



Dr. Vishwanath Karad
MIT WORLD PEACE
UNIVERSITY | PUNE
TECHNOLOGY, RESEARCH, SOCIAL INNOVATION & PARTNERSHIPS

Object Oriented Programming with C++ and Java

MINI PROJECT REPORT

Submitted by-

Sadhika Jain-1032210508

Saumya Jain-1032210791

Priyanshi Jain- 1032211916

Sayal Goyal-

Under the guidance of -

Prof. Ruhi Patankar

At

MIT-World Peace University (MIT-WPU)

Faculty of Engineering
School of Computer Engineering & Technology

Certificate

This is to certify that **Sadhika Jain, Saumya Jain, Priyanshi Jain, Sayal Goyal** of B.Tech. School of Computer Engineering & Technology, Semester IV has successfully completed project on “Airline Management System.”

To my satisfaction and submitted the same during the academic year 2022 - 2023 towards the partial fulfillment of the degree of Bachelor of Technology in the School of Computer Engineering & Technology under Dr. Vishwanath Karad MIT- World Peace University, Pune.

Prof. Ruhi Patankar

Group Members and Work Distribution

- | | |
|-------------------------|-------------|
| ● Sadhika Jain | PG01 |
| ● Saumya Jain | PG06 |
| ● Priyanshi Jain | PG18 |
| ● Sayal Goyal | PG31 |

Sadhika Jain:-

Cancel Function

Accept Function(Booking for International)

Accept function(passenger and meal)

Sayal Goyal:-

Main Function, Payment FunctionFile

Handling

Saumya Jain:-

Accept Function(Booking for Domestic)

Accept Function(Passenger and Meal).

Priyanshi Jain:-

Display Function(Booking and Check Flight)

Exception handling

Everyone contributed to the report writing.

INDEX

Sr no.	Table of contents	Page no.
1	Introduction	
2	Methodologies used	
3	Libraries used	
4	Member Functions and Data members	
5	OOP Concepts used	
6	Tasks performed	
7	Output	
8	Conclusion	

Introduction

The “Airline Booking System” has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the company to come out operations in a smooth and effective manner. The application is reduced as much as possible to avoid errors while entering the data. It also provides an error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus this all proves it is user-friendly. Flight Ticket Booking System, as described above, can lead to error-free, secure, reliable and fast management systems. It can assist the user to concentrate on their other activities rather than concentrating on record keeping. Thus it will help organizations in better utilization of resources. Every organization, whether big or small, has challenges to overcome and manage the information of Tickets, Flight, Passengers, Flight Route, and Payment. Every Airline Booking System has different Flight needs, therefore we design exclusive employee management systems that are adapted to your managerial requirements.

This is designed to assist in strategic planning and will help you ensure that your organizations are equipped with the right information and details for your future goals. Also, for those busy executives who are always on the go, our systems come with remote access features, which will allow you to manage your workforce anytime, at all times. These Systems will ultimately allow you to manage better resources.

METHODOLOGY

- First, we are declaring the public and protected data members in the **class dom_booking**(domestic booking). Declare variables in protected and public classes like **d_pnr**(ticket no), and **dom_passengers**(details).
- Then we add a function to generate pnr numbers.
- **Dom_Booking** for getting domestic travel information from the user
- Function for selecting the domestic flight
- Use the switch case to choose a flight with the details given.
- Function for selecting domestic flight meals.
- After that, we make a Class for international booking and repeat the same method as domestic flights
- We inherit the classes **dom_booking** and **int_booking** to class passenger and make a function for getting passengers' details and use if-else statement for domestic and international booking selection
- Function to display passenger details and function to get pnr for domestic and international flights
- Create a class for payment, declare the variable in protected and public and accept payment details
- Using File handling we create domestic and international flight tickets.
- By using the created files we can check for tickets and delete particular tickets by using pnr.
- Using exception handling
- Create a main function in which we use a switch case statement and make a **menu-driven program** and use all the created functions accordingly.

Libraries used:

#include<iostream>

#include<fstream>

#include<cstring

FUNCTIONS –

1. Book ticket- International or Domestic
2. Select meal preference
3. Make Payment
4. Check ticket
5. Cancel ticket

OOPs concept used in the project

- File Handling:
- Inheritance:
- Exception Handling:
- Sequential file Organisation:
- Polymorphism:

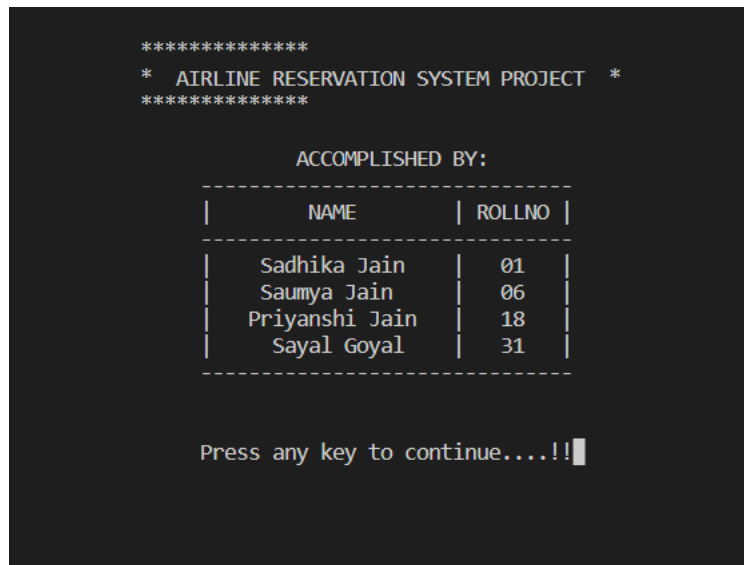
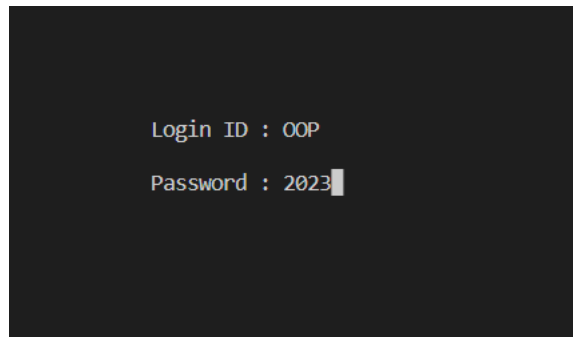
CONCLUSION

Hence, we implemented an Airline Management System in C++ using filehandling.

INPUT- Attached in text file.

OUTPUT

1.Login



2. Book Flight.

```
AIRLINE RESERVATION SYSTEM
```

```
-----  
1.Book flight(1)  
2.Cancel fight(2)  
3.Check your flight ticket(3)  
4.Exit(4)  
-----
```

```
Enter your choice:
```

```
1
```

```
Please enter your choice
```

```
1.Domestic Fights(1)  
2.International Flights(2)
```

```
Enter your option
```

```
1
```

```
Please enter date of departure (DD/MM/YY):
```

```
12/12/2022
```

```
-----
SOURCE
-----
1.New Delhi(1)
2.Chennai(2)
3.Kolkatta(3)
4.Mumbai(4)
-----
```

Enter your source:

1

```
-----
DESTINATION
-----
1.New Delhi(1)
2.Chennai(2)
3.Bangalore(3)
4.Kolkatta(4)
-----
```

Enter your destination :

2

Available flights

```
-----
Airlines      Departure      Arrival      Price
-----
Air India(1)   08:00         11:05        Rs.5000
IndiGo(2)      14:00         17:05        Rs.5500
SpiceJet(3)    19:00         22:05        Rs.6000
```

Enter your choice :

2

Your travel information:

Flight name : Indigo
Departure Time : 14:00
Arrival Time: 17:05

Please enter your meal preference :

1.Vegetarian meal(1): Rs.350
2.Non-Vegetarian meal(2) : Rs.450
3.No meal(3)

Enter your choice : 2

Enter the required details:

Enter your name:Yash
Enter your email ID :yash123@gmail.com
Enter your gender:Male
Enter your contact number:951823453
Enter your passport number:223234353623

Mode of payment

1.Debit Card(1)
2.Credit Card(2)
3.Net Banking(3)

Enter your choice :1

Mode of payment

1.Debit Card(1)
2.Credit Card(2)
3.Net Banking(3)

Enter your choice :1
Enter card number:22353445442324

Passenger details

Name:Yash
Gender:Male
Email ID:yash123@gmail.com
Contact No.:9238238234
Passport number :384323458384
PNR :101
Flight:Indigo
Name:Yash
Boarding date:12/12/202214:00
Departure Time:14:00
Arrival Time:17:05
Meal choice:non-Vegetarian meal

Do you wish to continue? (Y/N)
PS D:\Code\C C++\PROJECT> █

3. Cancel Flight.

```
AIRLINE RESERVATION SYSTEM
```

```
-----  
1.Book flight(1)  
2.Cancel flight(2)  
3.Check your flight ticket(3)  
4.Exit(4)  
-----
```

```
Enter your choice:
```

```
2
```

```
Your ticket has been deleted  
PNR :101  
Flight:Indigo  
Name:Yash  
Boarding date:12/12/202214:00  
Departure Time:14:00  
Arrival Time:17:05  
Meal choice:non-Vegetarian meal
```

```
Your ticket has been deleted
```

```
Do you wish to continue? (Y/N)
```

```
Y
```

4. Check Fight

```
AIRLINE RESERVATION SYSTEM
```

```
-----  
1.Book flight(1)  
2.Cancel fight(2)  
3.Check your flight ticket(3)  
4.Exit(4)  
-----
```

```
Enter your choice:
```

```
3
```

```
Check your tickets
```

```
-----  
1.Domestic Fights(1)  
2.International Flights(2)
```

```
Enter your option :
```

```
1
```

```
Enter your PNR number :
```

```
101
```

```
Ticket details
```

```
PNR :101
```

```
Flight:Indigo
```

```
Name:Yash
```

```
Boarding date:12/12/202214:00
```

```
Departure Time:14:00
```

```
Arrival Time:17:05
```

```
Meal choice:non-Vegetarian meal
```

```
Do you wish to continue? (Y/N)
```