About Project

In this project we have given an insight to the development of a computer based database titled "Parcel Management". This is a Courier service Parcel Management System Project. This is a web-based project and its main purpose is to offer an automated platform for courier services to manage and track parcels information. This project has a simple user interface and user-friendly functionalities of the given project.

Frontend (UI) : Python (3.10.2)

Backend (Programming Language): Python (3.10.2)

Database : MySQL (8.0.28)

Python download link : https://www.python.org/downloads/

MySQL download link : https://dev.mysql.com/downloads/mysql/

Objective of the Project:

- Even a non-technical user can use the system effectively and without any difficulty.
- It is upgradeable. Hence further enhancement to the system is possible.
- The system maintains speed and accuracy with eye-catching GUI.

References/Bibliography

- <u>www.scribd.com/document/348228893/The-Transport-Management-System</u>
- https://www.w3schools.com/sql
- Sumita Arora Text Book for Class XII

Database Designs

```
Enter password: ********
Welcome to the MySQL monitor. Commands end with ; or g.
Your MySQL connection id is 187
Server version: 8.0.25 MySQL Community Server - GPL
Copyright (c) 2000, 2021, Oracle and/or its affiliates.
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> use pms;
Database changed
mysql> show tables;
  Tables_in_pms |
 pinfo
 ratelist
2 rows in set (0.01 sec)
mysql> desc pinfo;
                            | Null | Key | Default | Extra
 Field
            Type
                                           NULL
  pid
             int
                             NO
                                     PRI
             varchar(256)
                              YES
                                           NULL
  radd
  rmob
             char(10)
                             YES
                                           NULL
  dispatchd | date
                              YES
                                           NULL
                              YES
  pweight
              int
                                           NULL
              decimal(10,2)
                              YES
                                           NULL
  pamt
  sadd
             varchar(256)
                              YES
                                           NULL
                             YES
  smob
            | char(10)
                                         NULL
8 rows in set (0.01 sec)
mysql> desc ratelist;
 Field | Type
                        | Null | Key | Default | Extra
  sn
          int
                         NO
                                 PRI |
                                      NULL
                                                 auto_increment
 wf
          int
                         YES
                                       NULL
         int
                         YES
                                       NULL
 wt
 rate | decimal(10,2) | YES
4 rows in set (0.00 sec)
```

Setting the connection between Python and RDBMS(MySQL)

```
import mysql.connector
from tabulate import tabulate

con=mysql.connector.connect(host="localhost",user="root",password="Admin@1234",database="pms")

cur=con.cursor()
```

Python Program Code

#pMgtSys.py

```
import orderMgt
import mysql.connector
con=mysql.connector.connect(host="localhost",user="root",password="Admin@1234")
cur=con.cursor()
cur.execute("create database if not exists pms;")
cur.execute('use pms')
cur.execute("create table if not exists pinfo(pid int primary key,radd varchar(256),rmob
char(10), dispatchd date,
pweight int,pamt decimal(10,2),sadd varchar(256),smob char(10));"')
while True:
  print('-----'WELCOME TO INSTANT PARCEL SERVICES-----')
  print('here is the list of operations:')
  print("1. ORDER MGT 2. RATE LIST 3. EXIT")
  op=input('enter your choice: ')
  if op=='1':
    print("1.Placing order\n 2.Search order\n 3.Edit order details\n 4.Display all details\n 5.Delete
order")
    cho=input("enter your choice: ")
    if cho=='1':
       orderMgt.add()
    elif cho=='2':
       orderMgt.search()
    elif cho=='3':
       orderMgt.edit()
    elif cho=='4':
       orderMgt.dispall()
    elif cho=='5':
       orderMgt.delete()
    else:
       print("Wrong choice entered")
```

```
if op=='2':
    orderMgt.ratelist()
```

#orderMgt.py

```
import mysql.connector
from tabulate import tabulate
con=mysql.connector.connect(host="localhost",user="root",password="Admin@1234",database="p
ms")
cur=con.cursor()
def add():
  while True:
       cur.execute("select max(pid) from pinfo;")
       pid=cur.fetchone()[0]
       if pid:
         pid=pid+1;
       else:
         pid=301
       pamt=0
       radd=input("Enter Receiver's Address(with name):")
       rmob=input("Enter Receiver's Mobile No:")
       pweight=int(input("Enter the weight of the parcel(in kg):"))
       if (pweight>0 and pweight<=5):
         pamt=pamt+(pweight*50)
       elif (pweight>5 and pweight<=10):
         pamt=pamt+(pweight*70)
       elif pweight>10:
         pamt=pamt+(pweight*100)
       else:
         print("Invalid Input")
         break
       print("Total payable amount is",pamt)
       ch=input("You want to proceed(Y/N)")
       if ch in['Y', 'y']:
         sadd=input("Enter Sender's address(with name):")
         smob=input("Enter sender's Mobile No:")
         cur.execute("insert
                                                                                              pinfo
                                                           into
values({},'{}','{}',curdate(),{},{},'{}','{}');".format(pid,radd,rmob,pweight,pamt,sadd,smob))
         con.commit()
         print("Parcel Information added successfully!")
       status=input("Do you want to proceed another records(Y/N):\t")
       if status in ['n','N']:
         break
def search():
    pid=int(input("Enter Packet Id whose information is to be searched:"))
    print()
```

```
cur.execute("select * from pinfo where pid={};".format(pid))
     rec=cur.fetchall()
     if rec:
       print(tabulate(rec,headers=["pid","radd","rmob","dispatchd
date","pweight","pamt","sadd","smob"],tablefmt="psql"))
       print()
     else:
       print("Record not found for the entered Packet Id!")
def edit():
     pid=int(input("Enter Packet Id whose information is to be edited:"))
     cur.execute("select * from pinfo where pid={};".format(pid))
     rec=cur.fetchall()
     if rec:
       print(tabulate(rec,headers=["pid","radd","rmob","dispatchd
date","pweight","pamt","sadd","smob"],tablefmt="psql"))
       print()
       smob=input("Enter updated Mobile No of Sender:")
       rmob=input("Enter updated Mobile No of receiver:")
       cur.execute("update pinfo set smob='{}',rmob='{}' where pid={};".format(smob,rmob,pid))
       con.commit()
       print()
       print("Information for entered Packet Id is edited successfully!")
       print()
     else:
       print("Record not found for the entered Packet Id!")
       print()
def dispall():
     cur.execute("select * from pinfo;")
     rec=cur.fetchall()
    if rec:
       print(tabulate(rec,headers=["pid","radd","rmob","dispatchd
date","pweight","pamt","sadd","smob"],tablefmt="psql"))
       print()
     else:
       print("Table is empty:No record found!")
       print()
def delete():
     pid=int(input("Enter Packet Id whose information is to be deleted:"))
     cur.execute("select * from pinfo where pid={};".format(pid))
     rec=cur.fetchall()
    if rec:
```

```
print(tabulate(rec,headers=["pid","radd","rmob","dispatchd
date", "pweight", "pamt", "sadd", "smob"], tablefmt="psql"))
       print()
       cur.execute("delete from pinfo where pid={};".format(pid))
       con.commit()
       print("Information for the entered Packet Id is deleted successfully!")
       print()
    else:
       print("Record not found for the entered Packet Id!")
       print()
def ratelist():
  cur.execute("select * from ratelist;")
  rec=cur.fetchall()
  if rec:
    print(tabulate(rec,headers=["S.No.","Weight From(in Kg)","Weight To(in Kg)","Price(Per
Kg)"],tablefmt="psql"))
    print()
```

Output Screens:

1) **RATE LIST**:

```
======= RESTART: C:\Users\hp\Desktop\parcelMgtSys\pMgtSys.py ========
-----WELCOME TO INSTANT PARCEL SERVICES-----
here is the list of operations:
1. ORDER MGT 2. RATE LIST 3. EXIT
enter your choice: 2
| S.No. | Weight From(in Kg) | Weight To(in Kg) | Price(Per Kg) |
                                                       50 I
                      1 |
1 |
                                     10 |
2 |
                      6 |
                                                    70 I
3 |
                       11 |
                                     100 |
                                                      100 I
```

2) PLACING ORDER:

```
======= RESTART: C:\Users\hp\Desktop\parcelMgtSys\pMgtSys.py =========
-----WELCOME TO INSTANT PARCEL SERVICES-----
here is the list of operations:
1. ORDER MGT 2. RATE LIST 3. EXIT
enter your choice: 1
1.Placing order
 2.Search order
 3.Edit order details
 4.Display all details
 5.Delete order
enter your choice: 1
Enter Receiver's Address(with name): lalit kumar , 45(A), vaishali colony, delhi
Enter Receiver's Mobile No:9512357486
Enter the weight of the parcel(in kg):8
Total payable amount is 560
You want to proceed (Y/N) y
Enter Sender's address (with name): suresh, 48, panchwati colony, bulandshahr
Enter sender's Mobile No:7412369852
Parcel Information added successfully!
Do you want to proceed another records (Y/N): n
```

3) **DISPLAY FUNCTION**:

```
======= RESTART: C:\Users\hp\Desktop\parcelMgtSys\pMgtSys.py =========
------WELCOME TO INSTANT PARCEL SERVICES---
here is the list of operations:
1. ORDER MGT 2. RATE LIST 3. EXIT
enter your choice: 1
1.Placing order
2.Search order
3.Edit order details
4.Display all details
5.Delete order
enter your choice: 4
                                                   rmob | dispatchd date | pweight | pamt | sadd
| pid | radd
               smob |
        - 1
  301 | kunal,481/a,subhash nagar,delhi
                                            | 9874563219 | 2022-04-08 | 2 | 100 | jayant
         | 9852003674 |
                                                                        1
| 302 | :priyansh , 78-b vimal appartments,karnal | 7894561230 | 2022-04-08
                                                                                 3 | 150 | sohan, 49-c, jagatpurs
         | 7418529632 |
| 303 | reena,459, junction road,khurja
                                            | 9852314567 | 2022-04-08
                                                                         1
                                                                                   9 | 630 | heena
         | 7536984125 |
  304 | suhail, 481c, gandhi colony, meerut | 7895236410 | 2022-04-08
                                                                        1
                                                                                 5 | 250 | ali
         I 7456982310 I
 305 | lalit kumar , 45(A), vaishali colony, delhi | 9512357486 | 2022-04-08
                                                                        8 | 560 | suresh, 48, panchwati colony,
bulandshahr | 7412369852 |
```

4) EDIT FUNTION:

```
------WELCOME TO INSTANT PARCEL SERVICES-----
here is the list of operations:
1. ORDER MGT 2. RATE LIST 3. EXIT
enter your choice: 1
1.Placing order
 2.Search order
3.Edit order details
 4.Display all details
 5.Delete order
enter your choice: 3
Enter Packet Id whose information is to be edited: 302
| pid | radd
                                   | rmob | dispatchd date | pweight | pamt | sadd
302 | :priyansh , 78-b vimal appartments,karnal | 7894561230 | 2022-04-08 |
                                                                3 | 150 | sohan, 49-c, jagatpurs | 7418
<u>+-----</u>
Enter updated Mobile No of Sender:8523258854
Enter updated Mobile No of receiver: 7854123698
Information for entered Packet Id is edited successfully!
```

5) **DELETE FUNTION**: