Assignment- 10

ELP - 718 Telecom Software Laboratory

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2019JTM2674
2019-21

A report on Python with MySQL

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October 16, 2019

Contents

Objective Statement

To test our understanding on implementation of mysql using python.
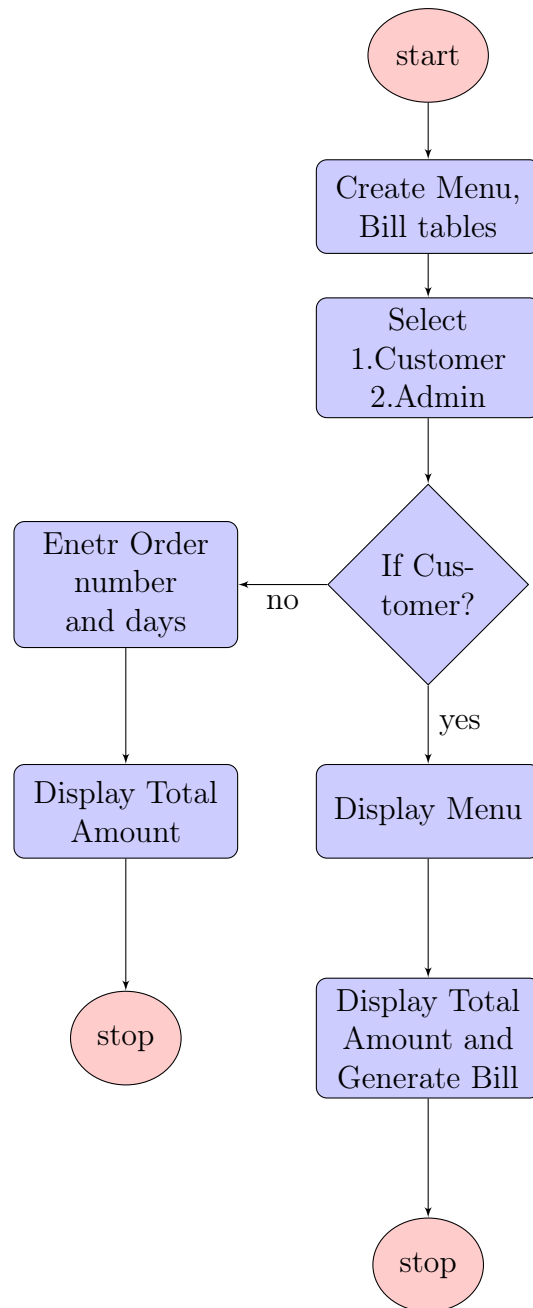
1 Problem Statement -1

To design a Database system for Restaurant Billing management which holds the details of customers on various days.

1.1 Problem Satement

1.2 Algorithm and Implementation

- Create Menu table with existing entries

- Create Bill table with no entries

- Design a menu for admin and customer

- For customer, display a menu

- Customer can chose items from menu

- Upon confirmation generate bill

- For admin, ask order number to dispaly respective order

- Admin can know bill amount in last n dayys by entering n

1.3   Flowchart

start

Create Menu,
Bill tables

Select
1.Customer
2.Admin

If Customer?

Enetr Order
number
and days

no

yes

Display Menu

Display Total
Amount

Display Total
Amount and
Generate Bill

stop

stop

1.4 Test Cases

1.4.1 Input

Enter
1.Customer
2.Admin

1.4.2 Output

Select an option 1.Customer
2.Admin1
Enter Customer name : Krishna
Menu
(1, 'Idli', 30, 49)
(2, 'Dosa', 60, 40)
(3, 'Paneer Butter Masala', 130, 20)
(4, 'Tawa Roti', 8, 500)
(5, 'Fried Rice', 80, 100)
(6, 'Veg Thali', 100, 53)
(7, 'Wada Paav', 12, 3)
(8, 'Ice Tea', 50, 5)
(9, 'Cappuccino', 60, 33)
(10, 'Cafe Latte', 80, 29)
Enter Item Id
Item Available
Enter Quantity of Selected Item2
Idli 30
47
Do you eant to continue ?
1.Yes
2.Done1
Selected Items:
1, 'Idli', 30, 49
3, 'Paneer Butter Masala', 130, 20
The Total Amount is : 320
Do you want confirm order ?
1.Confirm
2.Edit1
order number 0001

1.5 Screenshots

1.5.1 Screenshot1

```
krishna@machine0:~/Desktop/jktm19207_10$ ./ps1.py
Select an option 1.Customer
2.Admin1
Enter Customer name : Krishna
Menu
(1, 'Idli', 30, 49)
(2, 'Dosa', 60, 40)
(3, 'Paneer Butter Masala', 130, 20)
(4, 'Tawa Roti', 8, 500)
(5, 'Fried Rice', 80, 100)
(6, 'Veg Thali', 100, 53)
(7, 'Wada Paav', 12, 3)
(8, 'Ice Tea', 50, 5)
(9, 'Cappuccino', 60, 33)
(10, 'Cafe Latte', 80, 29)
Enter Item Id1
Item Available
Enter Quantity of Selected Item2
Idli 30
47
Do you eant to continue ?
1.Yes
2.Done1
Enter Item Id3
Item Available
Enter Quantity of Selected Item2
Paneer Butter Masala 130
18
Do you eant to continue ?
1.Yes
2.Done2
Selected Items:
[(1, 'Idli', 30, 49)]
[(3, 'Paneer Butter Masala', 130, 20)]
The Total Amount is : 320
Do you want confirm order ?
1.Confirm
2.Edit1
order number  0001
```

1.5.2 Screenshot2

```
Select an option 1.Customer
2.Admin2
Enter password
Password:
login Successfull
Enter order number: 0001
[(1, 1, 30, None, datetime.datetime(2019, 10, 16, 14, 28, 29))]
Enter number of days2
[]
(Decimal('350'),)
Total amount in last 2 day is (Decimal('350'),)
```

Appendices

Problem 1

code:

```python
#!/usr/bin/python3
import pymysql
import getpass
# Open database connection
mydb = pymysql.connect(
  host="localhost",
  user="root",
  passwd="root",
  database="billing_mgmt"
)
# prepare a cursor object using cursor() method
mycursor = mydb.cursor()
serial_number = 0

#Menu for customer
option = int(input("Select an option 1.Customer\n2.Admin\n"))
total_list=[]
amount = 0
k=0
if(option==1):
    cust_name = input("Enter Customer name : ")
    print("Menu")
    mycursor.execute("select * from Menu")
    items=mycursor.fetchall()
    for item in items:
        print(item)

while option==1:
    select_item_id = int(input("Enter Item_Id"))
    mycursor.execute("select Item_Id from Menu")
    Item_Id = mycursor.fetchall()
    Item_Id_list = [row[0] for row in Item_Id]
    #print(Item_Id_list)
    flag = 2
    for num in Item_Id_list:
        if num == select_item_id:
```

```
            flag=1
            break
#Checking If item exists
if flag == 1:
    print("Item Available")
if flag==2:
    print("Item Not Available.\nPlease select available item")
    continue


select_quantity = int(input("Enter Quantity of Selected Item"))
k = (select_item_id)
# execute SQL query using execute() method.
mycursor.execute("select Available_quantity from Menu where Item_ID ='%d'"%(select_i
select_row = list(mycursor.fetchone())
qua_flag=1

if int(select_row[0]) < select_quantity:
    qua_flag=2

if qua_flag == 2 :
    print("Selected Quantity abone limit.\n Please select with in limit")
    continue

mycursor.execute("select * from Menu where Item_ID ='%d'"%(select_item_id))
select_list = list(mycursor.fetchall())
#print(select_list)
print(select_list[0][1],select_list[0][2])
amount = amount + int(select_list[0][2])*select_quantity
k=k+1
total_list.append(select_list)
new_ava_qua = select_row[0] - select_quantity
print(new_ava_qua)
# execute SQL query using execute() method.
mycursor.execute("update Menu set Available_quantity = '%d' where Item_ID ='%d'"%(ne
choice = int(input("Do you eant to continue ?\n1.Yes\n2.Done\n"))
if choice==1:
    continue

if choice ==2:
    print("Selected Items:")
    for x in total_list:
```

```python
            print(x)
        print("The Total Amount is :",amount)
        con =int(input("Do you want confirm order ?\n1.Confirm\n2.Edit\n"))
    #Confirmation Block
    if con==1:
        serial_number=serial_number+1
        p=str(serial_number)
        print("order number ",p.zfill(4))
        # execute SQL query using execute() method.
        mycursor.execute("Insert into bill (item_id,total_amt,nmae) values (%d,%d,'%s')"
        #mydb.commit()
        break
    elif con==2:
        continue
#Admin Block
if option == 2:
    print("Enter password")
    passw = getpass.getpass()
    if passw == "password":
        print("login Successfull")
        order_no = int(input("Enter order number: "))
        # execute SQL query using execute() method.
        mycursor.execute("select * from bill where serial_id ='%d'"%(order_no))
        select_list = list(mycursor.fetchall())
        print(select_list)

days = input("Enter number of days\n")
mycursor.execute("select time from bill where time between '2019-10-15' and '2019-10-10'
date = list(mycursor.fetchall())
#Calculating total amount in days
mycursor.execute("select SUM(total_amt) from bill")
t_a = list(mycursor.fetchall())
print("Total amount in last", days,"day is",t_a[0])
```

References

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