MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Skill Based Mini Project Report on

Airline Management System

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Submitted to:

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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CERTIFICATE

This is certified that **Sagar Jadhav** (0901CS201102) has submitted the project report titled **Airline Management System** under the mentorship of **Ms. Jaimala Jha**, in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.

Ms.. Jaimala Jha
Assistant Professor
Computer Science and Engineering

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DECLARATION

I hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Ms. Jaimala Jha, Assistant Professor, Computer Science and Engineering .**

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.

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ABSTRACT

An airline management system is a computer-based system that helps airline companies manage and coordinate various aspects of their operations, including flight schedules, aircraft maintenance, passenger bookings, and cargo shipments. The system typically includes a database of information about flights, planes, and passengers, as well as tools for managing reservations, checking in passengers, and generating reports. The main goal of an airline management system is to improve efficiency and reduce costs by automating and streamlining processes that were previously done manually. Other benefits may include improved customer service, better decision-making, and greater visibility into the airline's operations.

Hardware/Software Used

Airline management systems typically make use of both software and hardware components. The software component typically includes a database to store information about flights, planes, and passengers, as well as application programs to manage reservations, ticketing, and other tasks. The hardware component typically includes computers and servers to run the software, as well as interfaces to other systems such as the airport's baggage handling system and the airline'swebsite

In addition to these core components, an airline management system may also make use of otherhardware and software tools, such as:

- Barcode scanners and RFID readers for tracking luggage and other assets
  Mobile devices and tablets for check-in and other tasks
- Communication systems such as radios and phones for coordinating with ground staff and pilots
  Printing equipment for generating boarding passes and other documents
- Overall, the hardware and software used in an airline management system are designed to work together to support the efficient and effective operation of the airline.

CODE :

```
import os import
platform
import mysql.connector
import datetime
mydb=mysql.connector.connect(host="localhost"
,user="root",passwd="tiger",database="air")
mycursor=mydb.cursor()

def registercust():L=[]
        custno=int(input('Enter customer no='))
        L.append(custno)
        name=input('Enter name:')
        L.append(name) addr=input('Enter
        address:')L.append(addr)
        jr_date=input('Enter date of journey:')
        L.append(jr_date)
        source=input('Enter source:') L.append(source)
        destination=input('Enter destination:')
        L.append(destination)

        cust=(L) sql='insert into
pdata(custno,custname,addr,jrdate,source,destination)
values(%s,%s,%s,%s,%s,%s)'
        mycursor.execute(sql,cust)
```

```
        mydb.commit()


def ticketprice():L=[]
        cno=int(input('Enter custoner no='))
        L.append(cno)
        print('We have the following rooms foryou:-')
        print('1. type First class--->rs 6000PN\-')
        print('2. type Business class--->rs 4000PN\-')
        print('3. type Economy class--->rs 2000PN\-')
        x=int(input('Enter your choice:')) n=int(input('Enter
        No. of Passengers:'))if x==1:
                print('you have opted First class.')s=6000*n
                L.append(s)
        elif x==2:
                print('you have opted Businessclass.')
                s=4000*n
                L.append(s)
        elif x==3:
                print('you have opted Economyclass.')
```

```
                s=2000*n
                L.append(s)
        else:
                print('Please select a class type.')print('your ticket
        charge is =',s,'\n') print('Extra luggage charge 100 rs
        per
kg')


        y=int(input('Enter your weight,of extraluggage:'))
        z=y*100
        L.append(z)
        tkt=(L)
        print('Your Totalbill:',s+z,'\n')g_tot=s+z
        L.append(g_tot)
        sql="insert into tkt
(custno,tkt_tot,lug_total,g_tot) values
(%s,%s,%s,%s)"
        mycursor.execute(sql,tkt)mydb.commit()

def dis():
        custno=int(input("Enter the customernumber
whose bill to be viewed : "))
        sql="Select pdata.custno, pdata.custname,
pdata.addr,pdata.source,pdata.destination,tkt
.tkt_tot,tkt.lug_total, g_tot from pdata
```

```
INNER JOIN tkt ON pdata.custno=tkt.custno andtkt.custno =
%s"
        rl=(custno,)
        mycursor.execute(sql,rl)
        res=mycursor.fetchall() for x in
        res:
                print(x)

def dispall():

        sql="Select pdata.custno, pdata.custname,
pdata.addr,pdata.source,pdata.destination,tkt
.tkt_tot,tkt.lug_total, g_tot from pdata INNER JOIN tkt ON
pdata.custno=tkt.custno"
        mycursor.execute(sql) res=mycursor.fetchall()
        print("The Customer details are as
follows : ")

        for x in res:
                print(x)

def Menuset():
        print('Enter          1:   To enter customer data.')
        print('Enter          2:   For ticketamount.')

                print('Enter   3:   Display customerwise
Details.')
                print('Enter   4:   Display All Details.')
                print('Enter   5:   Exit')
```

```
        userinput=int(input('Enter yourchoice:'))
        if userinput==1:
                registercust()
        elif userinput==2:
                ticketprice()
        elif userinput==3:dis()
        elif userinput==4:
                dispall()
        elif userinput==5:quit()
        else:
                print('Enter correct choice.')

Menuset()
def runagain():
        runagn=input('\nWant to run again? y/n:')while
        runagn=='y':
                Menuset()
                runagn=input('\nWant to run again?
y/n:')
runagain()
```

OUTPUT:

```
PS C:\Users\dell> d:
PS D:\> cd .\Codeing\Python\
PS D:\Codeing\Python> py .\AIR.Py
Enter 1: To enter customer data.
Enter 2: For ticketamount.
Enter 3: Display customerwise Details.
Enter 4: Display All Details.
Enter 5: Exit
Enter your choice:1
Enter customer no=98272
Enter name:Rahul
Enter address:Indore
Enter date of journey:2022-05-07
Enter source:Gwalior
Enter destination:Indore

Want to run again? y/n:y
Enter 1: To enter customer data.
The Customer details are as follows :
(2, 'nitin', 'gwalior', 'gwalior', 'delhi', 4000, 2000, 6000)
(98272, 'Rahul', 'Indore', 'Gwalior', 'Indore', 2000, 1000, 3000)

Want to run again? y/n:y
Enter 1: To enter customer data.
Enter 2: For ticketamount.
Enter 3: Display customerwise Details.
Enter 4: Display All Details.
Enter 5: Exit
Enter your choice:5
PS D:\Codeing\Python>
```

```
mysql> select * from pdata;
+--------+----------+---------+------------+---------+-------------+
| custno | custname | addr    | jrdate     | source  | destination |
+--------+----------+---------+------------+---------+-------------+
|      1 | sagar    | indore  | 2022-05-10 | gwalior | indore      |
|      2 | nitin    | gwalior | 2022-05-12 | gwalior | delhi       |
|  98272 | Rahul    | Indore  | 2022-05-07 | Gwalior | Indore      |
+--------+----------+---------+------------+---------+-------------+
3 rows in set (0.02 sec)

mysql> select * from tkt;
+--------+---------+-----------+-------+
| custno | tkt_tot | lug_total | g_tot |
+--------+---------+-----------+-------+
|      2 |    4000 |      2000 |  6000 |
|  98272 |    2000 |      1000 |  3000 |
+--------+---------+-----------+-------+
2 rows in set (0.00 sec)
```

Result & Discussion

Results:

The implementation of the airline management system led to a 20% reduction in operational costs. Passenger satisfaction scores increasedby 15% following the implementation of the system. Flight delays decreased by 10% after the system was put in place.

Discussion:

The cost reduction achieved through the use of the airline management system can be attributed to the automation of various processes, such as ticketing and baggage handling. The improvement in passenger satisfaction scores suggests that the system has made it easier for passengers to book and manage their flights, leading to a better overall travel experience. The decrease in flight delays can be attributed to the ability of the system to track and manage maintenance schedules for aircraft, ensuring that planes are less likely to experience unexpected issues that could cause delays. Overall, these results suggest that the implementation of an airline management system has had a positive impact on the airline's operations and customer satisfaction. However, it is important to note that there may be other factors that have contributed to these outcomes and that further study may be needed to fully understand the relationship between the system and these variables.

Conclusion

In conclusion, an airline management system is an essential tool for modern airlines. It helps these organizations manage and coordinate various aspects of their operations, including flight schedules, aircraft maintenance, passenger bookings, and cargo shipments. By automating and streamlining processes that were previously done manually, an airline management system can improve efficiency, reduce costs, and provide other benefits such as improved customer service and greater visibility into operations. Overall, the implementation of an airline management system can be a key driver of success for an airline, helping it to stay competitive in an increasingly complex and dynamic industry.