code for coding
3. Html
4. Css and Bootstrap
5. JavaScript
6. Python
7. Django default server
8. Sqlite3

### 3.3 Use Case Modeling and Description

The following 3.3 figure shows the Use Case of our system

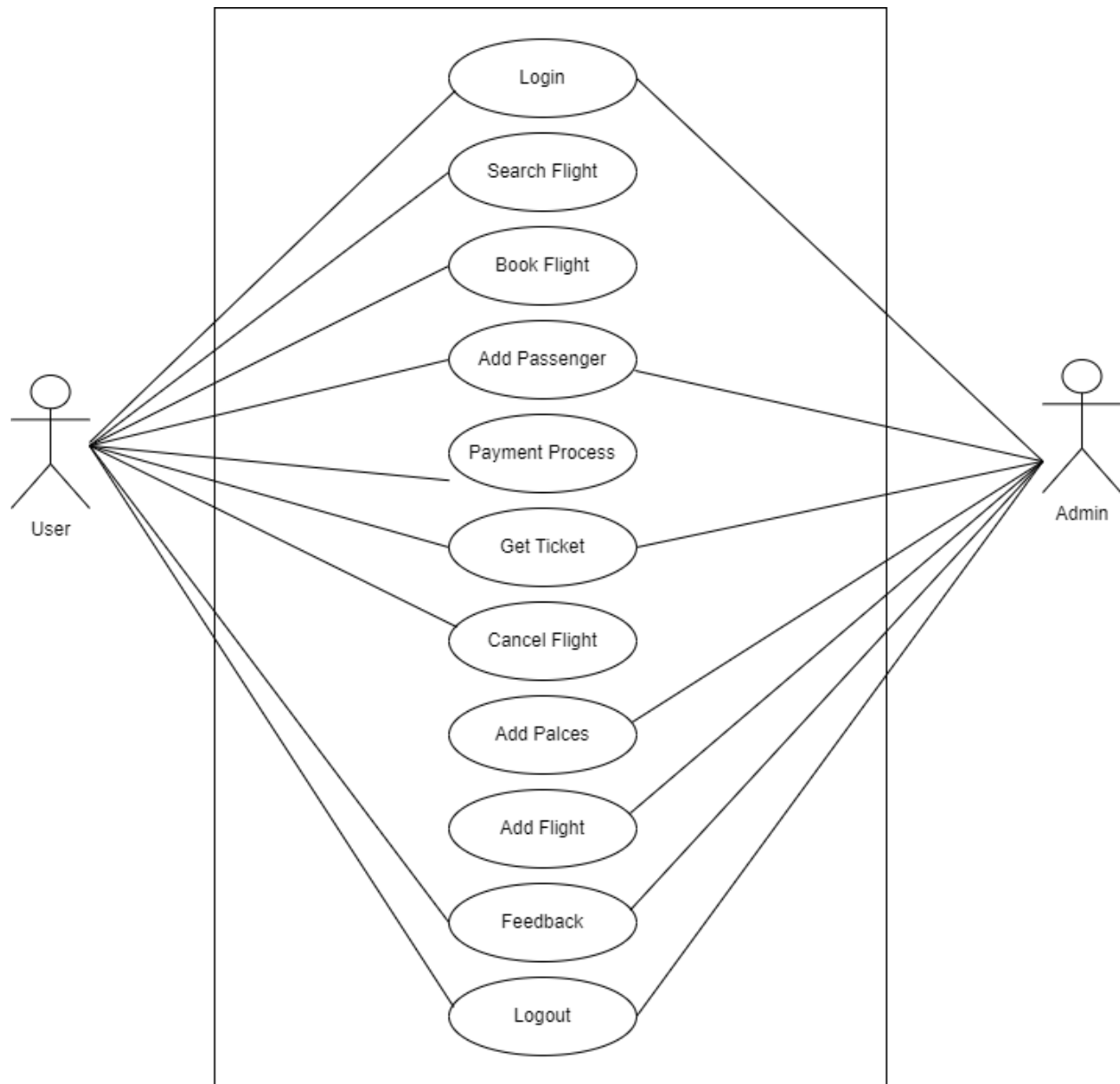


Figure 3.3: Use-Case

### 3.3.1 Use-Case Table

Table 3.3.1.1: Registration user

<b>Use Case Title</b>	Registration User
<b>Use Case ID</b>	Uc-1.0
<b>Pre-Conditions</b>	Choose the user registration form, then complete it.
<b>Actors</b>	User, admin
<b>Success End Conditions</b>	Successfully registered the user
<b>Failure End Conditions</b>	Clearly show the error message "".
<b>Trigger</b>	Automatically display the user's home page.
<b>Descriptions</b>	After filling all the required fields, the user can be registered with the system.

Table 3.3.1.2: Login User

<b>Use Case Title</b>	Login User
<b>Use Case ID</b>	Uc-2.0
<b>Pre-Conditions</b>	1. The user needs to sign up for the system 2. Select User Login Form and fill it.
<b>Actors</b>	Admin, User
<b>Success End Conditions</b>	Successfully registered the user
<b>Failure End Conditions</b>	Clearly show the error message "".
<b>Trigger</b>	Show the user's home page.
<b>Descriptions</b>	User can see the homepage after successfully login to the system.

Table 3.3.1.3: Homepage

<b>Use Case Title</b>	Homepage
<b>Use Case ID</b>	Uc-3.0
<b>Pre-Conditions</b>	User must be login.
<b>Actors</b>	User
<b>Success End Conditions</b>	User can see the homepage of the system.
<b>Failure End Conditions</b>	User failed to view system homepage
<b>Trigger</b>	Show home page.
<b>Descriptions</b>	User login can successfully find the homepage of the system

Table 3.3.1.4: Search flight

<b>Use Case Title</b>	Search flight
<b>Use Case ID</b>	Uc-4.0
<b>Pre-Conditions</b>	1. User must login.
<b>Actors</b>	2. User must be on homepage
<b>Success End Conditions</b>	User, admin
<b>Failure End Conditions</b>	User successfully searched for a flight
<b>Trigger</b>	User failed to search for a flight
<b>Descriptions</b>	Show home page.

Table 3.3.1.5: Available flight

<b>Use Case Title</b>	Available flight
<b>Use Case ID</b>	Uc-5.0
<b>Pre-Conditions</b>	The user must search for a flight.
<b>Actors</b>	User, admin
<b>Success End Conditions</b>	User successfully finds available flight.
<b>Failure End Conditions</b>	The user failed to find the flight.
<b>Trigger</b>	Show home page.
<b>Descriptions</b>	After searching for a flight user can see available flights.

Table 3.3.1.6: Book flight

<b>Use Case Title</b>	Book flight
<b>Use Case ID</b>	Uc-6.0
<b>Pre-Conditions</b>	User must be on an available flight.
<b>Actors</b>	User, Admin
<b>Success End Conditions</b>	User has successfully booked the flight
<b>Failure End Conditions</b>	User failed to book flight
<b>Trigger</b>	Show home page.
<b>Descriptions</b>	If the user has available flights he can book the flight.

Table 3.3.1..7: Predict Price

<b>Use Case Title</b>	Predict price
<b>Use Case ID</b>	Uc-7.0
<b>Pre-Conditions</b>	User must login.
<b>Actors</b>	the user
<b>Success End Conditions</b>	User can successfully predict his flight price
<b>Failure End Conditions</b>	User fails to estimate value
<b>Trigger</b>	Show home page.
<b>Descriptions</b>	If the user fulfills the necessary Requirements, he can estimate the price of his flight.

Table 3.3.1..8: Feedback

<b>Use Case Title</b>	User Feedback
<b>Use Case ID</b>	Uc-8.0
<b>Pre-Conditions</b>	User must login.
<b>Actors</b>	User, admin
<b>Success End Conditions</b>	User successfully give feedback
<b>Failure End Conditions</b>	User failed to respond
<b>Trigger</b>	Show home page.
<b>Descriptions</b>	If the user meets the required Requirements he can respond successfully.

### 3.4 Flow Chart Diagram

The following figure 3.4 shows the Flow Chart Diagram of our system

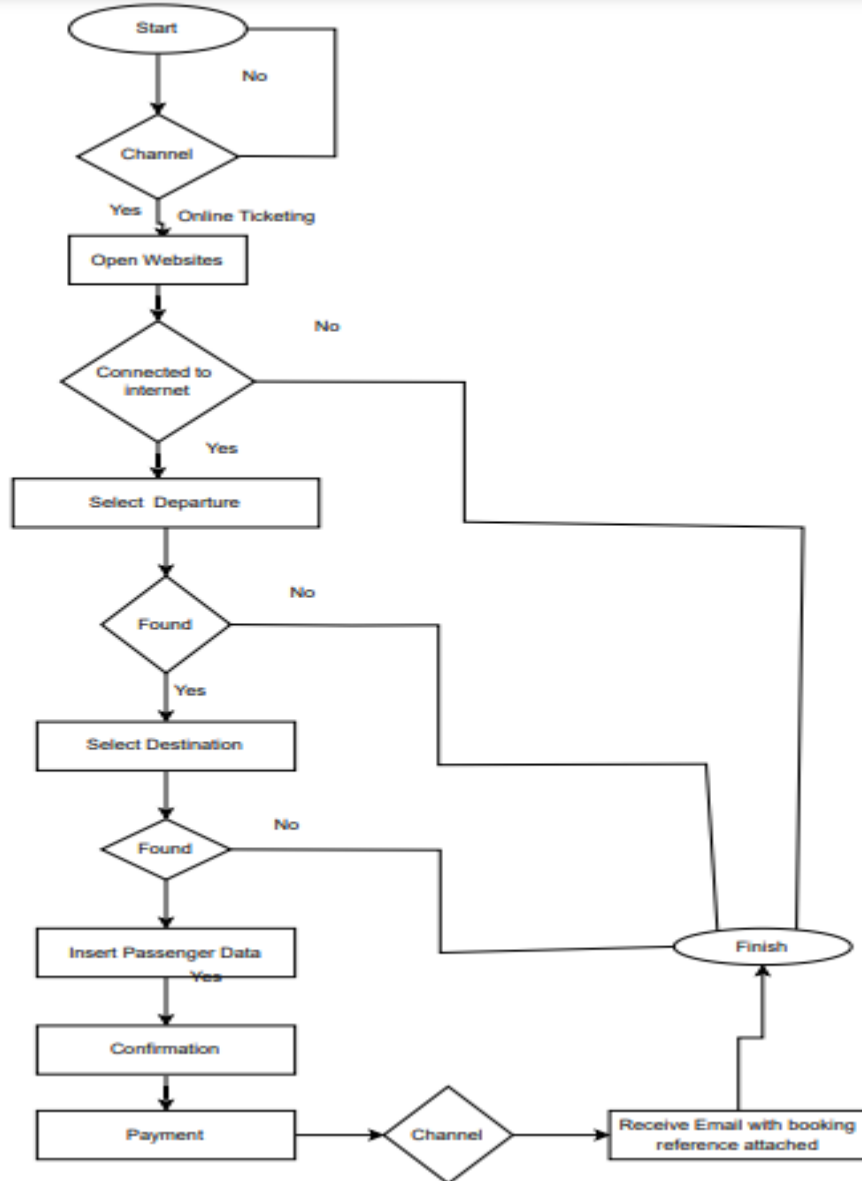


Figure 3.4: Flow Chart Diagram



### 3.5 Logical Data Model

The following figure 3.5 shows the Logical Data Model of our system

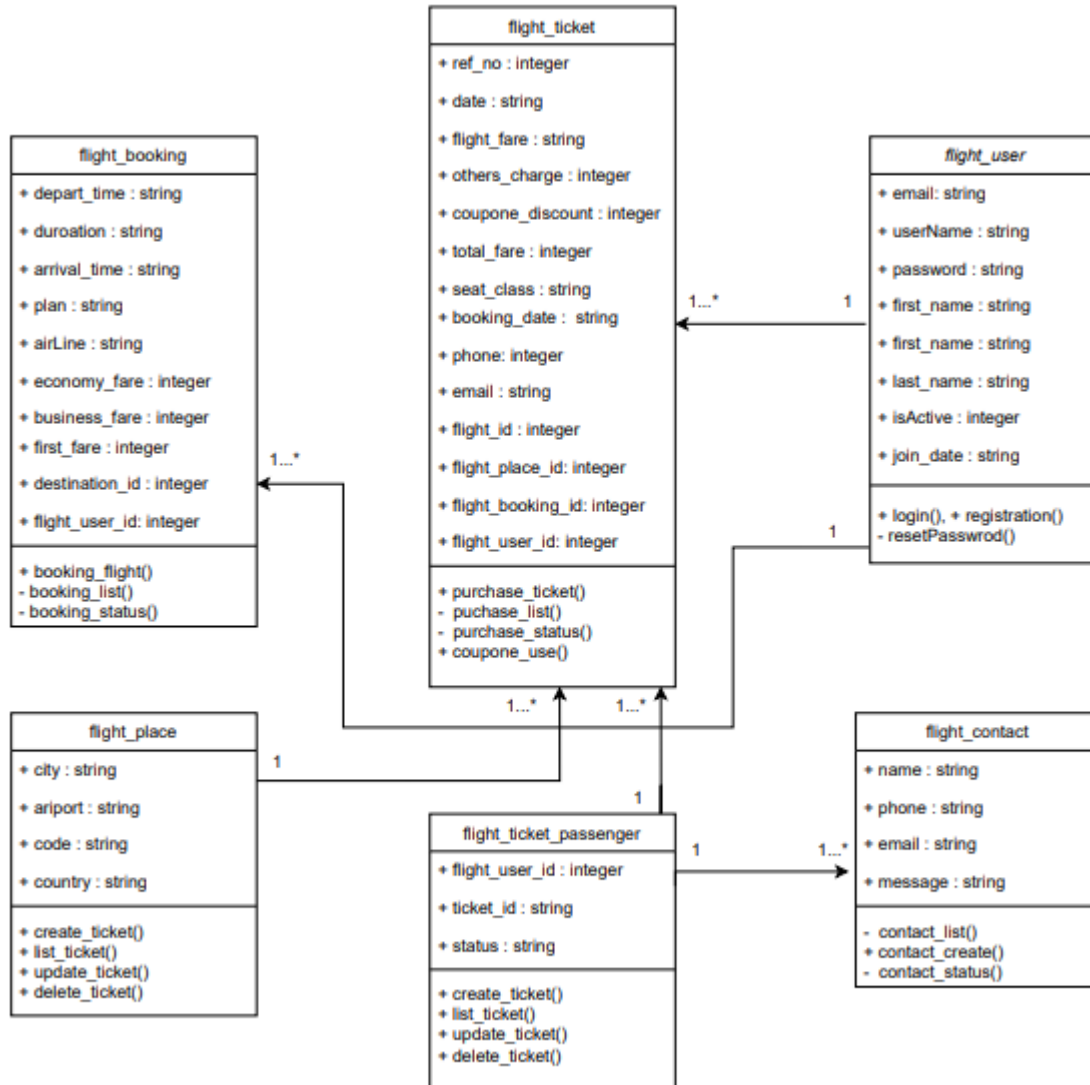


Figure 3.5: Logical Data Model

## **CHAPTER 4**

### **DESIGN SPECIFICATION**

#### **4.1 Front-End Design**

The act of producing HTML, CSS, and JavaScript for a website or Web Application so a client can see them and directly communicate with them is known as front-end web improvement, sometimes known as customer side advancement. The challenge with front end enhancement is that the tools and techniques used to create the front end of a site are constantly changing, so the engineer must constantly be aware of how the field is developing. Front-end web improvement is the process of converting information to a graphical interface for the client to see and connect with information through computerized cooperation.

#### **4.2 Back-End Design**

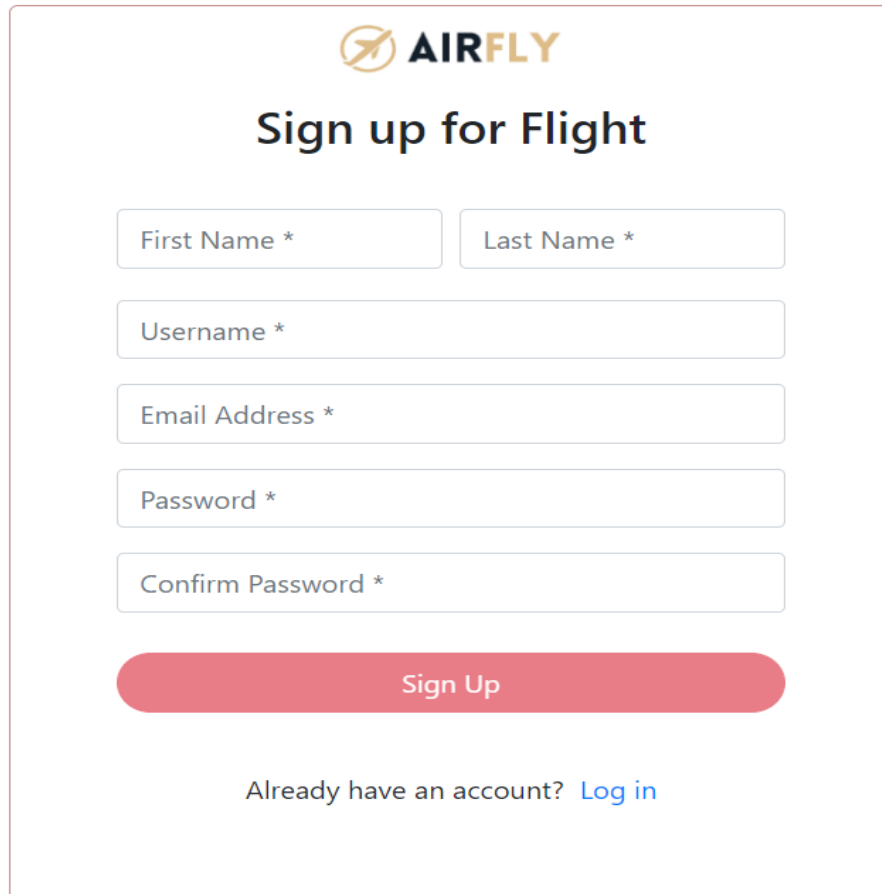
Python web frameworks are only used for server-side technology, such as URL routing, HTTP requests and replies, database access, and web security. Although using a web framework is not needed, it is highly advised because it enables you to create complicated applications in a substantially shorter amount of time.

I used Python for the backend Programming in my project. Python is a free and open-source language for web framework. From easy project to hardest project can be done with this language. Any problem can find very easily.

## 4.3 Interaction Design and User Experience (UX)

### Registration Page

The following figure 4.3.1 shows Registration Page

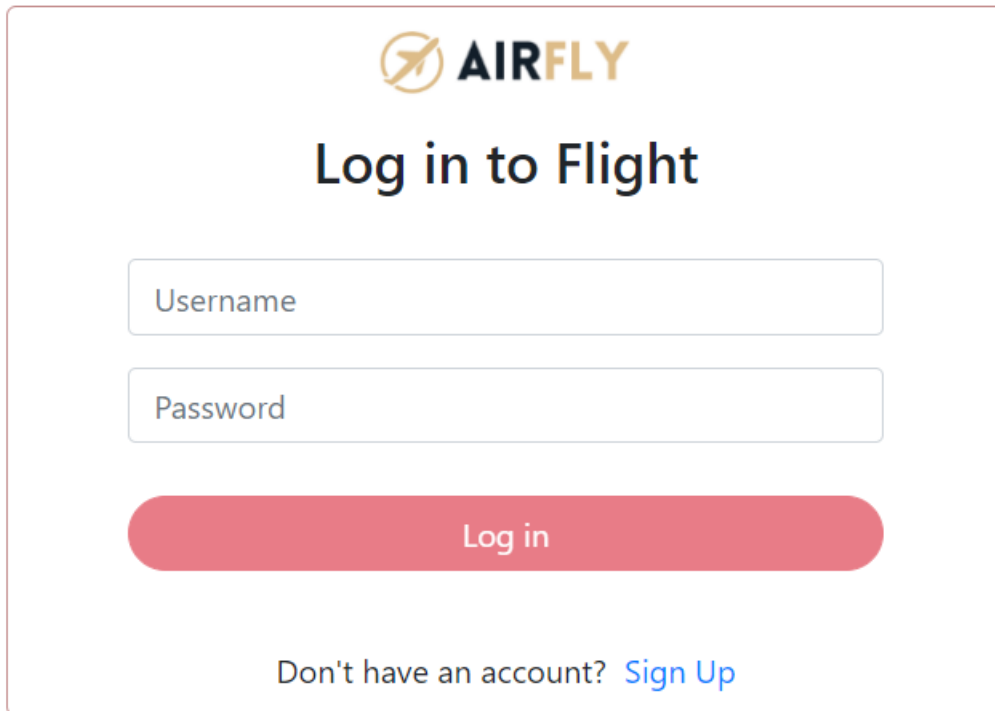


The registration page for AIRFLY features a clean, minimalist design. At the top, the AIRFLY logo is displayed in orange and black. Below the logo, the heading "Sign up for Flight" is centered in a bold, black font. The form consists of several input fields: "First Name \*" and "Last Name \*" are side-by-side; "Username \*" is a single wide field; "Email Address \*" is a single wide field; "Password \*" and "Confirm Password \*" are stacked vertically. A prominent red "Sign Up" button is centered below the fields. At the bottom, the text "Already have an account? [Log in](#)" is centered, with "Log in" as a blue link.

Figure 4.3.1: Registration page

## Login Page

The following figure 4.3.2 shows Login Page



**AIRFLY**

### Log in to Flight

Username

Password

Log in

Don't have an account? [Sign Up](#)

Figure 4.3.2: Login page

## Home Page

The following figure 4.3.3 shows Home Page

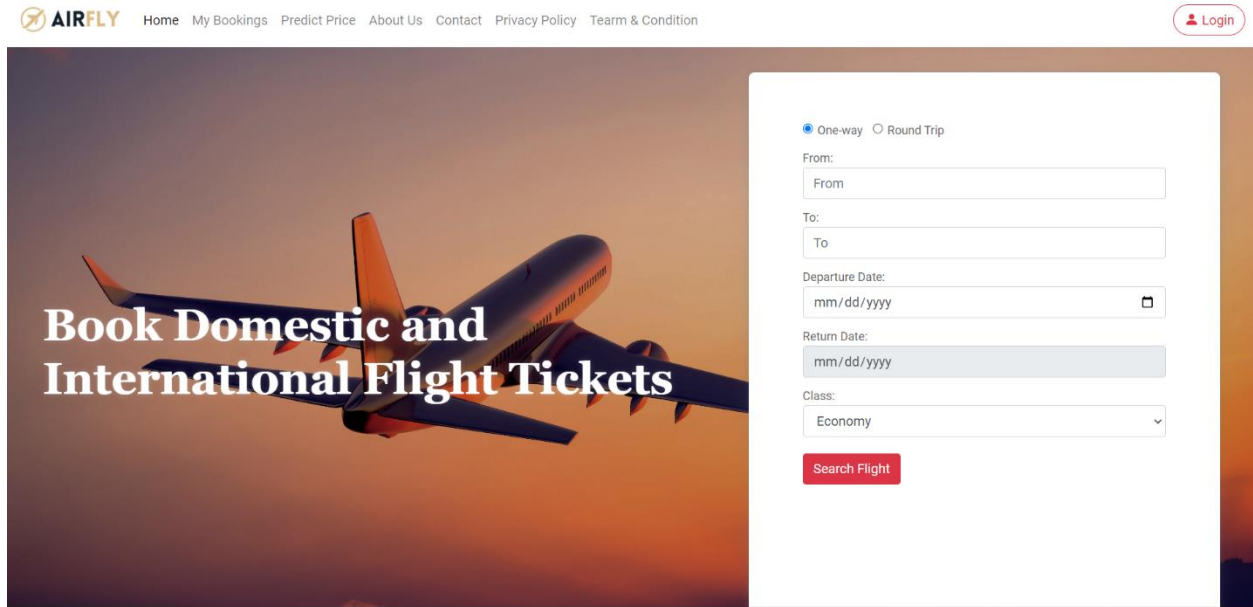


Figure 4.3.3: Home page

## Round Trip

The following figure 4.3.4 shows Round Trip

The screenshot displays the AIRFLY website interface for a round trip search. The search parameters are: From: Delhi (DEL), To: Mumbai (BOM), Depart: Wed, 07 Sep 2022, Return: Fri, 09 Sep 2022, Class: Economy. The search results are filtered to show flights from Delhi to Mumbai. The results table is as follows:

Sort By:	Depart	Arrive	Price
Go First G8334	08:00 Delhi	10:10 Mumbai	₹ 4589.0
Go First G8338	10:55 Delhi	13:10 Mumbai	₹ 4589.0
Go First G8346	19:45 Delhi	22:00 Mumbai	₹ 4589.0
Go First G8330	20:50 Delhi	23:05 Mumbai	₹ 4589.0

At the bottom of the screen, the round trip details are summarized: DEL → BOM @ ₹ 4589.0, BOM → DEL @ ₹ 5440.0, and TOTAL FARE ₹ 10029.0. A 'Continue' button is also visible.

Figure 4.3.4: Round Trip

## Confirm Ticket

The following figure 4.3.5 shows Confirm Ticket

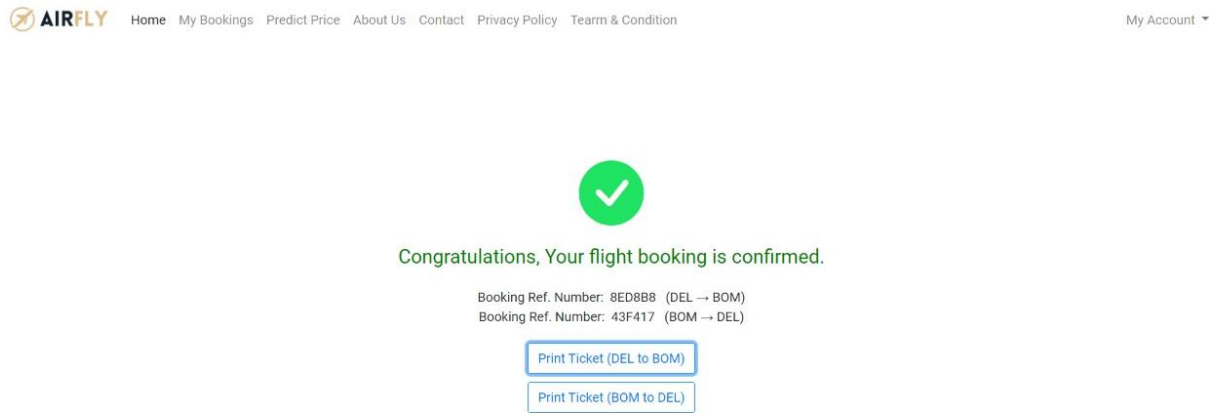


Figure 4.3.5: Confirm Ticket

## Flight Ticket

The following figure 4.3.6 shows Flight Ticket

**AIRFLY** **E-Ticket**

---

**Important information**

- This is your E-Ticket Itinerary. You must bring it to the airport for check-in, and it is recommended you to retain a copy for your records.
- Each passenger travelling needs a printed copy of this document for immigrations, customs, airport security checks and duty free purchases.
- Economy Class passengers should report to airline check-in desks 3 hours prior to departure of all flights. First and Business Class passengers should report to airline check-in desks not later than 1 hour prior to departure. Boarding for your flight begins at least 35 minutes before your scheduled departure time. Gates close 15 minutes prior to departure.

**TICKET INFORMATION**

<b>TICKET REFERENCE</b>	8ED8B8	<b>BOOKING DATE &amp; TIME</b>	07 SEP 22 1215
<b>FLIGHT DATE</b>	07 SEP 22	<b>CLASS</b>	ECONOMY
<b>EMAIL</b>	aman00@gmail.com	<b>MOBILE</b>	+880 01611057523
<b>STATUS</b>	CONFIRMED		

**PASSENGER INFORMATION**

S NO.	PASSENGER NAME	SEX	CLASS
1	AHMED/ABID	MALE	ECONOMY
2	JAMAN/RUSHA	FEMALE	ECONOMY

**FLIGHT INFORMATION**

FLIGHT	DEPART/ARRIVE	AIRPORT/TERMINAL
GO FIRST G8330	07 SEP 22 2050	INDIRA GANDHI INTERNATIONAL AIRPORT (DEL)
	07 SEP 22 2305	CHHATRAPATI SHIVAJI INTERNATIONAL AIRPORT (BOM)

**FARE DETAILS**

<b>FARE</b>	TK 9178.0
<b>CHARGES</b>	TK 100.0
<b>DISCOUNT</b>	TK (-) 0.0
<b>TOTAL</b>	TK 9278.0

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Figure 4.3.6: Flight Ticket



## Search Flight

The following figure 4.3.7 shows Search Flight

The screenshot displays the AIRFLY flight search interface. At the top, the navigation menu includes Home, My Bookings, Predict Price, About Us, Contact, Privacy Policy, and Team & Condition. The user's account is logged in as 'My Account'. The search criteria are: From Beijing (PEK) to Dubai (DXB), Departing on Tue, 30 Aug 2022, Return is '-', and Class is Business. A 'Modify Search' button is available. The 'Filter Results' section shows a price slider set at ₹ 25000. The 'Departure Time' and 'Arrival Time' filters are set to 'Before 6 AM', '6 am - 12 pm', '12 pm - 6 pm', and 'After 6 pm'. A 'Reset Filters' button is located below the filters. The search results table shows one result for 'dubai airline' with a price of ₹ 25000.0 and a 'Book Flight' button.

Sort By:	Depart	Arrive	Price		
dubai airline dubai airline	00:00 Beijing	-0- Dubai	06:00 Dubai	₹ 25000.0	<a href="#">Book Flight</a>

Figure 4.3.7: Search Flight

## Add Passengers Details

The following figure 4.3.8 shows Add Passengers Details

The screenshot displays a web form for adding passenger details. It is divided into three main sections: Ticket Details, Contact Information, and Passenger Details. The Ticket Details section shows a flight from Beijing to Dubai on August 30, 2022, with a 3-hour duration. The Contact Information section includes fields for Country Code (Bangladesh), Mobile No (35623372), and Email (rana2@gmail.com). The Passenger Details section shows 0 passengers added and a message stating 'You have not added any adults to the list'. Below this, there is an important instruction to enter the name as it appears on a passport, with input fields for 'rana' and 'ahmed'. The Gender section has radio buttons for Male (selected) and Female.

Ticket Details			
dubai airline dubai airline	00:00 Tue, 30 Aug 22 Beijing Beijing Capital International Airport	3h 00m	06:00 Tue, 30 Aug 22 Dubai Dubai International Airport
30 Kgs Check-in, 7 Kgs Cabin			

Fare Summary	
Base Fare:	Tk 25000.0
Fee & Surcharges:	Tk 100.0
<b>Total Fare:</b>	<b>Tk 25100</b>

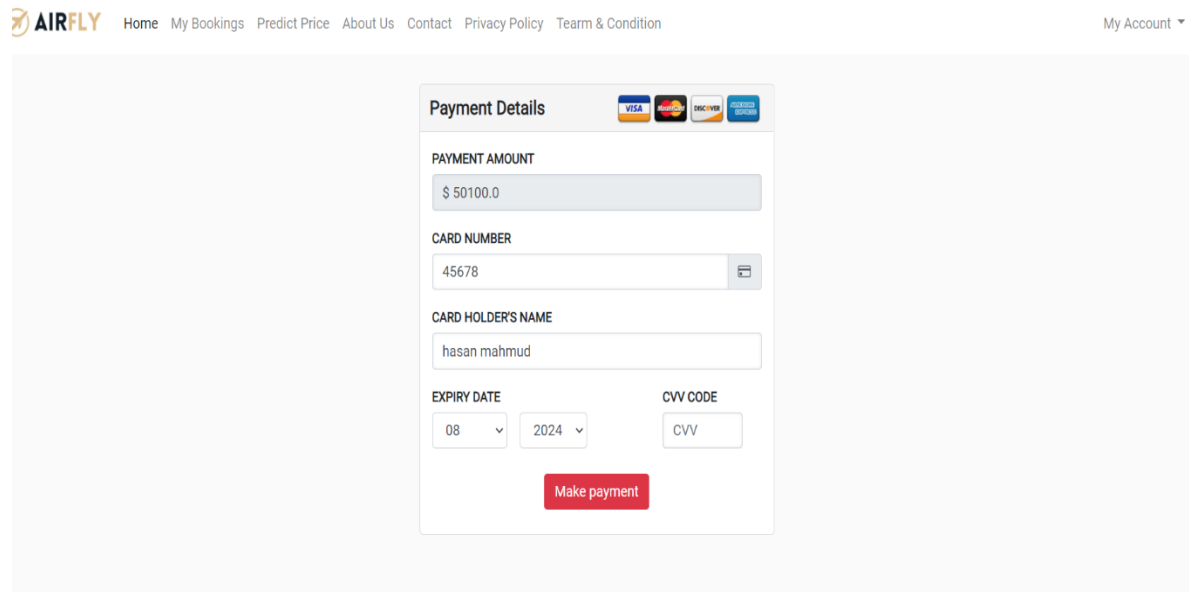
Contact Information		
Country Code Bangladesh (+880)	Mobile No 35623372	Email rana2@gmail.com

Passenger Details		0 Passengers
You have not added any adults to the list		
<b>IMPORTANT:</b> Enter your name as it is mentioned on your passport or any government approved ID.		
rana	ahmed	
Gender: <input checked="" type="radio"/> Male <input type="radio"/> Female		

Figure 4.3.8: Add Passengers Details

## Payment Method

The following figure 4.3.9 shows Payment Method



The screenshot shows the AIRFLY website's payment method form. The header includes the AIRFLY logo and navigation links: Home, My Bookings, Predict Price, About Us, Contact, Privacy Policy, and Team & Condition. A 'My Account' dropdown menu is visible in the top right corner. The main form is titled 'Payment Details' and features logos for VISA, Mastercard, and American Express. The form fields are as follows:

- PAYMENT AMOUNT:** A text input field containing '\$ 50100.0'.
- CARD NUMBER:** A text input field containing '45678' and a small card icon on the right.
- CARD HOLDERS NAME:** A text input field containing 'hasan mahmud'.
- EXPIRY DATE:** Two dropdown menus, the first showing '08' and the second showing '2024'.
- CVV CODE:** A text input field containing 'CVV'.

A red 'Make payment' button is located at the bottom of the form.

Figure 4.3.9: Payment Method

## Cancel Flight

The following figure 4.3.10 shows Cancel Flight

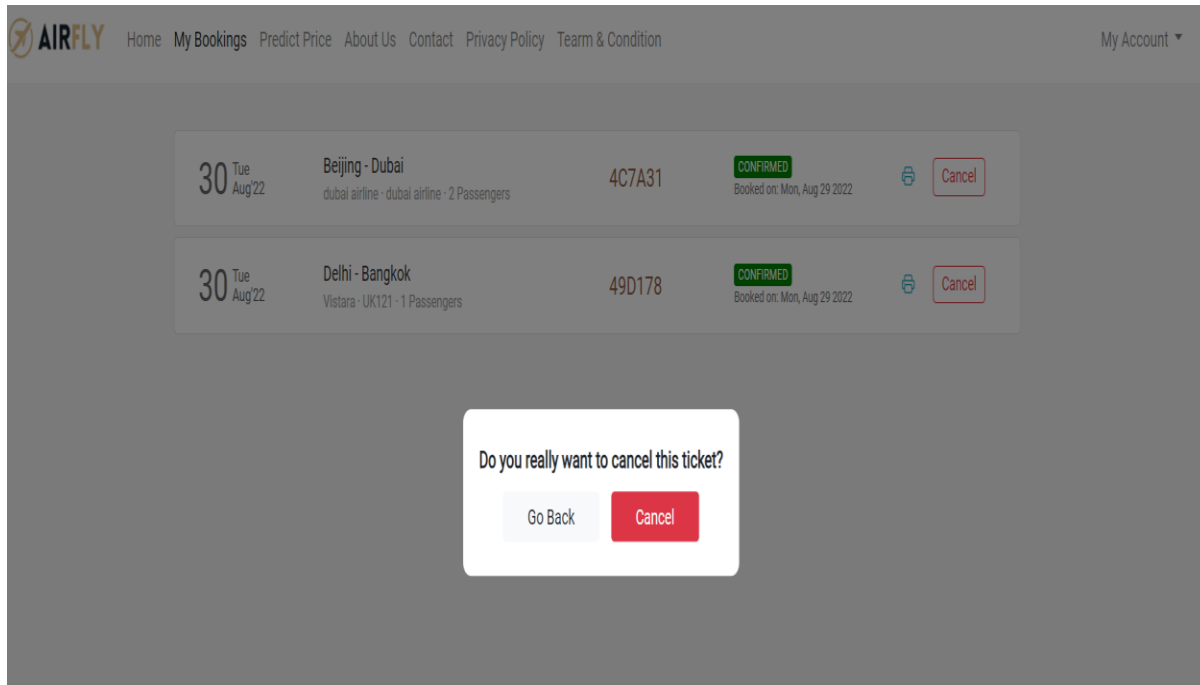
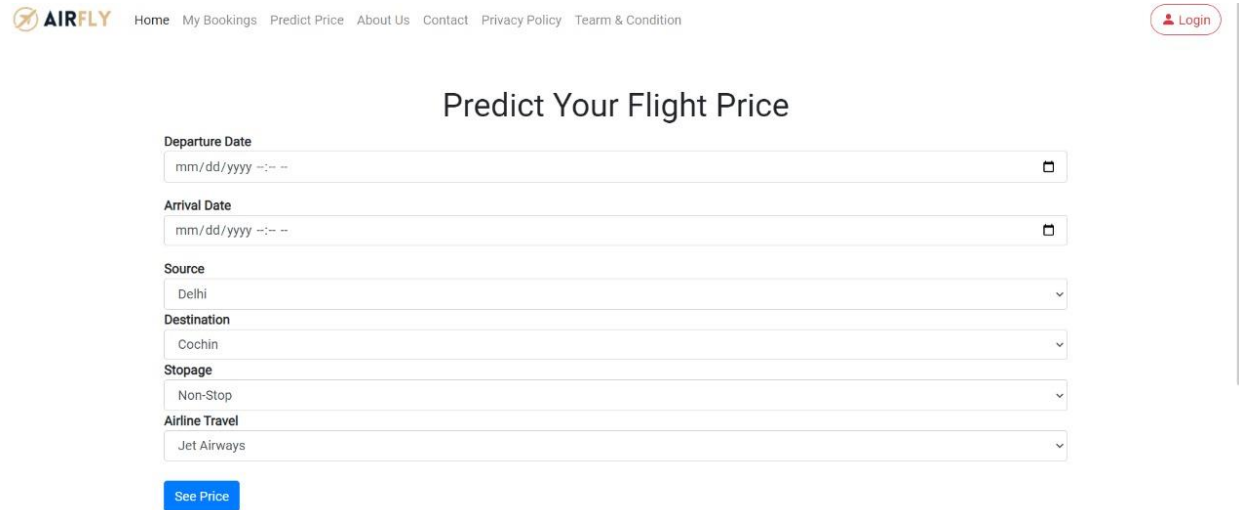


Figure 4.3.10: Cancel Flight

## Predict Flight Price

The following figure 4.3.11 shows Predict Flight Price



The screenshot shows the AIRFLY website's "Predict Your Flight Price" form. The form includes the following fields and options:

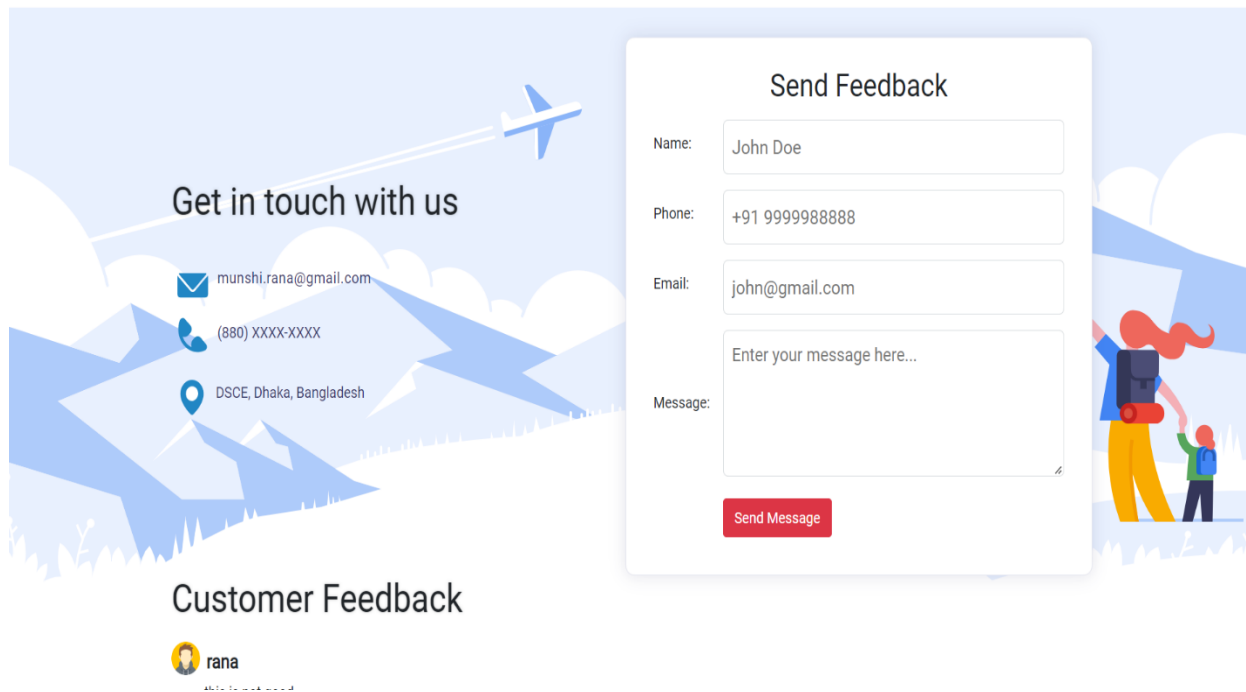
- Departure Date:** A text input field with the placeholder "mm/dd/yyyy -- --" and a calendar icon on the right.
- Arrival Date:** A text input field with the placeholder "mm/dd/yyyy -- --" and a calendar icon on the right.
- Source:** A dropdown menu with "Delhi" selected.
- Destination:** A dropdown menu with "Cochin" selected.
- Stopage:** A dropdown menu with "Non-Stop" selected.
- Airline Travel:** A dropdown menu with "Jet Airways" selected.
- See Price:** A blue button located below the form fields.

The top navigation bar includes the AIRFLY logo and links for Home, My Bookings, Predict Price, About Us, Contact, Privacy Policy, and Term & Condition. A "Login" button is visible in the top right corner.

Figure 4.3.11: Predict Flight Price

## User Feedback

The following figure 4.3.12 shows User Feedback



The image shows a user feedback form overlaid on a background illustration. The background features a blue sky with a white airplane, stylized mountains, and a person with a red backpack and a child. The form is titled "Send Feedback" and contains the following fields:

- Name: John Doe
- Phone: +91 9999988888
- Email: john@gmail.com
- Message: Enter your message here...

Below the message field is a red "Send Message" button. To the left of the form, there is a "Get in touch with us" section with contact information:

- Email: munshi.rana@gmail.com
- Phone: (880) XXXX-XXXX
- Location: DSCE, Dhaka, Bangladesh

Below this section is the text "Customer Feedback" and a profile picture of a person named "rana".

Figure 4.3.12: User Feedback

## Admin Panel

The following figure 4.3.13 shows Admin Panel

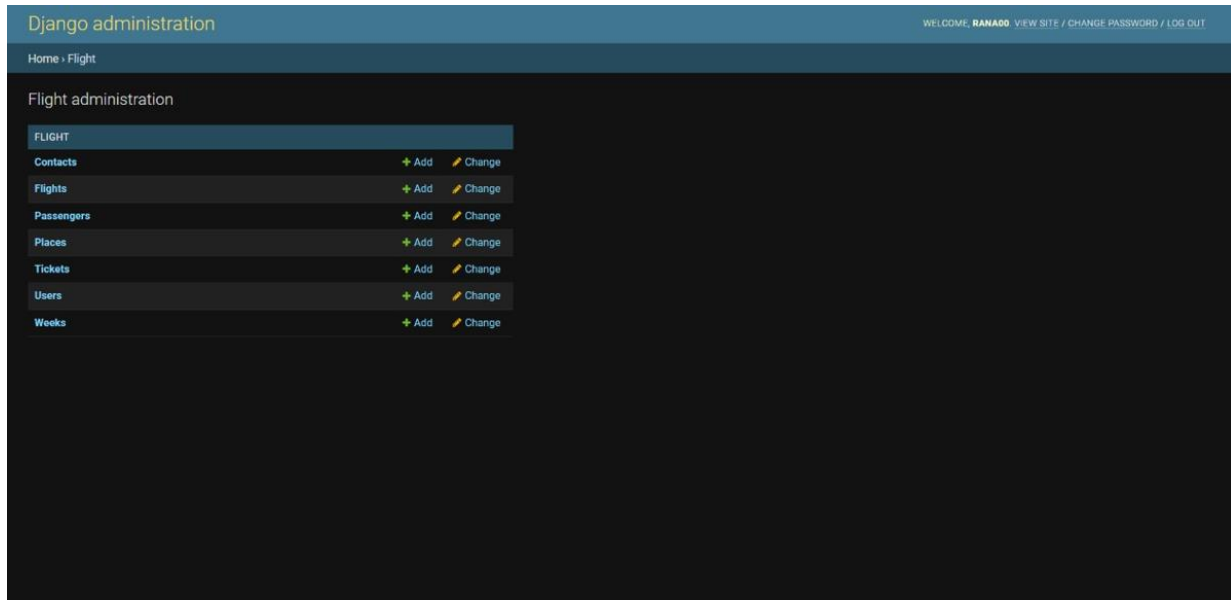


Figure 4.3.13: Admin Panel

## See Booking Status

The following figure 4.3.14 shows See Booking Status

Home > Flight > Tickets > 49762A

Start typing to filter...

**AUTHENTICATION AND AUTHORIZATION**

Groups [+ Add](#)

**FLIGHT**

Contacts [+ Add](#)

Flights [+ Add](#)

Passengers [+ Add](#)

Places [+ Add](#)

Tickets [+ Add](#)

Users [+ Add](#)

Weeks [+ Add](#)

**Change ticket** HISTORY

49762A

User:

Ref no:

Passengers:

- Passenger: rana ahmed, male
- Passenger: rana ahmed, male
- Passenger: robin ahmed, male
- Passenger: rana ahmed, male
- Passenger: ranim ahmed, male
- Passenger: Abid Ahmed, male
- Passenger: Rasha Jaman, female

Hold down "Control", or "Command" on a Mac, to select more than one.

Flight:

Flight ddate:  Today | [📅](#)  
Note: You are 0.5 hours ahead of server time.

Flight adate:  Today | [📅](#)  
Note: You are 0.5 hours ahead of server time.

Flight fare:

Other charges:

Coupon used:

Start typing to filter...

**AUTHENTICATION AND AUTHORIZATION**

Groups [+ Add](#)

**FLIGHT**

Contacts [+ Add](#)

Flights [+ Add](#)

Passengers [+ Add](#)

Places [+ Add](#)

Tickets [+ Add](#)

Users [+ Add](#)

Weeks [+ Add](#)

Flight fare:

Other charges:

Coupon used:

Coupon discount:

Total fare:

Seat class:

Booking date:  Today | [📅](#)  
 Now | [🕒](#)  
Note: You are 0.5 hours ahead of server time.

Mobile:

Email:

Status:

[Delete](#) [Save and add another](#) [Save and continue editing](#) [SAVE](#)

Figure 4.3.14: See Booking Status



## Passengers

The following figure 4.3.15 shows Passengers

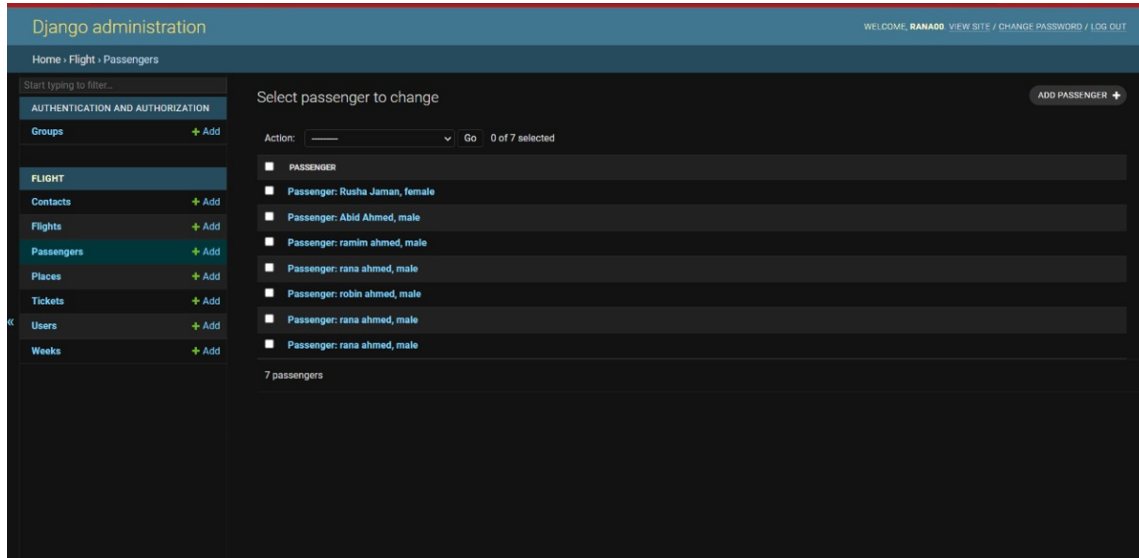


Figure 4.3.15: Passengers

## Feedback

The following figure 4.3.16 shows Feedback

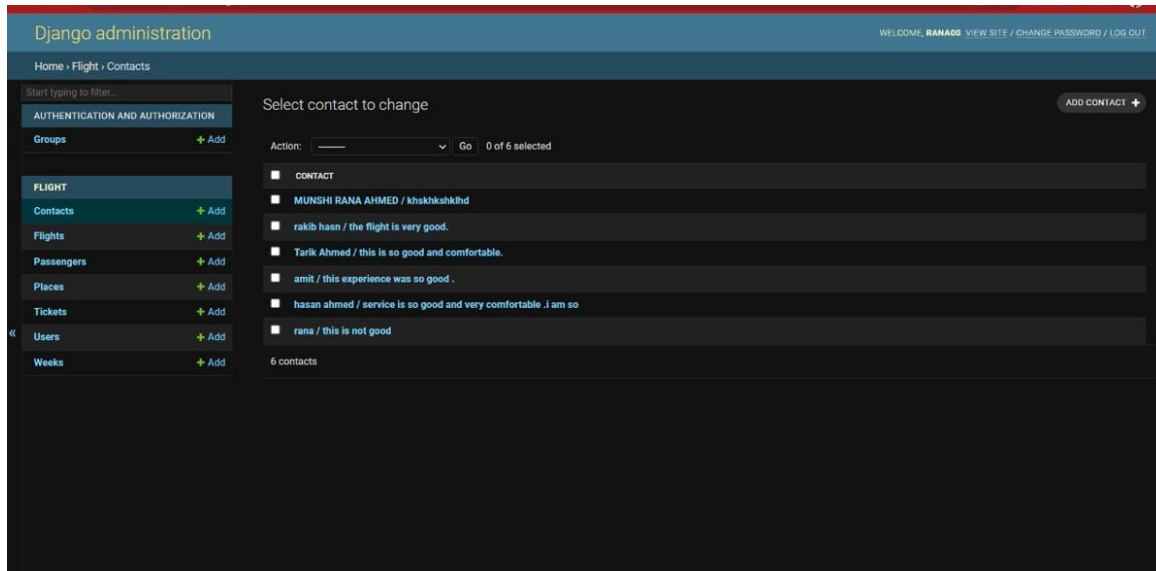


Figure 4.3.16: Feedback

## 4.4 Implementation Requirements

The act of carrying out, executing, or practicing a strategy, technique, or any other concept, for doing something, you can use a model, idea, standard, specification, or policy is referred to as a result of implementation. Many duties across different departments must be completed in order for an implementation process to be effective.

Way of Implementation of Airline Service:

- Planning and Analysis
- Discipline
- User Interface
- Django
- Sqlite
- Flask
- Pyramid

## **CHAPTER 05**

### **IMPLEMENTATION AND TESTING**

#### **5.1 Implementation of Database**

SQLite3'. The file, which is a database file, is where all the data you generate will be kept. It is a local file because, when you actually run the server on command line/terminal, Django treats your machine as the host. Django is a server-side framework. For databases I used sqlite3, it's an open-source relational database management system. It is used for a wide range purposes, including data warehousing and logging application this is the most common use for sqlite3. Also, I used Django default server, it is a software distribution that provides the web server. Django is an open source localhost server. It provides a number of functionalities though the packages of software contain. The configuration employs SQLite by default. This is the simplest option if you're new to databases or just want to try Django. You won't need to install anything additional to support your database because SQLite is already built into Python.

#### **5.2 Implementation of Front-end Design**

A free front-end framework called Bootstrap makes web development quicker and simpler. In addition to optional JavaScript plugins, Bootstrap comes with HTML and CSS-based design templates for typography, forms, buttons, tables, navigation, modals, picture carousels, and many other things. Contrarily, Bootstrap makes use of HTML, CSS, and JavaScript. But it's crucial to remember that HTML and CSS are mostly used in the creation of Bootstrap.

An online web application powers this system. Below are a list of the resources and methods I utilized to create this software.

Presentation Layer: HTML5, CSS3, Bootstrap 4, JavaScript, JQuery.

### **5.3 Testing Implementation**

Websites are used for a variety of benefits, but now have a variety of applications. This application is also known as website service application. This system will provide different types of applications like authentication, main app, find safe journey, feedback this system will serve the airline. So, the system has a variety of features that need to be tested, to ensure the quality of an application. User behavior will provide some data, therefore be cautious with data. Below are the tests I worked with Functional, unit, integration, system, and acceptance testing are all included.

#### **Testing Strategy**

The sorts of tests that will be run, the entry and exit criteria, and how product risks to stakeholders are addressed at the test level are all covered by test strategies. They have development design documents as a foundation. The level of testing that will be carried out is specified in the test strategy. The three primary testing levels are system testing, integration testing, and unit testing. I carry out a few of the test's stages. Functional testing was followed by unit testing, integration testing, system testing, and acceptance testing.

## 5.4 Test Results and Reports

<b>Feature</b>	<b>Priority</b>	<b>Descriptions</b>
Login	2	Authenticated user
Registration	2	User must be registered with the system to use the system
Search flight	3	The user must be registered with the system to search for a flight
Available flight	1	User can view available flights and flight prices
Book flight	3	User can book flights to see airlines and prices
Predict Price	3	User has to fulfill the necessary Requirements for price prediction
Feedback	2	Users can give feedback about the system
Logout	1	Destroy session after logout

Here low priority=1, medium priority=2, high priority=3

Table 5.4.1: Login

<b>Test case #1</b>		<b>Test case name:</b> Log in			
<b>System:</b> Airline service		<b>Subsystem:</b> N/A			
<b>Designed by:</b> Munshi Rana		<b>Designed date:</b> 10/07/2022			
<b>Executed by:</b> Munshi Rana		<b>Executed date:</b> 11/07/2020			
<b>Short Descriptions:</b> If the user input valid data, then login successfully					
<b>Pre-Conditions:</b>					
<ul style="list-style-type: none"> <li>• The user needs to sign up for the system.</li> <li>• Assume that, the username is 'rana11' and password is 'rana12345'</li> </ul>					
<b>Step</b>	<b>Username</b>	<b>Password</b>	<b>Expected result</b>	<b>Pass/Fail</b>	<b>Comment</b>
1	rana	65764	There is no record of username or password	pass	
2	rana11		The password box must be filled out.	Pass	
3		rana12345	The necessary username.	Pass	

4	rana11	rana12345	Logging on to the system successfully	Pass	
<b>Post-Conditionss:</b> The system homepage is visible once the user logs in..					

Table 5.4.2: Registration

<b>Test case #2</b>			<b>Test case name: Registration</b>			
<b>System: Airline service</b>			<b>Subsystem: N/A</b>			
<b>Designed by: Munshi Rana</b>			<b>Designed date: 10/07/2022</b>			
<b>Executed by: Munshi Rana</b>			<b>Executed date: 11/07/2022</b>			
<b>Short Descriptions:</b> If the user entered accurate details, registration would be successful.						
<b>Pre-Conditionss:</b>						
<ul style="list-style-type: none"> <li>User must be in the registration page</li> </ul>						
Step	Username	email	Password	Passport number	Expected result	Pass/Fail
1	rana11		65764	EG6784	Email field is required	pass
2	rana11	rana@gmail.com		EG6784	Password required	pass



3	rana11 rana@gmail.com	rana12345		Passport num require	pass
4	rana11 rana@gamil.com	rana12345	EG5675367	Successful	pass
<b>Post-Conditionss:</b> The user can view the system homepage after logging in.					

Table 5.4.3: Search flight

<b>Test case #3</b>		<b>Test case name:</b> Search flight			
<b>System:</b> Airline service		<b>Subsystem:</b> N/A			
<b>Designed by:</b> Munshi Rana		<b>Designed date:</b> 12/07/2022			
<b>Executed by:</b> Munshi Rana		<b>Executed date:</b> 13/07/2022			
<b>Short Descriptions</b> User have to be entered necessary Requirements for search flight					
<b>Pre-Conditionss:</b>					
<ul style="list-style-type: none"> <li>• Logging in is required.</li> <li>• All mandatory fields must be completed.</li> </ul>					
<b>Step</b>	<b>Action</b>	<b>Response</b>	<b>Pass/Fail</b>	<b>Comment</b>	
1	Not yet filled out are all mandatory fields.	Fields must not be empty.	Pass		

2	The user fills up all input fields.	save the information.	Pass	
<b>Post-Conditions:</b> User search flight information save into the database .				

Table 5.4.4: Available flight

<b>Test case #4</b>		<b>Test case name:</b> Available flight		
<b>System:</b> Airline service		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Munshi Rana		<b>Designed date:</b> 14/07/2022		
<b>Executed by:</b> Munshi Rana		<b>Executed date:</b> 15/07/2022		
<b>Short Descriptions</b> User have to be entered necessary Requirements for search flight the he/she show the available flighy				
<b>Pre-Conditions:</b>				
<ul style="list-style-type: none"> <li>User must be search for a flight.</li> </ul>				
<b>Step</b>	<b>Action</b>	<b>Response</b>	<b>Pass/Fail</b>	<b>Comment</b>
1	Not fill properly search flight information	Fill information properly	Pass	
2	Fill search flight information properly	See the available airlines and prices	Pass	
<b>Post-Conditions:</b> User available flight information comes from the system depending on their Requirements				

Table 5.4.5: Book flight

<b>Test case #5</b>		<b>Test case name:</b> Book flight		
<b>System:</b> Airline service		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Munshi Rana		<b>Designed date:</b> 14/07/2022		
<b>Executed by:</b> Munshi Rana		<b>Executed date:</b> 15/07/2022		
<b>Short Descriptions</b> User can book flight to see the airline and prices				
<b>Pre-Conditions:</b>				
<ul style="list-style-type: none"> <li>User must be in available flight</li> </ul>				
<b>Step</b>	<b>Action</b>	<b>Response</b>	<b>Pass/Fail</b>	<b>Comment</b>
1	Not booking flight	Go to home	Pass	
2	Book flight	Flight book successfully	Pass	
<b>Post-Conditions:</b> User flight booking save into the database				

Table 5.4.6: Predict Price

<b>Test case #6</b>		<b>Test case name:</b> Predict Price			
<b>System:</b> Airline service		<b>Subsystem:</b> N/A			
<b>Designed by:</b> Munshi Rana		<b>Designed date:</b> 16/07/2022			
<b>Executed by:</b> Munshi Rana		<b>Executed date:</b> 17/07/2022			
<b>Short Descriptions:</b> user can find his best suitable journey					
<b>Pre-Conditionss:</b>					
<ul style="list-style-type: none"> <li>User must be in the system</li> </ul>					
<b>Step</b>	<b>Airlines</b>	<b>Select flight</b>	<b>Expected result</b>	<b>Pass/Fail</b>	<b>Comment</b>
1	Bangladesh airlines		Fill the flight feild	pass	
2		international	Fill the airlines feild	Pass	
3	Bangladesh airlines	international	Your flight price is 19000 tk	Pass	
<b>Post-Conditionss:</b> After fill the necessary Requirements user can see his best suitable journey.					

Table 5.4.7: Give feedback

<b>Test case #7</b>			<b>Test case name:</b> Give feedback			
<b>System:</b> Airline service			<b>Subsystem:</b> N/A			
<b>Designed by:</b> Munshi Rana			<b>Designed date:</b> 18/07/2022			
<b>Executed by:</b> Munshi Rana			<b>Executed date:</b> 19/07/2022			
<b>Short Descriptions:</b> If the user input all Requirements then feedback successfully						
<b>Pre-Conditionss:</b>						
<ul style="list-style-type: none"> <li>User must be in the feedback page</li> </ul>						
Step	Name	email	Subject	Message	Expected result	Pass/Fail
1	rana		service	good	Email field is required	pass
2	rana	rana @g mail. co		good	subject required	pass
3	rana		service		Message required	pass

4	rana rana@gamil.com	service	good	Successful	pass
<b>Post-Conditionss:</b> Feedback information will save into the database					

Table 5.4.8: Logout User

<b>Test case # 8</b>		<b>Test case name:</b> Logout User		
<b>System:</b> Airline service		<b>Subsystem:</b> N/A		
<b>Designed by:</b> Munshi Rana		<b>Designed date:</b> 20/07/2022		
<b>Executed by:</b> Munshi Rana		<b>Executed date:</b> 21/07/2022		
<b>Short Descriptions:</b> The user will select the logout button and press it if they want to log out.				
<b>Pre-Conditionss:</b> The user should always be logged in.				
<b>Step</b>	<b>Action</b>	<b>Response</b>	<b>Pass/Fail</b>	<b>Comment</b>
1	From the options, select logout.	Successfully logout.	Pass	
2	Click back and reload after logging out..	Redirect to login page	Pass	
<b>Conditionss since:</b> The session will be terminated.				

## **CHAPTER 06**

### **IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY**

#### **6.1 Impact of Society**

Significant economic and social benefits are provided by air travel. It promotes travel, trade, connectivity, economic growth, job creation, improved living standards, reduced poverty, serves as a lifeline for isolated people, and allows for quick emergency response. I believe that this project helps many peoples like customer, user and others.

#### **6.2 Impact on Environment**

Flying does have a negative environmental impact because it causes pollution, global warming, and a large carbon footprint. Kerosene, the fuel used in airplanes, burns with a great deal of carbon dioxide and other gases released into the environment.

#### **6.3 Ethical Aspects**

The managerial duty to act in a way that safeguards and enhances both the general welfare of society and the interests of the business are known as social responsibility. The aviation sector has to have a clear, logical definition of social purpose, a method for determining priorities based on their social implications, and a disciplined approach to social responsibility.

Recognizing these opportunities does not automatically translate into using social responsibility to identify new markets. That implies we might have to settle for a lower profit margin in return for gaining a new market, and we should never make the error of presuming that a less wealthy market is any less picky than the wealthy when it comes to purchasing habits.

## **6.4 Sustainability Plan**

Our environment management system aids in regulating the environmental performance of our websites' organizational structure and achieving ongoing improvements to enable sustainable operations. Our strategy strives to guarantee that impact is minimized and that we track our affects. The environmental management plan was created in response to the inadequacies identified by the management system of airline services. Faculty of Policy and Planning and roughly 10,000 users add per year.



## **CHAPTER 07**

### **CONCLUSION AND FUTURE SCOPE**

#### **7.1 Link GitHub:**

<https://github.com/rana-ahmed3/last-updated-final-defense>

#### **7.2 Discussion and Conclusion**

First, I discuss with my supervisor and I list some characteristics. I began drawing the diagram and designing the system after verifying the feature. I started coding once the designing was complete. I've finished the coding portion and am now beginning the testing phase. I was given some test ideas to work with when I started the test work, and my supervisor assisted me with them.

#### **7.3 Project Limitation**

Since I designed it with my thoughts in mind, I think it would be nice to be able to make some changes. But the internet connection is not good in our village otherwise I want to build a machine learning model but I can't find the required dataset I need.

#### **7.4 Achievements and Obstacles**

I faced some hurdles for the development of this project.

- Lack of resource mobilization
- Machine learning data collection
- Unclear project definition or expectations
- Lack of use of final results.

## **Throughout the project I have achieved:**

- Learned how to deal with stressful situations
- Handle large amounts of pressure
- Learn many new thoughts
- Learn about many new thinking future opportunities:
- Know how to use machine learning models in spades
- Learn how to use machine learning
- Add more areas
- Add features

## **7.5 Scope for Future Developments**

In the future, the project could be deployed on an intranet. Because it is quite versatile in terms of expansion, the project can be upgraded in as and when the need arises in the near future. With the database Space Manager software that has been proposed ready and completely functional the customer can now manage and thereby conduct the entire project in a far more efficient, accurate, and error-free manner. The following is the project's future scope:

- We use big database
- Add more option to help customer
- 24/7 Online live support
- Use React for website first browsing

## Reference:

1. Python.org available at <<https://www.python.org/>>, last accessed on 15-Aug -2022 at 9 pm
2. Django available at < <https://www.djangoproject.com/>>, last accessed on 16-Aug-2022 at 8pm
3. Getbootstrap.com available at <https://getbootstrap.com/>, last accessed on 9-June-2022 at 5pm
4. JQuery.com available at < <https://jquery.com/>>, last accessed on 18-June-2022 at 10 pm
5. For project Idea, “simply search tutors and tuitions” available at <<<https://makemytrips.com/>>>  
last accessed on 5- May-2022 at 8 pm
6. Learn about MySQL, available at <<[https://www.w3schools.com/mysql/mysql\\_intro.asp](https://www.w3schools.com/mysql/mysql_intro.asp) >> last accessed  
on 15-June-2022 at 7 pm

## rana 2

### ORIGINALITY REPORT

<b>28%</b>	<b>23%</b>	<b>2%</b>	<b>21%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

### PRIMARY SOURCES

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