Chrysalis high
KADUGODI

SUBJECT: COMPUTER SCIENCE

AIRLINE TICKET BOOKING

DONE BY:

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Academic Year: 2022-2023

CERTIFICATE

This is to certify that **PRAMODH NARAIN** of Chrysalis High, Kadugodi, Bangalore has successfully completed computer project towards partial completion of the practical examination of AISSCE 2022-23, as prescribed by CBSE.

Signature of
Internal Examiner

Signature of
External Examiner

PRINCIPAL

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ACKNOWLEDGEMENT

We wish to express our deep gratitude and sincere thanks to all our teachers for their encouragement and the management for providing all facilities to successfully complete the project work.

We extend our sincere thanks to our principal, Mrs. Sailatha, and our Computer Science teacher, Mrs. Sonia whose valuable guidance helped us in completing the project.

We would also want to thank our parents and teachers for their valuable support and time.

INTRODUCTION

Introduction:

The idea of the project "EASY2BOOKNFLY" is to create a code which allows the user to book an air ticket from anywhere and anytime. As we know, travelling through the mode of air saves a lot of time, so our project guides the user to select the desired airline according to their budget.

The code for this project takes various details as the input, such as- user registration, type of journey, from and drop location, date of departure, type of class (economy/premium/business) and preferred flight rates and time, according to which available flights will be shown. Then, the user can choose the flight, mention the seat preferences and proceed to pay after confirmation, which will book a secured ticket for the passenger.

Similar Projects:

There are some pre-existing projects like MakeMyTrip, Goibibo, Cleartrip and so on. The main intention of these sites is to make booking airline tickets faster and cheaper without third party booking centers, so we intend to do a similar project.

Unique features:

The feature that makes our project unique is that it lets you book any plane ticket with all payment options without any extra hidden charges. This is also a safe and secure way of booking airline tickets, it is a very easy and fast way to book tickets.

SYSTEM REQUIREMENTS

SYSTEM SOFTWARE AND HARDWARE

Software used to run the project:

1. Windows 10 or 11
2. Front end-
    - Python
3. Back end-
    - SQL (Structured Query Language)

Hardware used to run the project:

1. 8 GB RAM
2. 250 GB HDD
3. Monitor with HDMI 1920 X 1080 Screen Resolution
4. 3.4 GHZ PROCESSOR

CODING TOOLS

PYTHON

Python is a widely used general-purpose, high level programming language. It was mainly developed to emphasize on code readability. Its syntax allows programmers to express concepts in fewer lines of code.

Python is a programming language that lets you work quickly and integrate systems efficiently.

Reason for increasing popularity:

1. Emphasis on code readability.
2. Logical concepts can be expressed in fewer lines of code in comparison to languages such as C++ or Java.
3. Python supports multiple programming paradigms, like object-oriented and functional programming/procedural.
4. There exist inbuilt functions for all of the frequently used concepts.

DATABASE- STRUCTURED QUERY LANGUAGE (SQL)

SQL (Structured Query Language) is a standard language developed and used for accessing and modifying relational databases. The SQL language was originally developed at the IBM research laboratory in San José. SQL is used to communicate with a database. SQL statements are used to perform tasks such as updating data on a database or retrieving data from a database. A database is nothing but an organized collection of data. Data is organized into rows, columns, and tables and it is indexed to make it easier to find relevant information.

We have made use of SQL to store the Customer data and perform Simple Calculations of the Total Bill Amount.

ADVANTAGES OF USING SQL -

1) PORTABILITY:

Small enough in size to install and run on any type of Hardware and OS like Linux, MS Windows or Mac, etc.

2) SECURITY:

Its Databases are secured & protected with passwords.

3) QUERY LANGUAGE:

It supports SQL (Structured Query Language) for handling databases.

We have used Python to access the SQL Database. The following are the reasons why we have chosen the SQL Database.

- Programming is more efficient and faster compared to other languages.
- Python programs are portable
- Python supports Platform Independent Programming.
- Python takes care of opening and closing the connections.
- Python supports Relational Database Systems.

- Python supports porting of data from one Database to another. It is easily possible as it supports a large range of Application Programming Interfaces (APIs) for various databases.

MAJOR SECTIONS/FEATURES

1. **Registration/Login page:-**

   Here, the user is asked to login into his/her account, by entering their details such as user id and password.

2. **From and to location pg**:-

   In this section, the code allows the user to select his/her desired start and end locations.

3. **Flight selection pg:-**

   Here, the code filters through the pre-existing flights and displays only those airlines which are available for travel according to the user request. The user then gets a chance to select one of the airlines from the displayed list by entering the respective option (Example: Suppose that the available flights are: A.Indigo, B.Air India and C.Spicejet; and if the user wishes to travel through the airline named 'Air India', he/she must enter option "B.")

4. **Payment pg:-**

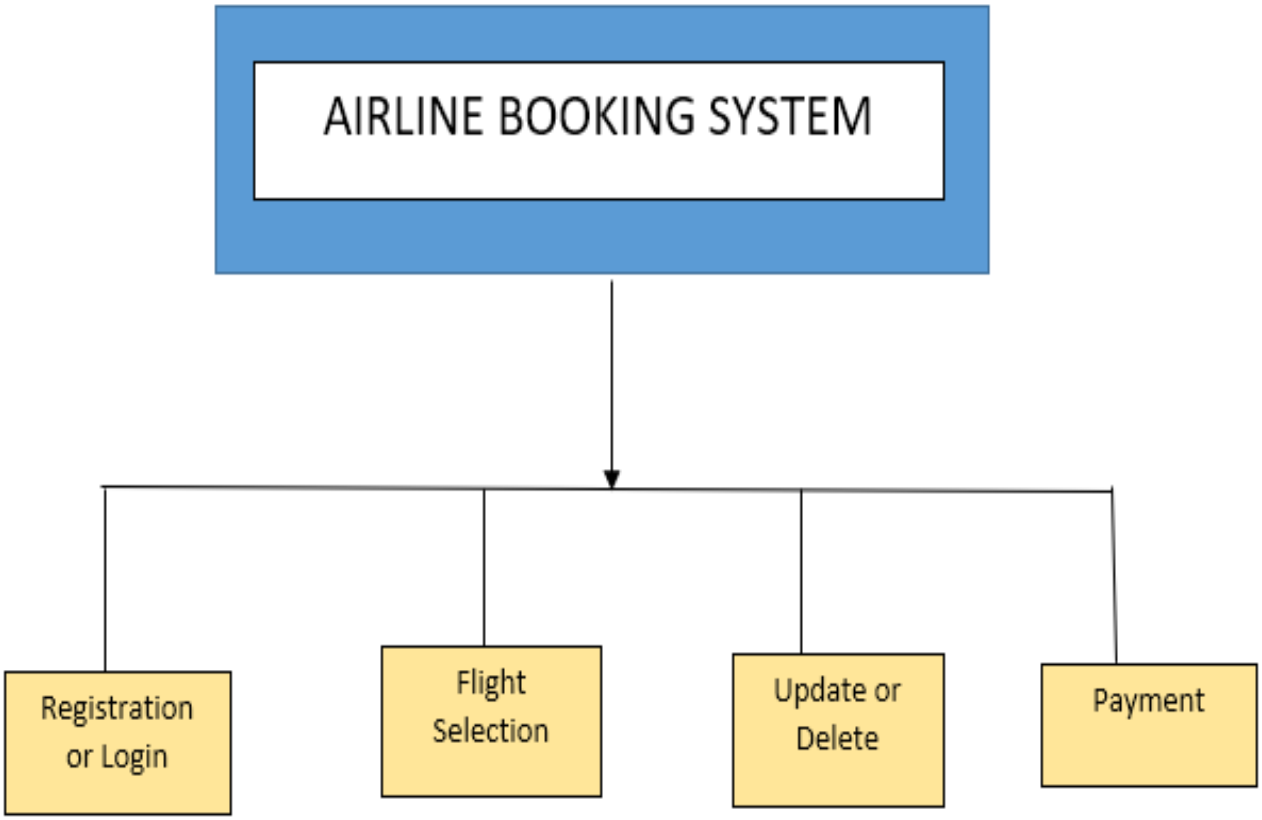
   Once the user has selected the desired airline and completes the booking of the airline ticket, the code redirects the user to the payment page. In this page the code displays the various modes of payment (eg: through credit card, debit card, EMI, gift cards, etc.). Once the user selects his/her desired mode of payment, the code asks the user to input the required details such as the bank account number, card details, etc.

5. **Final receipt:-**

   After the payment has been done, the code displays a

message stating that the flight ticket has been booked and also shows details such as: date of flight, chosen airline, seat location.

PROJECT MAP


AIRLINE BOOKING SYSTEM
Registration or Login
Flight Selection
Update or Delete
Payment

SOURCE CODE

- **SOURCE CODE:**

The source code of our project is shown as follows:

```
#-*-coding: utf-8-*-
"""
Created on Fri Nov 18 12:11:43 2022
@author: Pramodh Narain
"""
#Computer-Science-Project-Class-12
#Topic: Airline-Ticket-Booking
#Code-Name: Easy2BookNFly

import sys
import csv
import time
import random
import datetime
today = datetime.date.today()
year = today.year
month = today.month
day = today.day
import mysql.connector as connector
connection_string = connector.connect (host = "localhost", user = "root", passwd =
"MySQL_1_2_3")
cursor_object = connection_string.cursor()

def print_text(x):

    for g in x+'\n':

        sys.stdout.write(g)
        sys.stdout.flush()
```

```
        time.sleep(1./50)

    return ""

print_text("Hello User :)")
print_text("Easy2BookNFly gives you a warm welcome!! :)")
print_text("This code allows you to book an airline ticket based on the data you provide as input.")

def Domestic_Budget_Choice():

    global Airline, Budget_price, airline_choice
    Budget_price = 0

    if Budget_choice == 1:

        while True:

            try:

                print_text("The domestic flights available in the price range of Rs.30,000 to Rs.50,000 are displayed as follows:")
                print_text("1. Spicejet")
                print_text("2. Akasa Air")
                airline_choice = int(input(print_text("Enter your choice from the above menu (1/2): ")))
                break

            except ValueError:

                print_text("Expected integer data type!")

        Airline = " "

        while True:

            if airline_choice == 1:
                Airline += "Spicejet"
                Budget_price += 30000
                break
```

```
        elif airline_choice == 2:
            Airline += "Akasa Air"
            Budget_price += 50000
            break

        else:
            print_text("Invalid Choice! Please try again!")

    elif Budget_choice == 2:

        while True:

            try:

                print_text("The domestic flights available in the price range of Rs.60,000
to Rs.80,000 are displayed as follows:")
                print_text("1. Air India")
                print_text("2. Indigo")
                airline_choice = int(input(print_text("Enter your choice from the above
menu (1/2): ")))
                break

            except ValueError:

                print_text("Expected integer data type!")

        Airline = " "

        while True:

            if airline_choice == 1:

                Airline += "Air India"
                Budget_price += 60000
                break

            elif airline_choice == 2:

                Airline += "Indigo"
```

```
            Budget_price += 80000
            break

        else:

            print_text("Invalid Choice! Please try again!")

    elif Budget_choice == 3:

        while True:

            try:

                print_text("The domestic flights available in the price range of Rs.90,000
to Rs.100,000 are displayed as follows:")
                print_text("1. Vistara")
                print_text("2. Air India Express")
                airline_choice = int(input(print_text("Enter your choice from the above
menu (1/2): ")))
                break

            except ValueError:

                print_text("Expected integer data type!")

        Airline = " "

        while True:

            if airline_choice == 1:

                Airline += "Vistara"
                Budget_price += 90000
                break

            elif airline_choice == 2:

                Airline += "Air India Express"
                Budget_price += 100000
                break
```

```
        else:

            print_text("Invalid Choice! Please try again!")

    elif Budget_choice == 4:

        while True:

            try:

                print_text("The domestic flights available in the price range of
Rs.110,000 to Rs.150,000 are displayed as follows:")
                print_text("1. Go First")
                print_text("2. Air Asia India")
                airline_choice = int(input(print_text("Enter your choice from the above
menu (1/2):")))
                break

            except ValueError:

                print_text("Expected integer data type!")

        Airline = " "

        while True:

            if airline_choice == 1:

                Airline += "Go First"
                Budget_price += 110000
                break

            elif airline_choice == 2:

                Airline += "Air Asia India"
                Budget_price += 150000
                break

            else:
```

```
            print_text("Invalid Choice! Please try again!")

    else:

        print_text("Invalid Choice! Please try again!")
        return

#Insert Method:
def Domestic_Flights():

    global
Customer_ID,number,First_Name,Last_Name,Age,Date_of_Birth,Airline,Budget_
Choice,Start_Location,End_Location,Seating_Position,Seat_Number,Date,Time,Cl
ass

    Customer_ID = random.randrange (300000 , 900000 , 1)
    print_text("Customer ID for this passenger is : ")
    print_text(str(Customer_ID))
    First_Name = input(print_text("Enter first name of the passenger : "))
    Last_Name = input(print_text("Enter last name of the passenger : "))
    print_text("WARNING!! : ")
    print_text("Age and Date of Birth can be given as input only once and cannot be
modified once entered. Hence, please be alert while entering the data!")

    while True:

        try:

            Age = int(input(print_text("Enter age of the passenger:")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    while True:

        Date_of_Birth = input(print_text("Enter date of birth of the passenger
(Format: (yyyy/mm/dd)):"))
```

```
        if ((int(Date_of_Birth[0:4]) + Age)) != year:

            print_text("Invalid date of birth/Invalid age")
            print_text("Please try again!")

        else:

            break

    def Domestic_Cost_of_Travel():

        global Airline, Budget_choice

        Airline = "  "

        while True:

            try:

                print_text("Choose your budget range from the dropdown menu:")
                print_text("1. Rs.30,000 to Rs.50,000")
                print_text("2. Rs.60,000 to Rs.80,000")
                print_text("3. Rs.90,000 to Rs.100,000")
                print_text("4. Rs.100,000 to Rs.150,000")
                Budget_choice = int(input(print_text("Enter your choice from above
menu (1/2/3/4):")))
                break

            except ValueError:

                print_text("Expected integer data type!")

    Domestic_Cost_of_Travel()

    Domestic_Budget_Choice()

    global Start, End

    while True:
```

```
        print_text("Enter your start and end locations:")
        Start_Location = input(print_text("Enter start location:"))
        End_Location = input(print_text("Enter destination:"))
        Start = End = " "

        if Start_Location == End_Location:

            print_text("Start and End locations are same. Please enter location details
properly!")

        else:

            Start += Start_Location
            End += End_Location
            break

    def Seating_Position():

        global Seating_Position
        Seating_Position = "  "

        while True:

            try:

                print_text("You can select your seating position as displayed in the
following menu:")
                print_text("1. Aisle Seat")
                print_text("2. Middle Seat")
                print_text("3. Window Seat")
                break

            except ValueError:

                print_text("Expected integer data type!")

        while True:

            try:
```

```
            SP = int(input(print_text("Enter your choice from above menu
(1/2/3):")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    while True:

        Seating_Position = " "

        if SP == 1:

            Seating_Position += "Aisle Seat"
            break

        elif SP == 2:

            Seating_Position += "Middle Seat"
            break

        elif SP == 3:

            Seating_Position += "Window Seat"
            break

        else:

            print_text("Invalid Choice! Please try again!")

    return Seating_Position

Seating_Position()

def Seat_Number():

    global Seat_Number
```

```
    Seat = random.randrange (65,91,1)
    Number = random.randrange (1,501,1)
    Seat_Number = chr(Seat) + str(Number)
    print_text("Your Seat Number is displayed as follows : ")
    print_text(Seat_Number)
    return Seat_Number

Seat_Number()

def Date_Of_Travel():

    print_text("WARNING!!: Date of travel once given as input cannot be
modified later. So make sure you follow the appropriate syntax as given within the
parentheses")

    global Date

    while True:

        Date=input(print_text("Enter desired date of travel (Format:
(yyyy/mm/dd)):"))

        if str(year)<Date[0:4] or str(month)<Date[5:7] or str(day)<Date[8:10]:

            print_text("Invalid date! Please enter valid date!")

            if Date[5:7]=="02":

                if int(Date[8:10])>28:

                    print_text("Invalid date! Please enter valid date!")

                elif Date[5:7]=="01" or Date[5:7]=="03" or Date[5:7]=="05" or
Date[5:7]=="07" or Date[5:7]=="08" or Date[5:7]=="10" or Date[5:7]=="12":

                    if int(Date[8:10])>31:

                        print_text("Invalid date! Please enter valid date!")
```

```
                elif Date[5:7]=="01" or Date[5:7]=="04" or Date[5:7]=="06" or
Date[5:7]=="09" or Date[5:7]=="11":

                    if int(Date[8:10])>30:

                        print_text("Invalid date! Please enter valid
date!")

            else:

                break

            break

    Date_Of_Travel()

    def Time():

        global Time

        Time = "  "

        while True:

            try:

                print_text("The available timings of your selected flight are displayed as
follows:")
                print_text("1. 2:00 AM")
                print_text("2. 9:00 AM")
                print_text("3. 3:00 PM")
                print_text("4. 9:00 PM")
                break

            except ValueError:

                print_text("Expected integer data type!")

        while True:
```

```
        try:

            choice=int(input(print_text("Enter your choice from above menu
(1/2/3/4):")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    Time="  "

    while True:

        if choice == 1:

            Time += "2:00 AM"
            break

        elif choice == 2:

            Time += "9:00 AM"
            break

        elif choice == 3:

            Time += "3:00 PM"
            break

        elif choice == 4:

            Time += "9:00 PM"
            break

        else:

            print_text("Invalid Choice! Please try again!")

    return
```

```
    Time()


    def Class():

        global Class

        while True:

            try:

                print_text("Choose the class of flight you want to travel in from
following menu:")
                print_text("1. Business Class")
                print_text("2. Economy Class")
                break

            except ValueError:

                print_text("Expected integer data type!")

        while True:

            try:

                choice=int(input(print_text("Enter your choice from above menu
(1/2):")))
                break

            except ValueError:

                print_text("Expected integer data type!")

        Class=" "

        while True:

            if choice==1:

                Class += "Business Class"
```

```
            break

        elif choice==2:

            Class += "Economy Class"
            break


    Class()


    print_text("Successfully recorded one passenger information.")
    loop=False


def International_Budget_Choice():

    global Airline,Budget_price,inner_choice

    Budget_price=0

    if Budget_choice==1:

        while True:

            try:

                print_text("The international flights available in the price range of
Rs.100,000 to Rs.150,000 are displayed as follows:")
                print_text("1.British Airways")
                print_text("2.Jet Airways")
                inner_choice=int(input(print_text("Enter your choice from above menu
(1/2):")))
                break

            except ValueError:

                print_text("Expected integer data type!")
```

```
    Airline=" "

    while True:

        if inner_choice==1:

            Airline += "British Airways"
            Budget_price += 100000
            break

        elif inner_choice==2:

            Airline += "Jet Airways"
            Budget_price += 145000
            break

        else:

            print_text("Invalid Choice! Please try again!")


elif Budget_choice==2:

    while True:

        try:

            print_text("The international flights available in the price range of
Rs.160,000 to Rs.200,000 are displayed as follows:")
            print_text("1.Air China Flights")
            print_text("2.Aeroflot Airline")
            inner_choice=int(input(print_text("Enter your choice from above menu
(1/2):")))
            break

        except ValueError:

            print_text("Expected integer data type!")
```

```
    Airline=" "

    while True:

        if inner_choice==1:

            Airline += "Air China Flights"
            Budget_price += 160000
            break

        elif inner_choice==2:

            Airline += "Aeroflot Airline"
            Budget_price += 200000
            break

        else:

            print_text("Invalid Choice! Please try again!")


elif Budget_choice==3:

    while True:

        try:

            print_text("The international flights available in the price range of
Rs.250,000 to Rs.300,000 are displayed as follows:")
            print_text("1. Austrian Airlines")
            print_text("2. Cathay Pacific Airlines")
            inner_choice = int(input(print_text("Enter your choice from above menu
(1/2):")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    Airline="  "
```

```
        while True:

            if inner_choice==1:

                Airline += "Austrian Airlines"
                Budget_price += 250000
                break

            elif inner_choice==2:

                Airline += "Cathay Pacific Airlines"
                Budget_price += 300000
                break

            else:
                print_text("Invalid Choice! Please try again!")

    elif Budget_choice==4:

        while True:

            try:

                print_text("The international flights available in the price range of
Rs.350,000 to Rs.400,000 are displayed as follows:")
                print_text("1.Emirates Airlines")
                print_text("2.Delta Airlines")
                inner_choice=int(input(print_text("Enter your choice from above menu
(1/2):")))
                break

            except ValueError:

                print_text("Expected integer data type!")

        Airline=" "

        while True:
```

```
        if inner_choice==1:

            Airline += "Emirates Airlines"
            Budget_price += 350000
            break

        elif inner_choice==2:

            Airline += "Delta Airlines"
            Budget_price += 400000
            break

        else:

            print_text("Invalid Choice! Please try again!")

    else:

        print_text("Invalid choice! Please try again!")


#Insert Method:
def International_Flights():

    global
Customer_ID,Number,First_Name,Last_Name,Age,Date_of_Birth,Airline,Budget
_Choice,Start_Location,End_Location,Seating_Position,Seat_Number,Date,Time,
Class

    Customer_ID=random.randrange(300000,900000,1)
    print_text("Customer ID for this passenger is:")
    print_text(str(Customer_ID))
    First_Name = input(print_text("Enter first name of the passenger:"))
    Last_Name = input(print_text("Enter last name of the passenger:"))
    print_text("WARNING!!:")
    print_text("Age and Date of Birth can be given as input only once and cannot be
modified once entered. Hence, please be alert while entering the data!")

    while True:
```

```
        try:

            Age=int(input(print_text("Enter age of the passenger:")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    while True:

        Date_of_Birth=input(print_text("Enter date of birth of the passenger (Format:
(yyyy/mm/dd)):"))

        if ((int(Date_of_Birth[0:4])+Age))!=year:

            print_text("Invalid date of birth/Invalid age")
            print_text("Please try again!")

        else:

            break


    def International_Cost_of_Travel():

        global Airline, Budget_price, Budget_choice

        Airline=" "

        while True:

            try:

                print_text("Choose your budget range from the dropdown menu:")
                print_text("1.Rs.100,000 to Rs.150,000")
                print_text("2.Rs.160,000 to Rs.200,000")
                print_text("3.Rs.250,000 to Rs.300,000")
                print_text("4.Rs.350,000 to Rs.400,000")
                break
```

```
            except ValueError:

                print_text("Expected integer data type!")


        while True:

            Budget_price=0

            try:

                Budget_choice=int(input(print_text("Enter your choice from above
menu(1/2/3/4):")))
                break

            except ValueError:

                print_text("Expected integer data type!")


    International_Cost_of_Travel()

    International_Budget_Choice()

    while True:

        print_text("Enter your start and end locations:")
        Start_Location = input(print_text("Enter start location:"))
        End_Location=input(print_text("Enter destination:"))

        Start=End=" "

        if Start_Location==End_Location:

            print_text("Start and End locations are same. Please enter location details
properly!")

        else:
```

```
            Start += Start_Location
            End += End_Location
            break

    Seating_Position=" "

    while True:

        try:

            print_text("You can select your seating position as displayed in the
following menu:")
            print_text("1.Aisle Seat")
            print_text("2.Middle Seat")
            print_text("3.Window Seat")
            SP=int(input(print_text("Enter your choice from above menu (1/2/3):")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    while True:

        if SP==1:

            Seating_Position += "Aisle Seat"
            break

        elif SP==2:

            Seating_Position += "Middle Seat"
            break

        elif SP==3:

            Seating_Position += "Window Seat"
            break

        else:
```

```
        print_text("Invalid Choice! Please try again!")

    Seat = random.randrange(65,91,1)
    Number = random.randrange(1,51,1)
    Seat_Number = chr(Seat) + str(Number)
    print_text("Your Seat Number is displayed as follows:")
    print_text(Seat_Number)

    def Date_Of_Travel():

        print_text("WARNING!!: Date of travel once given as input cannot be
modified later. So make sure you follow the appropriate syntax as given within the
parentheses")

        global Date

        while True:

            Date=input(print_text("Enter desired date of travel (Format:
(yyyy/mm/dd)):"))

            if str(year)<Date[0:4] or str(month)<Date[5:7] or str(day)<Date[8:10]:

                print_text("Invalid date! Please enter valid date!")

                if Date[5:7]=="02":

                    if int(Date[8:10])>28:

                        print_text("Invalid date! Please enter valid date!")

                elif Date[5:7]=="01" or Date[5:7]=="03" or Date[5:7]=="05" or
Date[5:7]=="07" or Date[5:7]=="08" or Date[5:7]=="10" or Date[5:7]=="12":

                    if int(Date[8:10])>31:

                        print_text("Invalid date! Please enter valid date!")
```

```
            elif Date[5:7]=="04" or Date[5:7]=="06" or Date[5:7]=="09" or
Date[5:7]=="11" or Date[5:7]=="11":

                if int(Date[8:10])>30:

                        print_text("Invalid date! Please enter valid
date!")

            else:

                break

            break


    Date_Of_Travel()


    while True:

        try:

            print_text("The available timings of your selected flight are displayed as
follows:")
            print_text("1. 2:00 AM")
            print_text("2. 9:00 AM")
            print_text("3. 3:00 PM")
            print_text("4. 9:00 PM")

            choice = int(input(print_text("Enter your choice from above menu
(1/2/3/4):")))

            break

        except ValueError:

            print_text("Expected integer data type!")


    while True:
```

```
        Time="  "

        if choice==1:

            Time += "2:00 AM"
            break

        elif choice==2:

            Time += "9:00 AM"
            break

        elif choice==3:

            Time += "3:00 PM"
            break

        elif choice==4:

            Time += "9:00 PM"
            break

        else:

            print_text("Invalid Choice! Please try again!")

    while True:

        try:

            print_text("Choose the class of flight you want to travel in from following
menu:")
            print_text("1.Business Class")
            print_text("2.Economy Class")
            choice=int(input(print_text("Enter your choice from above menu (1/2):")))
            break

        except ValueError:
```

```
            print_text("Expected integer data type!")

    while True:

        Class=" "

        if choice==1:

            Class += "Business Class"
            break

        elif choice==2:

            Class += "Economy Class"
            break

        else:

            print_text("Invalid choice! Please try again!")


    print_text("Successfully recorded one passenger information.")


def Payment():

    print_text("Now we will guide you with the payment procudure as follows:")

    while True:

        try:

            print_text("Choose a method of payment from the dropdown list as
displayed below:")
            print_text("1.Credit card")
            print_text("2.Debit card")
            choice=int(input(print_text("Enter your choice from the above menu
(1/2):")))
            break
```

```
    except ValueError:

        print_text("Expected integer data type!")

if choice==1:

    Customer_ID=int(input(print_text("Enter customer ID:")))

    while True:

        Phone_Number=int(input(print_text("Enter phone number:")))
        Ph_Str=str(Phone_Number)

        if len(Ph_Str)==10:

            break

        else:

            print_text("Invalid Phone number!")
            print_text("Please try again!")

    print_text("Generating OTP /\/\/\/")
    print_text("Your OTP is displayed as follows:")

    while True:

        PIN=random.randrange(100000,1000000,1)
        print_text(str(PIN))
        OTP=int(input(print_text("Enter OTP:")))

        if OTP==PIN:

            print_text("Your payment has been receieved by us.")
            print_text("Thank you for your cooperation!! Have a nice day!")
            break

        else:

            print_text("Incorrect OTP entered. Please try again!")
```

```
elif choice==2:

    Card_NO=int(input(print_text("Enter your card number ")))

    while True:

        Phone_Number=int(input(print_text("Enter phone number:")))
        Ph_Str=str(Phone_Number)

        if len(Ph_Str)==10:

            break

        else:

            print_text("Invalid Phone number!")
            print_text("Please try again!")

    print_text("Generating OTP /\/\/\/")
    print_text("Your OTP is displayed as follows:")

    while True:

        PIN=random.randrange(100000,1000000,1)
        print_text(str(PIN))
        OTP=int(input(print_text("Enter OTP:")))

        if OTP==PIN:

            print_text("Your payment has been receieved by us.")
            print_text("Thank you for your cooperation!! Have a nice day!")
            break

        else:

            print_text("Incorrect OTP entered. Please try again!")

else:
```

```
        print_text("Invalid Choice! Please try again!")


def Delete():
    global Customer_ID, choice
    cursor_object.execute("USE My_Airline_Ticket ;")
    while True:
        try:
            print_text("Select any one table from following:")
            print_text("1.Domestic_Flight_Ticket")
            print_text("2.International_Flight_Ticket")
            choice=int(input(print_text("Enter your choice from above menu (1/2):")))
            break
        except ValueError:
            print_text("Expected integer data type!")
    if choice==1:
        Customer_ID=int(input(print_text("Enter Customer ID according to which
you wish to delete the ENTIRE passenger details:")))
        Customer_ID_STR=str(Customer_ID)
        print_text("We shall be displaying the existing records in the table for your
convinience while deleting the tuple's data.")
        print_text("The content present in the table 'Domestic_Flight_Ticket' is
displayed as follows:")
        Selection_Query=str("SELECT * FROM Domestic_Flight_Ticket WHERE
Customer_ID="+Customer_ID_STR+";")
        cursor_object.execute(Selection_Query)
        for record in cursor_object:
```

```
            print_text(str(record))

        connection_string.commit()

    elif choice==2:

        Customer_ID=int(input(print_text("Enter Customer ID according to which
you wish to delete the ENTIRE passenger details:")))
        Customer_ID_STR=str(Customer_ID)
        print_text("We shall be displaying the existing records in the table for your
convinience while deleting the tuple's data.")
        print_text("The content present in the table 'Domestic_Flight_Ticket' is
displayed as follows:")
        Selection_Query=str("SELECT * FROM International_Flight_Ticket
WHERE Customer_ID="+Customer_ID_STR+";")
        cursor_object.execute(Selection_Query)

        for record in cursor_object:

            print_text(str(record))

        connection_string.commit()


    if choice==1:

        inner_choice_1=input(print_text("Are you sure you wish to delete the
ENTIRE passenger details ? (yes/no)"))

        if inner_choice_1.lower()=="yes":

            print_text("Deletion of passenger details is in progress...Please wait for
sometime...")
            Customer_ID_STR=str(Customer_ID)
            Deletion_Query="Delete from Domestic_Flight_Ticket "+" where
Customer_ID = "+Customer_ID_STR+";"
            cursor_object.execute(Deletion_Query)
            connection_string.commit()
            print_text("Passenger details have been successfully deleted from the
table!!")
```

```
            Payment()

        elif inner_choice_1.lower()=="no":

            print_text("No worries, the passengers' details are safe. None of them have
been deleted yet :)")

            Payment()

        else:

            print_text("No worries, the passengers' details are safe. None of them have
been deleted yet :)")

            Payment()

    elif choice==2:

        inner_choice_2=input(print_text("Are you sure you wish to delete the
ENTIRE passenger details ? (yes/no)"))

        if inner_choice.lower_2()=="yes":

            print_text("Deletion of passenger details is in progress...Please wait for
sometime...")
            Customer_ID_STR=str(Customer_ID)
            Deletion_Query="Delete from International_Flight_Ticket "+" where
Customer_ID = "+Customer_ID_STR+";"
            cursor_object.execute(Deletion_Query)
            connection_string.commit()
            print_text("Passenger details have been successfully deleted from the
table!!")

            Payment()

        elif inner_choice_2.lower()=="no":

            print_text("No worries, the passengers' details are safe. None of them have
been deleted yet :)")
```

```
            Payment()

        else:

            print_text("No worries, the passengers' details are safe. None of them have
been deleted yet :)")

            Payment()


def Update():

    global Customer_ID, choice

    cursor_object.execute("USE My_Airline_Ticket ;")

    while True:

        try:

            print_text("Select any one table from following:")
            print_text("1.Domestic_Flight_Ticket")
            print_text("2.International_Flight_Ticket:")
            choice=int(input(print_text("Enter your choice from above menu (1/2):")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    if choice==1:

        ID=int(input(print_text("Enter Customer ID according to which you wish to
update the passenger's details:")))
        Customer_ID_STR=str(ID)
        print_text("We shall be displaying the existing records in the table for your
convinience while updating the tuple's data.")
        print_text("The content present in the table 'Domestic_Flight_Ticket' is
displayed as follows:")
        cursor_object.execute("USE My_Airline_Ticket;")
```

```
        Selection_Query="SELECT * FROM Domestic_Flight_Ticket WHERE
Customer_ID="+Customer_ID_STR+";"
        cursor_object.execute(Selection_Query)

        for record in cursor_object:

            print_text(str(record))

        #connection_string.commit()

    elif choice==2:

        ID=int(input(print_text("Enter Customer ID according to which you wish to
delete the pssenger's details:")))
        Customer_ID_STR=str(ID)
        print_text("We shall be displaying the existing records in the table for your
convinience while deleting the tuple's data.")
        print_text("The content present in the table 'International_Flight_Ticket' is
displayed as follows:")
        cursor_object.execute("USE My_Airline_Ticket;")
        Selection_Query="SELECT * FROM International_Flight_Ticket WHERE
Customer_ID="+Customer_ID_STR+";"
        cursor_object.execute(Selection_Query)

        for record in cursor_object:

            print_text(str(record))

        #connection_string.commit()

    if choice==1:

        while True:

            try:

                cursor_object.execute("USE My_Airline_Ticket;")
                print_text("Select one column from the following menu according to
which you wish to update the passenger details.")
                print_text("Menu:")
```

```
            print_text("1.First_Name")
            print_text("2.Last_Name")
            print_text("3.Airline")
            print_text("4.Start_Location")
            print_text("5.End_Location")
            print_text("6.Seating_Position")
            print_text("7.Time")
            print_text("8.Class")
            column_choice=int(input(print_text("Select any one column from above
menu (1/2/3/4/5/6/7/8):")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    new_data=input(print_text("Enter new data to be modified in SQL table:"))

    filed_name=None

    if column_choice==1:

        field_name="First_Name"

    elif column_choice==2:

        field_name="Last_Name"

    elif column_choice==3:

        field_name="Airline"

    elif column_choice==4:

        field_name="Start_Location"

    elif column_choice==5:

        field_name="End_Location"
```

```
        elif column_choice==6:

            field_name="Seating_Position"

        elif column_choice==7:

            field_name="Time"

        elif column_choice==8:

            field_name="Class"

        Customer_ID_STR=str(Customer_ID)
        Updation_Query="Update Domestic_Flight_Ticket set "+field_name+" =
"+"'"+new_data+"'"+" where Customer_ID= "+Customer_ID_STR+";"
        cursor_object.execute(Updation_Query)
        connection_string.commit()
        print_text("Passenger details have been successfully updated from the
table!!")

        Payment()

    elif choice==2:

        while True:

            try:

                cursor_object.execute("USE My_Airline_Ticket;")
                print_text("Select one column from the following menu according to
which you wish to delete the ENTIRE passenger details.")
                print_text("Menu:")
                print_text("1.First_Name")
                print_text("2.Last_Name")
                print_text("3.Airline")
                print_text("4.Start_Location")
                print_text("5.End_Location")
                print_text("6.Seating_Position")
                print_text("7.Time")
                print_text("8.Class")
```

```
            column_choice=int(input(print_text("Select any one column from above
menu (1/2/3/4/5/6/7/8):")))
            break

        except ValueError:

            print_text("Expected integer data type!")

    new_data=input(print_text("Enter new data to be modified in SQL table:"))
    filed_name=None

    if column_choice==1:

        field_name="First_Name"

    elif column_choice==2:

        field_name="Last_Name"

    elif column_choice==3:

        field_name="Airline"

    elif column_choice==4:

        field_name="Start_Location"

    elif column_choice==5:

        field_name="End_Location"

    elif column_choice==6:

        field_name="Seating_Position"

    elif column_choice==7:

        field_name="Time"

    elif column_choice==8:
```

```
            field_name="Class"

        Customer_ID_STR=str(Customer_ID)
        Updation_Query="Update International_Flight_Ticket set "+field_name+" =
"+"'"+(new_data)+"'"+" where Customer_ID= "+Customer_ID_STR+";"
        cursor_object.execute(Updation_Query)
        connection_string.commit()
        print_text("Passenger details have been successfully updated from the
table!!")

        Payment()

    else:

        print_text("No worries, the passengers' details are safe. None of them have
been modified yet :)")

        Payment()



#Insert Method

def Choose_Region():

    global choice

    while True:

        try:

            print_text("Do you wish to travel within India or outside India?")
            print_text("1.Within India")
            print_text("2.Outside India")
            choice=int(input(print_text("Enter your choice (1/2):")))
            break

        except ValueError:
```

```
        print_text("Expected integer data type!")

    count=0

    while count==0:

        if choice==1:

            while True:

                try:

                    number=int(input(print_text("Enter number of passengers:")))
                    break

                except ValueError:

                    print_text("Expected integer data type!")

            for x in range(number):

                Domestic_Flights()

                cursor_object.execute("CREATE DATABASE IF NOT EXISTS
My_Airline_Ticket;")
                cursor_object.execute("USE My_Airline_Ticket;")
                cursor_object.execute("""Create Table if not exists
Domestic_Flight_Ticket (Customer_ID int unique, First_Name varchar(20) not
null, Last_Name varchar(20) not null, Age int not null, Date_of_Birth date not
null,
                                        Airline varchar(25) not null,Start_location varchar(20)
not null, End_Location varchar(20) not null, Seating_Position varchar(20) not null,
                                        Seat_Number varchar(6) primary key,Date_of_Travel
date not null, Time varchar(20) not null, Class varchar(20) not null);""")

                Table_Details=(Customer_ID,First_Name,Last_Name,Age,Date_of_Birt
h,Airline,Start_Location,End_Location,Seating_Position,Seat_Number,Date,Time,
Class)
```

```
            Add_User="Insert into Domestic_Flight_Ticket values
(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s);"

            cursor_object.execute(Add_User, Table_Details)

            connection_string.commit()

            count += 1


        elif choice==2:

            while True:

                try:

                    number=int(input(print_text("Enter number of passengers:")))
                    break

                except ValueError:

                    print_text("Expected integer data type!:")

            for x in range(number):

                International_Flights()

                cursor_object.execute("CREATE DATABASE IF NOT EXISTS
My_Airline_Ticket;")
                cursor_object.execute("USE My_Airline_Ticket;")
                cursor_object.execute("""Create Table if not exists
International_Flight_Ticket (Customer_ID int unique, First_Name varchar(20) not
null, Last_Name varchar(20) not null, Age int not null, Date_of_Birth date not
null,
                                    Airline varchar(25) not null,Start_location varchar(20)
not null, End_Location varchar(20) not null, Seating_Position varchar(20) not null,
                                    Seat_Number varchar(6) primary key,Date_of_Travel
date not null, Time varchar(20) not null, Class varchar(20) not null);""")
```

```
            Table_Details=(Customer_ID,First_Name,Last_Name,Age,Date_of_Birt
h,Airline,Start_Location,End_Location,Seating_Position,Seat_Number,Date,Time,
Class)

            Add_User="Insert into International_Flight_Ticket values
(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s);"

        cursor_object.execute(Add_User, Table_Details)

        connection_string.commit()

        count += 1


    elif choice != 1 and choice != 2:

        count = 0
        print_text("Invalid Choice! Please try again!")

        return


#Login Page:

def Register_and_Login():

   print_text("In order to book a ticket in Easy2BookNFly.com, you need to follow
the procedure carefully")
   print_text("We shall be guiding you to register yourself in our website. Follow
the rules as instructed below:")

   while True:

      Name = input(print_text("Enter your name:"))

      while True:

         Create_Username=input(print_text("Enter your username (format:
<username>@booknfly.com):"))
```

```
        if "@booknfly.com" not in Create_Username:

            print_text("Please enter a valid user name (as per the format mentioned
within the parentheses!)")

        else:

            break

    break

print_text("Setup a password for your account :")
Create_Password = input(print_text("Enter your desired password to be set for
your account:"))
print_text("Now we will be redirecting you tou our website's login page :)")
print_text("Enter the login credentials as requested below:")

while True:

    Username = input(print_text("Enter your username:"))
    Password = input(print_text("Enter your password:"))

    if Username != Create_Username:

        print_text("Invalid username, please try again !!")

    elif Password != Create_Password:

            print_text("Incorrect password, please try again!")

    else:

        print_text("Hurray!! You have successfully logged in to Easy2BookNFly
website!!")
        break

print_text("Now you can book your airline ticket.")

Choose_Region()
```

```
Register_and_Login()


def Modifications():

   choice=input(print_text("Do you wish to perform any changes/modifications
in      your flight ticket ? (yes/no):"))

   while True:

      if choice.lower() == "yes":

         print_text("Choose one of the following changes that you wish to
perform:")
         print_text("1.Modify data within a specific row/column")
         print_text("2.Add/Delete an entire row/coloumn")

         while True:

            try:

               choice = int(input(print_text("Enter your choice from above menu
(1/2):")))

               if choice == 1:

                  Update()

                  break

                  #connection_string.close()

               elif choice == 2:

                  Delete()

                  break

                  #connection_string.close()
```

```
            except ValueError:
                print_text("Expected integer data type!")
                break
        elif choice.lower() == "no":
            print_text("No worries, the passengers' details are safe. None of them have been modified yet :)")
            print_text("Thank you!! Your name has been successfully registered!.")
            Payment()
            break

        else:
            print_text("Invalid Choice! Please try again!")
            return
Modifications()
print_text("Thank you!! Your airline ticket has been successfully booked!")
print_text("Wishing you a very happy journey!! :))")
```

OUTPUT AND SCREENSHOTS

Sample-Input and Sample-Output – for Domestic Region:

1.1. The Login Page:

Following is the page where the user logs himself/herself as a user in our website namely, Easy2BooknFly.com.

Here:

- The user is asked to create a username and password
- Furthermore, the user is redirected to the login page once his/her account has been successfully created.

```
= RESTART: E:\Pramodh Files\Class-12-Files\School-Files\Projects\Computer-Science\Main-Project-Files (Airline-Ticket-Booking)\Main-Code\#Computer-Science-Class-12-Project-Airline-Ticket-Booking (Python with MySQL) (With-Parametrized-Queries).py
Hello User :)
Easy2BookNFly gives you a warm welcome!! :)
This code allows you to book an airline ticket based on the data you provide as input
In order to book a ticket in Easy2BookNFly.com, you need to follow the procedure carefully
We shall be guiding you to register yourself in our website. Follow the rules as instructed below:
Enter your name:
Karthick Kumar Nair
Enter your username (format: <username>@booknfly.com):
karthick1997@booknfly.com
Setup a password for your account :
Enter your desired password to be set for your account:
print("Air Asia India Airlines")
Now we will be redirecting you tou our website's login page :)
Enter the login credentials as requested below:
Enter your username:
karthick1997@booknfly.com
Enter your password:
print("Air Asia India Airlines")
Hurray!! You have successfully logged in to Easy2BookNFly website!!
Now you can book your airline ticket.
```

1.2. The Choosing of Region Page:

Following is the page where the user is asked to choose his/her region of flight, i.e., either flying in domestic region or international.

```
Do you wish to travel within India or outside India?
1.Within India
2.Outside India
Enter your choice (1/2):
1
```

1.3. Taking number of passengers as input:

Following is the page where the code takes the number of passengers as input from the user, and furthermore allows the user to enter details for those many passengers as many given as input for the number of passengers.

```
Enter your choice (1/2):
1
```

1.4. Giving passenger's details as input:

Following is the page where the user gives details of the passenger as input, which is to be added to the database namely 'My_Airline_Ticket'.

1.5. Message displaying passenger details successfully recorded:

Following is the message displayed by the code stating that one passenger information has been successfully recorded.

1.6. Choice asking whether the user wishes to either modify data in the airline ticket which was just booked, or to delete a record from the airline ticket:

1.7. Update or Delete function choice:

The following page is where the code displays a choice for the user to choose to either update or delete data based upon his/her desired choice.

```
Do you wish to perform any changes/modifications in your flight ticket ? (yes/no):
yes
Choose one of the following changes that you wish to perform:
1.Modify data within a specific row/column
2.Add/Delete an entire row/coloumn
Enter your choice from above menu (1/2):
1
```

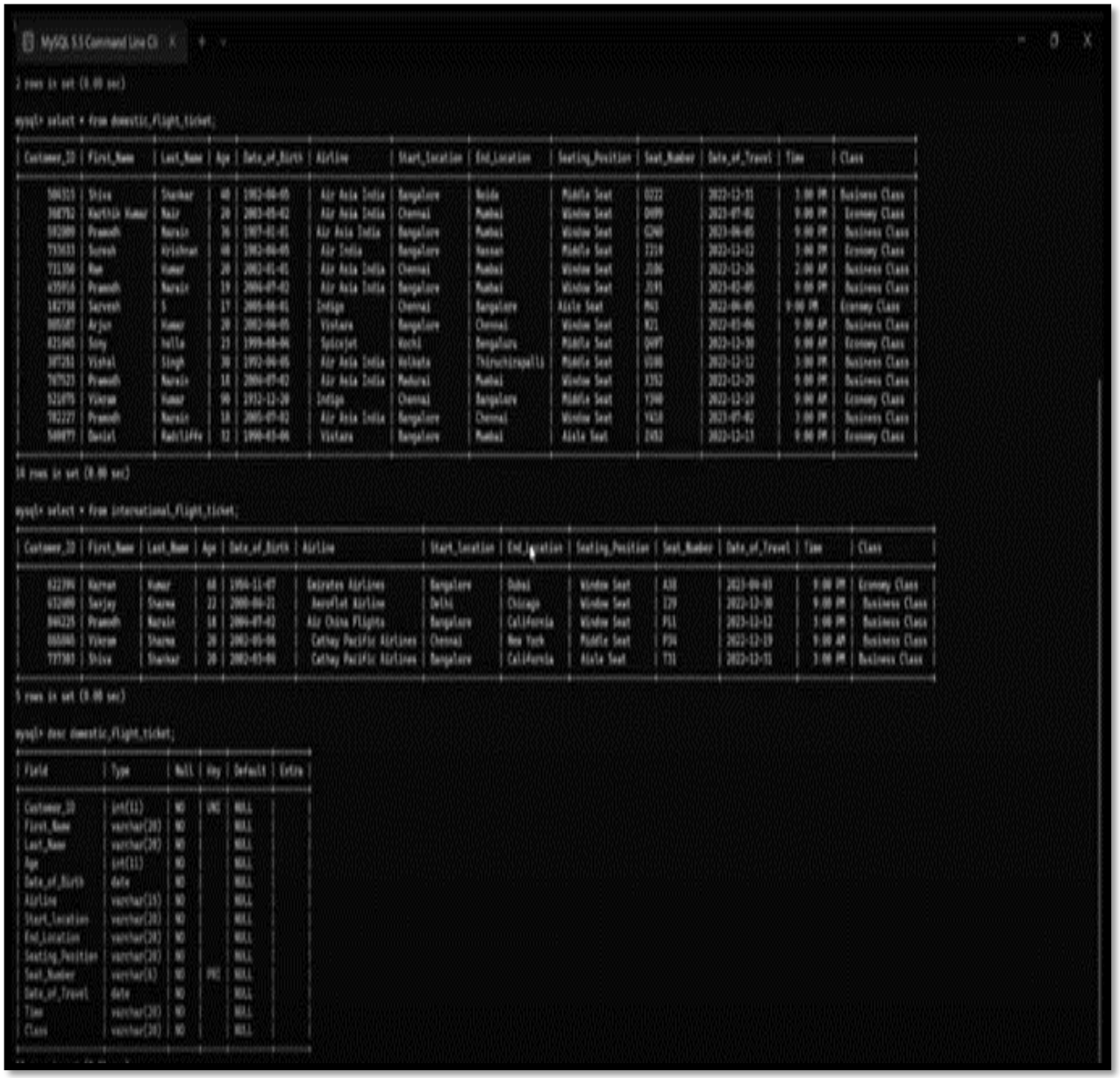
1.8. When the user chooses the update function:

```
Select any one table from following:
1.Domestic_Flight_Ticket
2.International_Flight_Ticket:
Enter your choice from above menu (1/2):
1
Enter Customer ID according to which you wish to update the passenger's details:
368752
We shall be displaying the existing records in the table for your convinience while updating the tuple's data.
The content present in the table 'Domestic_Flight_Ticket' is displayed as follows:
(368752, 'Karthik Kumar', 'Nair', 20, datetime.date(2003, 5, 2), ' Air Asia India', 'Noida', 'Mumbai', ' Window Seat', 'D499', datetime.date(2023, 7, 2), '  9:00 PM', ' Economy Class')
Select one column from the following menu according to which you wish to update the passenger details.
Menu:
1.First_Name
2.Last_Name
3.Airline
4.Start_Location
5.End_Location
6.Seating_Position
7.Time
8.Class
Select any one column from above menu (1/2/3/4/5/6/7/8):
4
Enter new data to be modified in SQL table:
Chennai
Passenger details have been successfully updated from the table!!
```

1.9. The Payment Function:

```
Now we will guide you with the payment procudure as follows:
Choose a method of payment from the dropdown list as displayed below:
1.Credit card
2.Debit card
Enter your choice from the above menu (1/2):
1
Enter customer ID:
18138348
Enter phone number:
9380388647
Generating OTP /\/\/
Your OTP is displayed as follows:
512127
Enter OTP:
512127
Your payment has been receieved by us.
Thank you for your cooperation!! Have a nice day!
Thank you!! Your airline ticket has been successfully booked!
Wishing you a very happy journey!! :))
```

1.10. SQL Screenshot:



CONCLUSION

- **CONCLUSION:**

We hope that through this project we could make a difference in the system of travel management involving administrative tasks to help users manage services like booking, pricing, transport, etc. This code ensures our users would not have any trouble planning their vacation providing a hassle-free experience. It allows users to easily access their prior trips from using their account.

LIMITATIONS OF THE SOFTWARE

1. The software is COMPLETELY working on a database format; So, when the user executes this code, he/she won't be able to view any web-page/any new window.
2. There is no option of refunding money to the user once he/she makes the payment.

• BIBLIOGRAPHY:

We have used the following links as a reference for our code:

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2. https://www.python.org
3. https://pythonworld.in/practical-project/project-list/
4. https://www.javatpoint.com/12-best-python-projects-for-class-12
5. https://www.slideshare.net/manishjain598/computer-science-with-python-project-for-class-12-cbse
6. https://www.cs4school.com/cbse/python-project-for-class-12