## **COMPUTER LAB REPORT**

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## **SYNOPSIS**

FLIGHT MANAGEMENT SYSTEM, is an application that helps to manage flights and to handle all flight related activities whether online or offline.

The flight manager finds it difficult to handle a large volume of flight records when it is present in an MS excel application stored in tabular data having a large amount of data.

The proposed system is designed with python IDLE as front end and MYSQL as back end, which will handle all the required operations automatically in which front end applications handles at the execution level and back-end application handles at the storage level.

#### **Operations executed:**

- Inserting a Flight Record with the attributes like, flight ID, flight Name, from, to and
- Date of departure.
- Bill Amount
- Removing an existing patient Record.
- Update the doctor.
- Updating the patient details.
- Display a flight record based on the name.
- Display all the flight records.

- The new system will allow the flight manager to handle large volume of data in effective
- manner and to generate the different types of reports for making analysis and decisions.
- It will deny any duplication of records in the system so that the system should be in a consistent state.

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## **ABOUT PYTHON**

Python was created by <u>Guido van Rossum</u>, and first released on February 20, 1991. While you may know the python as a large snake, the name of the Python programming language comes from an old BBC television comedy sketch series called *Monty Python's Flying Circus*.

Python is omnipresent, and people use numerous

Python-powered devices on a daily basis, whether they realize it
or not. There are billions of lines of code written in Python, which
means almost unlimited opportunities for code reuse and
learning from well-crafted examples. What's more, there is a
large and very active Python community, always happy to help.

There are also a couple of factors that make Python great for learning:

- It is easy to learn the time needed to learn Python is shorter than for many other languages; this means that it's possible to start the actual programming faster;
- It is easy to use for writing new software it's often possible to write code faster when using Python;
- It is easy to obtain, install and deploy Python is free, open and multiplatform; not all languages can boast that.

Programming skills prepare you for careers in almost any industry, and are required if you want to continue to more advanced and higher-paying software development and engineering roles. Python is the programming language that opens more doors than any other. With a solid knowledge of Python, you can work in a multitude of jobs and a multitude of industries. And the more you understand Python, the more you can do in the 21st Century. Even if you need it

# **ABOUT MYSQL**

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold the vast amounts of information in a corporate network. In particular, a relational database is a digital store collecting data and organizing it according to the relational model. In this model, tables consist of rows and columns, and relationships between data elements all follow a strict logical structure. An RDBMS is simply the set of software tools used to actually implement, manage, and query such a database.

MySQL is integral to many of the most popular software stacks for building and maintaining everything from customer-facing web applications to powerful, data-driven B2B services. Its open-source nature, stability, and rich feature set, paired with ongoing development and support from Oracle, have meant that internet-critical organizations such as Facebook, Flickr, Twitter, Wikipedia, and YouTube all employ MySQL backends.

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# **SYSTEM REQUIREMENTS**

#### **HARDWARE REQUIREMENTS:**

PROCESSOR:Intel(R) Core™ i5-250M CPU @ 2.50 GHz

RAM:4.00 GB

**MONITOR: Dell N5110-PC** 

**OPERATING SYSTEM - 64-bit operating system** 

#### **SOFTWARE REQUIREMENT:**

FRONT END: python 3.7.4 IDLE

BACK END: MySql 5.5 command client

### **SOURCE CODE**

```
import mysql.connector as sql
ch='y'
while ch=='y':
 print('Options are:')
 print('1. Add')
 print('2. Delete')
 print('3. Update')
  print('4. Search')
 print('5. Display the table')
 ch=int(input('Enter your choice:'))
  if ch==1:
mydb=sql.connect(host='localhost',user='root',passwd='Mysql',database='mk12a')
   c=mydb.cursor()
   n=int(input('Enter Flight ID:'))
   name=input('Enter Flight Name:')
   f_from=input('Enter Departure location:')
   f_to=input('Enter Arrival location:')
   date=input('Enter Date:')
   price=float(input('Enter Price:'))
   c.execute("insert into flights
values({},'{}','{}','{}','{}','{}')".format(n,name,f_from,f_to,date,price))
   mydb.commit()
   c.close()
```

```
print('Record is added')
 elif ch==2:
mydb=sql.connect(host='localhost',user='root',passwd='Mysql',database='mk12a')
   c=mydb.cursor()
   n=int(input('Enter Flight ID:'))
   c.execute('delete from flights where flight_id={}'.format(n))
   mydb.commit()
   c.close()
      print('Record is deleted')
 elif ch==3:
mydb=sql.connect(host='localhost',user='root',passwd='Mysql',database='mk12a')
   c=mydb.cursor()
   n=int(input('Enter Flight ID:'))
   name=input('Enter Flight Name:')
   c.execute("update flights set flight_name='{}' where
flight_id={}".format(name,n))
   mydb.commit()
   c.close()
 elif ch==4:
mydb=sql.connect(host='localhost',user='root',passwd='Mysql',database='mk12a')
   c=mydb.cursor()
   n=int(input('Enter Flight ID:'))
   c.execute('select * from flights where flight_id={}'.format(n))
```

```
rec=c.fetchall()
      for i in rec:
      print(i)
   c.close()
 elif ch==5:
mydb=sql.connect(host='localhost',user='root',passwd='Mysql',database='mk12a')
   c=mydb.cursor()
   c.execute('select * from flights')
   rec=c.fetchall()
      for i in rec:
      print(i)
   c.close()
 else:
   print('Wrong Choice')
 ch=input('Do you want to continue y/n:')
```

## **ORIGINAL TABLE:**

```
mysql> select * from flights;
 flight_id | flight_name
                              | f_from | f_to
                                                     date_of_departure
                                                                         price
                                                                           8375.00
        101
              Salam Air
                                Muscat
                                         Dubai
                                                     2023-10-14
        102
              Etihad Airways
                                Dubai
                                         Muscat
                                                     2023-10-24
                                                                           4225.00
        103
              Air India
                                Muscat
                                         Mumbai
                                                     2023-05-17
                                                                           7200.00
        104
              Oman Air
                                         Delhi
                                                     2023-07-05
                                                                          26000.00
                                Muscat
        105
              Delta
                                Mumbai
                                         New York
                                                     2023-06-30
                                                                          40000.00
5 rows in set (0.04 sec)
mysql>
```

#### **OUTPUT WITHOUT CHOICE:**

== RESTART: C:\Users\mkazi\AppData\Local\Programs\Python\Python311\project.py ==
Options are:

- 1. Add
- 2. Delete
- 3. Update
- 4. Search
- 5. Display the table Enter your choice:

#### **CODE FOR INSERT:**

```
Options are:

1. Add

2. Delete

3. Update

4. Search

5. Display the table
Enter your choice:1
Enter Flight ID:106
Enter Flight Name:Vistara
Enter Departure location:Kashmir
Enter Arrival location:Mumbai
Enter Date:2023-01-26
Enter Price:8295.00
Record is added
Do you want to continue y/n:
```

#### **OUTPUT:**

flight_id	flight_name	f_from	f_to	date_of_departure	price
101	Salam Air	Muscat	Dubai	2023-10-14	8375.06
102	Etihad Airways	Dubai	Muscat	2023-10-24	4225.00
103	Air India	Muscat	Mumbai	2023-05-17	7200.00
104	Oman Air	Muscat	Delhi	2023-07-05	26000.00
105	Delta	Mumbai	New York	2023-06-30	40000.00
106	Vistara	Kashmir	Mumbai	2023-01-26	8295.00

#### **CODE FOR DELETE:**

```
Options are:
```

- 1. Add
- 2. Delete
- 3. Update
- 4. Search
- 5. Display the table

Enter your choice:2

Enter Flight ID:106

Record is deleted

Do you want to continue y/n:

### **OUTPUT:**

```
mysql> select * from flights;
 flight_id | flight_name
                             date_of_departure
                                       Dubai
             Salam Air
                              Muscat
                                                  2023-10-14
                                                                       8375.00
       102
             Etihad Airways
                              Dubai
                                       Muscat
                                                  2023-10-24
                                                                       4225.00
                                       Mumbai
       103
             Air India
                                                  2023-05-17
                              Muscat
                                                                       7200.00
             Oman Air
                                       Delhi
                                                                      26000.00
       104
                              Muscat
                                                  2023-07-05
                              Mumbai
       105
             Delta
                                       New York
                                                                      40000.00
                                                  2023-06-30
5 rows in set (0.00 sec)
mysql>
```

#### **CODE FOR UPDATE:**

```
Options are:
1. Add
2. Delete
3. Update
4. Search
5. Display the table
Enter your choice:3
Enter Flight ID:105
Enter Flight Name:KLM
Do you want to continue y/n:
```

#### **OUTPUT:**

flight_id	flight_name	f_from	f_to	date_of_departure	price
101	Salam Air	Muscat	Dubai	2023-10-14	8375.00
102	Etihad Airways	Dubai	Muscat	2023-10-24	4225.00
103	Air India	Muscat	Mumbai	2023-05-17	7200.00
104	Oman Air	Muscat	Delhi	2023-07-05	26000.00
105	KLM	Mumbai	New York	2023-06-30	40000.00

#### **CODE FOR SEARCH:**

```
Options are:

1. Add
2. Delete
3. Update
4. Search
5. Display the table
Enter your choice:4
Enter Flight ID:104
(104, 'Oman Air', 'Muscat', 'Delhi', datetime.date(2023, 7, 5), 26000.0)
Do you want to continue y/n:
```

#### **CODE FOR DISPLAYING THE TABLE:**

```
Options are:

1. Add

2. Delete

3. Update

4. Search

5. Display the table
Enter your choice:5

(101, 'Salam Air', 'Muscat', 'Dubai', datetime.date(2023, 10, 14), 8375.0)

(102, 'Etihad Airways', 'Dubai', 'Muscat', datetime.date(2023, 10, 24), 4225.0)

(103, 'Air India', 'Muscat', 'Mumbai', datetime.date(2023, 5, 17), 7200.0)

(104, 'Oman Air', 'Muscat', 'Delhi', datetime.date(2023, 7, 5), 26000.0)

(105, 'KLM', 'Mumbai', 'New York', datetime.date(2023, 6, 30), 40000.0)

Do you want to continue y/n:
```

### **BIBLIOGRAPHY**

- https://www.python.org/
- <a href="https://www.mysql.com/">https://www.mysql.com/</a>
- https://pythoninstitute.org/about-python#:~:text=Python%20was %20created%20by%20Guido,called%20Monty%20Python's%20Fl ying%20Circus
  - <a href="https://www.talend.com/resources/what-is-mysql/">https://www.talend.com/resources/what-is-mysql/</a>