PyCode Project Report

Restaurant Billing System

by

Abhishek Murali, Roll number: 02

Mahek Desai, Roll number: 20

Mahendra Jadav, Roll number: 36

Sheldon Kotian, Roll number: 45

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I. Introduction of Topic

This project- “Restaurant Management System” serves the best way of maintaining customer's bill and caters their needs. The project Restaurant Billing System helps us to manage the Restaurants billing and ordering statistics. This is helpful for the restaurant staff or admin for billing of food ordered and managing about the details regarding the customers. This application can be accessed by only staff and admin, Members can't access it directly.

The project is very useful for those who want to know about Restaurants Billing System This application maintains the information related to Customers, and Sales etc. We also have added about the GST calculation of every food item. GST can be issued according to Govt specified categories of all the food items with inclusion of the Hotel Tax and Service Pay.

While totaling the system will automatically add up all the amount and present a bill. All basic requirements for the Restaurants Billing System has been presented in this project.

II. Problem and Solution

Problem 1: We cannot update the prices of the items.

Sol.: You have to update the price by changing the code.

Problem 2: The total amount of the bill is a float number.

Sol.: You need to round off the number.

Problem 3: Random function is used for the order number.

Sol.: You need to number those bills by self.

III. Source Code

```
from tkinter import*
import random
import time
root = Tk ()
root.geometry("1000x700+0+0")
root.title("Restaurant Billing System")
root.configure(bg="#FF9A84")
Tops = Frame (root, bg="black”, width = 1600, height=50,relief=SUNKEN)
Tops.pack(side=TOP)
f1 = Frame (root, width = 900, height=700, relief=SUNKEN ,bg="#FF9A84")
f1.pack(side=LEFT)
#------------------TIME--------------
localtime=time.asctime(time.localtime(time.time()))
#-----------------INFO TOP------------
lblinfo = Label(Tops, font=( 'aria' ,30, 'bold' ),text="Restaurant Billing
System",fg="black",bg="#FF9A84",bd=10,anchor='w')
lblinfo.grid(row=0,column=0)
lblinfo = Label(Tops, font=( 'aria' ,20,),text=localtime,fg="black",bg="#FF9A84",anchor=W)
lblinfo.grid(row=1,column=0)
def  btnclick(numbers):
    global operator
    operator=operator + str(numbers)
    text_Input.set(operator)

def clrdisplay():
    global operator
```

```
    operator=""
    text_Input.set("")

def eqals():
    global operator
    sumup=str(eval(operator))

    text_Input.set(sumup)
    operator = ""

def Ref():
    x=random.randint(12980, 50876)
    randomRef = str(x)
    rand.set(randomRef)

    cof =float(Fries.get())
    colfries= float(Largefries.get())
    cob= float(Burger.get())
    cofi= float(Filet.get())
    cochee= float(Cheese_burger.get())
    codr= float(Drinks.get())

    costoffries = cof*25
    costoflargefries = colfries*40
    costofburger = cob*35
    costoffilet = cofi*50
    costofcheeseburger = cochee*50
    costofdrinks = codr*35

    costofmeal = "Rs.",str('%.2f'% (costoffries +  costoflargefries + costofburger + costoffilet
+ costofcheeseburger + costofdrinks))
```

```
    PayTax=((costoffries +  costoflargefries + costofburger + costoffilet +  costofcheeseburger
+ costofdrinks)*0.33)
    Totalcost=(costoffries +  costoflargefries + costofburger + costoffilet  +
costofcheeseburger + costofdrinks)
    Ser_Charge=((costoffries +  costoflargefries + costofburger + costoffilet +
costofcheeseburger + costofdrinks)/99)
    Service="Rs.",str('%.2f'% Ser_Charge)
    OverAllCost="Rs.",str( PayTax + Totalcost + Ser_Charge)
    PaidTax="Rs.",str('%.2f'% PayTax)


    Service_Charge.set(Service)
    cost.set(costofmeal)
    Tax.set(PaidTax)
    Subtotal.set(costofmeal)
    Total.set(OverAllCost)



def qexit():
    root.destroy()


def reset():
    rand.set("")
    Fries.set("")
    Largefries.set("")
    Burger.set("")
    Filet.set("")
    Subtotal.set("")
    Total.set("")
    Service_Charge.set("")
    Drinks.set("")
    Tax.set("")
```

```
    cost.set("")
    Cheese_burger.set("")


rand = StringVar()
Fries = StringVar()
Largefries = StringVar()
Burger = StringVar()
Filet = StringVar()
Subtotal = StringVar()
Total = StringVar()
Service_Charge = StringVar()
Drinks = StringVar()
Tax = StringVar()
cost = StringVar()
Cheese_burger = StringVar()


lblreference = Label(f1, font=( 'aria' ,16, 'bold' ),text="Order
No.",fg="black",bg="#FF9A84",bd=10,anchor='w')
lblreference.grid(row=0,column=0)
txtreference = Entry(f1,font=('ariel' ,16,'bold'), textvariable=rand ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')
txtreference.grid(row=0,column=1)

lblfries = Label(f1, font=( 'aria' ,16, 'bold' ),text="Fries
Meal",fg="black",bg="#FF9A84",bd=10,anchor='w')
lblfries.grid(row=1,column=0)
txtfries = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Fries ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')
txtfries.grid(row=1,column=1)
```

```
lblLargefries = Label(f1, font=( 'aria' ,16, 'bold' ),text="Lunch
Meal",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblLargefries.grid(row=2,column=0)

txtLargefries = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Largefries ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtLargefries.grid(row=2,column=1)



lblburger = Label(f1, font=( 'aria' ,16, 'bold' ),text="Burger
Meal",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblburger.grid(row=3,column=0)

txtburger = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Burger ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtburger.grid(row=3,column=1)


lblFilet = Label(f1, font=( 'aria' ,16, 'bold' ),text="Pizza
Meal",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblFilet.grid(row=4,column=0)

txtFilet = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Filet ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtFilet.grid(row=4,column=1)


lblCheese_burger = Label(f1, font=( 'aria' ,16, 'bold' ),text="Cheese
burger",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblCheese_burger.grid(row=5,column=0)

txtCheese_burger = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Cheese_burger ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtCheese_burger.grid(row=5,column=1)


#-----------------------------------------------------------------------------------

lblDrinks = Label(f1, font=( 'aria' ,16, 'bold'
),text="Drinks",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblDrinks.grid(row=0,column=2)
```

```
txtDrinks = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Drinks ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtDrinks.grid(row=0,column=3)


lblcost = Label(f1, font=( 'aria' ,16, 'bold'
),text="cost",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblcost.grid(row=1,column=2)

txtcost = Entry(f1,font=('ariel' ,16,'bold'), textvariable=cost ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtcost.grid(row=1,column=3)


lblService_Charge = Label(f1, font=( 'aria' ,16, 'bold' ),text="Service
Charge",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblService_Charge.grid(row=2,column=2)

txtService_Charge = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Service_Charge ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtService_Charge.grid(row=2,column=3)


lblTax = Label(f1, font=( 'aria' ,16, 'bold'
),text="Tax",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblTax.grid(row=3,column=2)

txtTax = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Tax ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtTax.grid(row=3,column=3)


lblSubtotal = Label(f1, font=( 'aria' ,16, 'bold'
),text="Subtotal",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblSubtotal.grid(row=4,column=2)

txtSubtotal = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Subtotal ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtSubtotal.grid(row=4,column=3)
```

```
lblTotal = Label(f1, font=( 'aria' ,16, 'bold'
),text="Total",fg="black",bg="#FF9A84",bd=10,anchor='w')

lblTotal.grid(row=5,column=2)

txtTotal = Entry(f1,font=('ariel' ,16,'bold'), textvariable=Total ,
bd=6,insertwidth=4,bg="#FF5733" ,justify='right')

txtTotal.grid(row=5,column=3)


#---------------------------------------buttons----------------------------------------

lblTotal = Label(f1,text="----------------------",fg="white")

lblTotal.grid(row=6,columnspan=3)


btnTotal=Button(f1,padx=16,pady=8, bd=10 ,fg="black",font=('ariel' ,16,'bold'),width=10,
text="TOTAL", bg="#EA6548",command=Ref)

btnTotal.grid(row=7, column=1)


btnreset=Button(f1,padx=16,pady=8, bd=10 ,fg="black",font=('ariel' ,16,'bold'),width=10,
text="RESET", bg="#EA6548",command=reset)

btnreset.grid(row=7, column=2)


btnexit=Button(f1,padx=16,pady=8, bd=10 ,fg="black",font=('ariel' ,16,'bold'),width=10,
text="EXIT", bg="#EA6548",command=qexit)

btnexit.grid(row=7, column=3)


def price():
   roo = Tk()
   roo.geometry("550x220+850+200")
   roo.configure(bg="#FF9A84")
   roo.title("Price List")
   lblinfo = Label(roo, font=('aria', 15, 'bold'), text="ITEM", fg="black",bg="#FF9A84",
bd=5)
   lblinfo.grid(row=0, column=0)
```

```
    lblinfo = Label(roo, font=('aria', 15,'bold'), text="_____________",
fg="black",bg="#FF9A84", anchor=W)

    lblinfo.grid(row=0, column=2)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="PRICE", fg="black",bg="#FF9A84",
anchor=W)

    lblinfo.grid(row=0, column=3)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="Fries Meal", fg="black",bg="#FF9A84",
anchor=W)

    lblinfo.grid(row=1, column=0)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="25", fg="black",bg="#FF9A84",
anchor=W)

    lblinfo.grid(row=1, column=3)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="Lunch Meal",
fg="black",bg="#FF9A84", anchor=W)

    lblinfo.grid(row=2, column=0)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="40", fg="black",bg="#FF9A84",
anchor=W)

    lblinfo.grid(row=2, column=3)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="Burger
Meal",fg="black",bg="#FF9A84", anchor=W)

    lblinfo.grid(row=3, column=0)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="35", fg="black",bg="#FF9A84",
anchor=W)

    lblinfo.grid(row=3, column=3)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="Pizza Meal",fg="black",bg="#FF9A84",
anchor=W)

    lblinfo.grid(row=4, column=0)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="50", fg="black",bg="#FF9A84",
anchor=W)

    lblinfo.grid(row=4, column=3)

    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="Cheese Burger",
fg="black",bg="#FF9A84", anchor=W)

    lblinfo.grid(row=5, column=0)
```

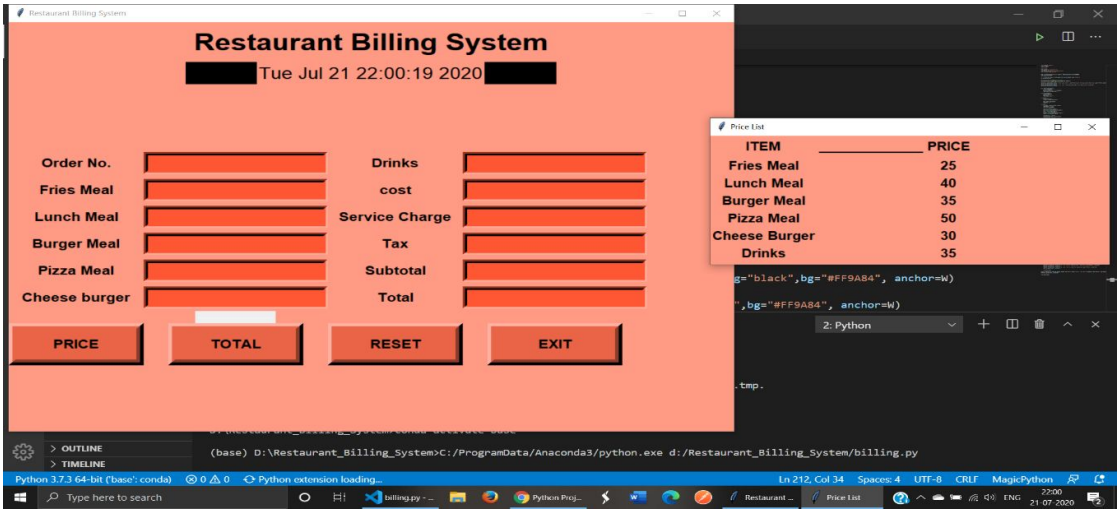
```
    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="30", fg="black",bg="#FF9A84",
anchor=W)
    lblinfo.grid(row=5, column=3)
    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="Drinks", fg="black",bg="#FF9A84",
anchor=W)
    lblinfo.grid(row=6, column=0)
    lblinfo = Label(roo, font=('aria', 15, 'bold'), text="35",fg="black",bg="#FF9A84",
anchor=W)
    lblinfo.grid(row=6, column=3)


    roo.mainloop()


btnprice=Button(f1,padx=16,pady=8, bd=10 ,fg="black",font=('ariel' ,16,'bold'),width=10,
text="PRICE", bg="#EA6548",command=price)
btnprice.grid(row=7, column=0)


root.mainloop()
```

IV. Output

Step 1:

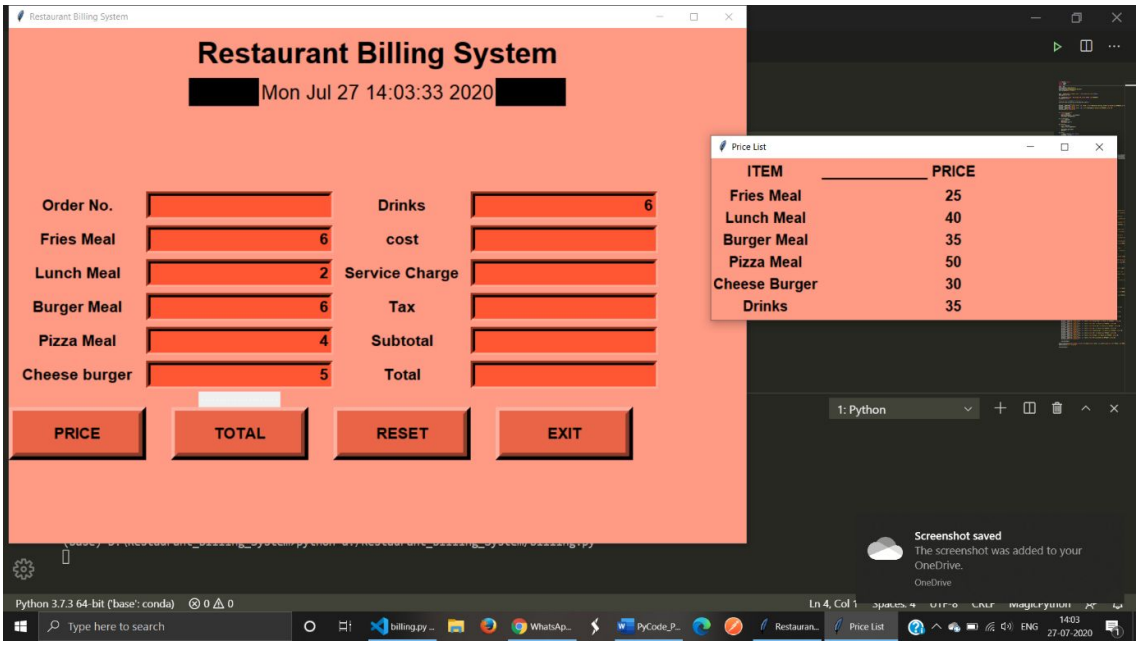
Display output

o



Step 2:

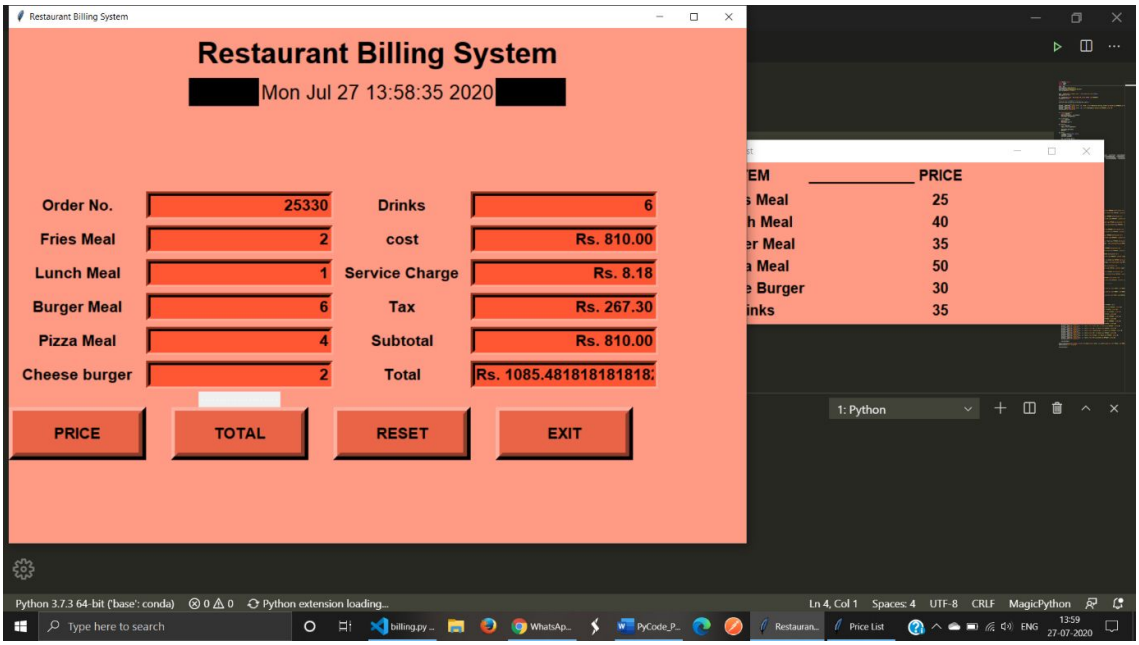
Enter the number of orders:



Step 3:

Displaying the output

- **Cost**
- **Service Charge**
- **Tax**
- **Total**
- **And Order Number**


Restaurant Billing System
Restaurant Billing System
Mon Jul 27 13:58:35 2020
Order No.
25330
Fries Meal
2
Lunch Meal
1
Burger Meal
6
Pizza Meal
4
Cheese burger
2
Drinks
6
cost
Rs. 810.00
Service Charge
Rs. 8.18
Tax
Rs. 267.30
Subtotal
Rs. 810.00
Total
Rs. 1085.481818181818
PRICE
TOTAL
RESET
EXIT
EM
PRICE
s Meal
25
h Meal
40
er Meal
35
a Meal
50
e Burger
30
inks
35
1: Python
Python 3.7.3 64-bit ('base': conda)
Python extension loading...
Ln 4, Col 1
Spaces: 4
UTF-8
CRLF
MagicPython
Type here to search
billing.py ...
WhatsAp...
PyCode_P...
Restauran...
Price List
ENG
13:59
27-07-2020