**System Implementations**

**Recommended System Requirements**

Processors: Intel® Core™ i3 processor 4300M at 2.60 GHz.

Disk space: 4 to 8 GB.

Operating systems: Windows® 10, MACOS, and UBUNTU.

Python Versions: 3.X.X or Higher.

**Minimum System Requirements**

Processors: Intel Atom® processor or Intel® Core™ i3 processor.

Disk space: 1 GB.

Operating systems: Windows 7 or later, MACOS, and UBUNTU.

Python Versions: 2.7.X, 3.9.X.

**ACKNOWLEDGEMENT**TTT

First and foremost, praises and thanks to the God, the Almighty, for His showers of blessings throughout my research work to complete the research successfully.

We would like to express my deep and sincere gratitude to my subject teacher, Mr. Amit Udiwal, for giving me the opportunity to do research and providing invaluable guidance throughout this research. His dynamism, vision, sincerity and motivation have deeply inspired me. He has taught me the methodology to carry out the research and to present the research works as clearly as and honour to work and study under his guidance. We are very much thankful to our Sr. Jasmin for giving valuable time and moral support to develop this software. We would like to take opportunity to extend my sincere thanks and gratitude to our parents for being a source of inspiration and providing time and freedom to develop this software project. We also feel indebted to my friends for the valuable suggestions during the project work.

Soumy Porwal

[Roll No.

Class XII

**CERTIFICATE**

This is to certify that the project on ‘Shop Billing System’ is a work done by Garv Songara fulfilment of CBSE’S AISSCE EXAMINATION 2022 and has been carried out under my direct supervision and guidance. This report or a similar report on the topic has not been submitted for any other examination and does not form any other examination and does not form any other course undergone by the candidate.

Name:

Garv Songara [Roll No.

………………….

Signature of Teacher / Guide

Name: Mr. Amit Udiwal

Designation:

………………. ….………………

**REFERENCE**

The order to work on this project on ‘Shop Billing System’ the following books & literature are referred by me during the various phrases of department of the project.

• http://www.python.org/.

• http://www.itsourcecode.org/.

• http://www.wikipedia.org/.

• Informatics Practices for Class XII

- By Sumita Arora

• Together with informatics practices.

Other than the above mentioned books, the suggestions and supervision of my teacher and my class experience also helped me to develop this software project.

**Introduction**

The Shop Billing System In Python is a simple project using python Tkinter which displays the items of electronic store that offers electronic machines like phone, laptop and HDD etc. Thus, this is a digital way of management of the electronics order and also the payment system. The project file contains a python script inside the files folder.

This simple mini project; billing system in Python does not contain any additional libraries for the GUI aspect as everything runs using a command prompt or terminal. Presenting a new simple billing system in Python project which includes a user panel that contains the least but essential features to follow up, and a knowledgeable resource for learning purposes.

**Objective and**

**Scope of The Project**

This Shop Billing System is in Python. Talking about the features of this system, it contains only the admin section. The admin manages all the orders management, payments, and report. The products are present in text file form and bills will be saved in text format in the main folder.

* The user enters username and selects items from the menu.
* The system displays the product menu with price and quantity.
* Users can generate bills after selecting at least 1 item.

Also, Python Dictionary stores(Temporary Storage) customer’s order and text files stores(Permanent Storage) menu and bills with customer’s information.

**Shop Billing System**

from tkinter import \*

import random

class Bill\_App:

def \_\_init\_\_(self,root):

self.root = root

self.root.geometry("1300x700+0+0")

self.root.maxsize(width = 1280,height = 700)

self.root.minsize(width = 1280,height = 700)

self.root.title("ShopCodespeedy project")

#====================Variables========================#

self.cus\_name = StringVar()

self.c\_phone = StringVar()

#For Generating Random Bill Numbers

x = random.randint(1000,9999)

self.c\_bill\_no = StringVar()

#Seting Value to variable

self.c\_bill\_no.set(str(x))

self.bath\_soap = IntVar()

self.face\_cream = IntVar()

self.face\_wash = IntVar()

self.hair\_spray = IntVar()

self.body\_lotion = IntVar()

self.rice = IntVar()

self.daal = IntVar()

self.food\_oil = IntVar()

self.wheat = IntVar()

self.sugar = IntVar()

self.maza = IntVar()

self.coke = IntVar()

self.frooti = IntVar()

self.nimko = IntVar()

self.biscuits = IntVar()

self.total\_cosmetics = StringVar()

self.total\_grocery = StringVar()

self.total\_other = StringVar()

self.tax\_cos = StringVar()

self.tax\_groc = StringVar()

self.tax\_other = StringVar()

#===================================

bg\_color = "#074463"

fg\_color = "white"

lbl\_color = 'white'

#Title of App

title = Label(self.root,text = "Shop Billing System",bd = 12,relief = GROOVE,fg = fg\_color,bg = bg\_color,font=("times new roman",30,"bold"),pady = 3).pack(fill = X)

#==========Customers Frame==========#

F1 = LabelFrame(text = "Customer Details",font = ("time new roman",12,"bold"),fg = "gold",bg = bg\_color,relief = GROOVE,bd = 10)

F1.place(x = 0,y = 80,relwidth = 1)

#===============Customer Name===========#

cname\_lbl = Label(F1,text="Customer Name",bg = bg\_color,fg = fg\_color,font=("times new roman",15,"bold")).grid(row = 0,column = 0,padx = 10,pady = 5)

cname\_en = Entry(F1,bd = 8,relief = GROOVE,textvariable = self.cus\_name)

cname\_en.grid(row = 0,column = 1,ipady = 4,ipadx = 30,pady = 5)

#=================Customer Phone==============#

cphon\_lbl = Label(F1,text = "Phone No",bg = bg\_color,fg = fg\_color,font = ("times new roman",15,"bold")).grid(row = 0,column = 2,padx = 20)

cphon\_en = Entry(F1,bd = 8,relief = GROOVE,textvariable = self.c\_phone)

cphon\_en.grid(row = 0,column = 3,ipady = 4,ipadx = 30,pady = 5)

#====================Customer Bill No==================#

cbill\_lbl = Label(F1,text = "Bill No.",bg = bg\_color,fg = fg\_color,font = ("times new roman",15,"bold"))

cbill\_lbl.grid(row = 0,column = 4,padx = 20)

cbill\_en = Entry(F1,bd = 8,relief = GROOVE,textvariable = self.c\_bill\_no)

cbill\_en.grid(row = 0,column = 5,ipadx = 30,ipady = 4,pady = 5)

#====================Bill Search Button===============#

bill\_btn = Button(F1,text = "Enter",bd = 7,relief = GROOVE,font = ("times new roman",12,"bold"),bg = bg\_color,fg = fg\_color)

bill\_btn.grid(row = 0,column = 6,ipady = 5,padx = 60,ipadx = 19,pady = 5)

#==================Cosmetics Frame=====================#

F2 = LabelFrame(self.root,text = 'Cosmetics',bd = 10,relief = GROOVE,bg = bg\_color,fg = "gold",font = ("times new roman",13,"bold"))

F2.place(x = 5,y = 180,width = 325,height = 380)

#===========Frame Content

bath\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Bath Soap")

bath\_lbl.grid(row = 0,column = 0,padx = 10,pady = 20)

bath\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.bath\_soap)

bath\_en.grid(row = 0,column = 1,ipady = 5,ipadx = 5)

#=======Face Cream

face\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Face Cream")

face\_lbl.grid(row = 1,column = 0,padx = 10,pady = 20)

face\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.face\_cream)

face\_en.grid(row = 1,column = 1,ipady = 5,ipadx = 5)

#========Face Wash

wash\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Face Wash")

wash\_lbl.grid(row = 2,column = 0,padx = 10,pady = 20)

wash\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.face\_wash)

wash\_en.grid(row = 2,column = 1,ipady = 5,ipadx = 5)

#========Hair Spray

hair\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Hair Spray")

hair\_lbl.grid(row = 3,column = 0,padx = 10,pady = 20)

hair\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.hair\_spray)

hair\_en.grid(row = 3,column = 1,ipady = 5,ipadx = 5)

#============Body Lotion

lot\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Body Lotion")

lot\_lbl.grid(row = 4,column = 0,padx = 10,pady = 20)

lot\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.body\_lotion)

lot\_en.grid(row = 4,column = 1,ipady = 5,ipadx = 5)

#==================Grocery Frame=====================#

F2 = LabelFrame(self.root,text = 'Grocery',bd = 10,relief = GROOVE,bg = bg\_color,fg = "gold",font = ("times new roman",13,"bold"))

F2.place(x = 330,y = 180,width = 325,height = 380)

#===========Frame Content

rice\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Rice")

rice\_lbl.grid(row = 0,column = 0,padx = 10,pady = 20)

rice\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.rice)

rice\_en.grid(row = 0,column = 1,ipady = 5,ipadx = 5)

#=======

oil\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Food Oil")

oil\_lbl.grid(row = 1,column = 0,padx = 10,pady = 20)

oil\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.food\_oil)

oil\_en.grid(row = 1,column = 1,ipady = 5,ipadx = 5)

#=======

daal\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Daal")

daal\_lbl.grid(row = 2,column = 0,padx = 10,pady = 20)

daal\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.daal)

daal\_en.grid(row = 2,column = 1,ipady = 5,ipadx = 5)

#========

wheat\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Wheat")

wheat\_lbl.grid(row = 3,column = 0,padx = 10,pady = 20)

wheat\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.wheat)

wheat\_en.grid(row = 3,column = 1,ipady = 5,ipadx = 5)

#============

sugar\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Sugar")

sugar\_lbl.grid(row = 4,column = 0,padx = 10,pady = 20)

sugar\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.sugar)

sugar\_en.grid(row = 4,column = 1,ipady = 5,ipadx = 5)

#==================Other Stuff=====================#

F2 = LabelFrame(self.root,text = 'Others',bd = 10,relief = GROOVE,bg = bg\_color,fg = "gold",font = ("times new roman",13,"bold"))

F2.place(x = 655,y = 180,width = 325,height = 380)

#===========Frame Content

maza\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Maza")

maza\_lbl.grid(row = 0,column = 0,padx = 10,pady = 20)

maza\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.maza)

maza\_en.grid(row = 0,column = 1,ipady = 5,ipadx = 5)

#=======

cock\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Coke")

cock\_lbl.grid(row = 1,column = 0,padx = 10,pady = 20)

cock\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.coke)

cock\_en.grid(row = 1,column = 1,ipady = 5,ipadx = 5)

#=======

frooti\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Frooti")

frooti\_lbl.grid(row = 2,column = 0,padx = 10,pady = 20)

frooti\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.frooti)

frooti\_en.grid(row = 2,column = 1,ipady = 5,ipadx = 5)

#========

cold\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Nimkos")

cold\_lbl.grid(row = 3,column = 0,padx = 10,pady = 20)

cold\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.nimko)

cold\_en.grid(row = 3,column = 1,ipady = 5,ipadx = 5)

#============

bis\_lbl = Label(F2,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Biscuits")

bis\_lbl.grid(row = 4,column = 0,padx = 10,pady = 20)

bis\_en = Entry(F2,bd = 8,relief = GROOVE,textvariable = self.biscuits)

bis\_en.grid(row = 4,column = 1,ipady = 5,ipadx = 5)

#===================Bill Aera================#

F3 = Label(self.root,bd = 10,relief = GROOVE)

F3.place(x = 960,y = 180,width = 325,height = 380)

#===========

bill\_title = Label(F3,text = "ShopBill Area",font = ("Lucida",13,"bold"),bd= 7,relief = GROOVE)

bill\_title.pack(fill = X)

#============

scroll\_y = Scrollbar(F3,orient = VERTICAL)

self.txt = Text(F3,yscrollcommand = scroll\_y.set)

scroll\_y.pack(side = RIGHT,fill = Y)

scroll\_y.config(command = self.txt.yview)

self.txt.pack(fill = BOTH,expand = 1)

#===========Buttons Frame=============#

F4 = LabelFrame(self.root,text = 'Bill Menu',bd = 10,relief = GROOVE,bg = bg\_color,fg = "gold",font = ("times new roman",13,"bold"))

F4.place(x = 0,y = 560,relwidth = 1,height = 145)

#===================

cosm\_lbl = Label(F4,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Total Cosmetics")

cosm\_lbl.grid(row = 0,column = 0,padx = 10,pady = 0)

cosm\_en = Entry(F4,bd = 8,relief = GROOVE,textvariable = self.total\_cosmetics)

cosm\_en.grid(row = 0,column = 1,ipady = 2,ipadx = 5)

#===================

gro\_lbl = Label(F4,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Total Grocery")

gro\_lbl.grid(row = 1,column = 0,padx = 10,pady = 5)

gro\_en = Entry(F4,bd = 8,relief = GROOVE,textvariable = self.total\_grocery)

gro\_en.grid(row = 1,column = 1,ipady = 2,ipadx = 5)

#================

oth\_lbl = Label(F4,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Others Total")

oth\_lbl.grid(row = 2,column = 0,padx = 10,pady = 5)

oth\_en = Entry(F4,bd = 8,relief = GROOVE,textvariable = self.total\_other)

oth\_en.grid(row = 2,column = 1,ipady = 2,ipadx = 5)

#================

cosmt\_lbl = Label(F4,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Cosmetics Tax")

cosmt\_lbl.grid(row = 0,column = 2,padx = 30,pady = 0)

cosmt\_en = Entry(F4,bd = 8,relief = GROOVE,textvariable = self.tax\_cos)

cosmt\_en.grid(row = 0,column = 3,ipady = 2,ipadx = 5)

#=================

grot\_lbl = Label(F4,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Grocery Tax")

grot\_lbl.grid(row = 1,column = 2,padx = 30,pady = 5)

grot\_en = Entry(F4,bd = 8,relief = GROOVE,textvariable = self.tax\_groc)

grot\_en.grid(row = 1,column = 3,ipady = 2,ipadx = 5)

#==================

otht\_lbl = Label(F4,font = ("times new roman",15,"bold"),fg = lbl\_color,bg = bg\_color,text = "Others Tax")

otht\_lbl.grid(row = 2,column = 2,padx = 10,pady = 5)

otht\_en = Entry(F4,bd = 8,relief = GROOVE,textvariable = self.tax\_other)

otht\_en.grid(row = 2,column = 3,ipady = 2,ipadx = 5)

#====================

total\_btn = Button(F4,text = "Total",bg = bg\_color,fg = fg\_color,font=("lucida",12,"bold"),bd = 7,relief = GROOVE,command = self.total)

total\_btn.grid(row = 1,column = 4,ipadx = 20,padx = 30)

#========================

genbill\_btn = Button(F4,text = "Generate Bill",bg = bg\_color,fg = fg\_color,font=("lucida",12,"bold"),bd = 7,relief = GROOVE,command = self.bill\_area)

genbill\_btn.grid(row = 1,column = 5,ipadx = 20)

#====================

clear\_btn = Button(F4,text = "Clear",bg = bg\_color,fg = fg\_color,font=("lucida",12,"bold"),bd = 7,relief = GROOVE,command = self.clear)

clear\_btn.grid(row = 1,column = 6,ipadx = 20,padx = 30)

#======================

exit\_btn = Button(F4,text = "Exit",bg = bg\_color,fg = fg\_color,font=("lucida",12,"bold"),bd = 7,relief = GROOVE,command = self.exit)

exit\_btn.grid(row = 1,column = 7,ipadx = 20)

#Function to get total prices

def total(self):

#=================Total Cosmetics Prices

self.total\_cosmetics\_prices = (

(self.bath\_soap.get() \* 40)+

(self.face\_cream.get() \* 140)+

(self.face\_wash.get() \* 240)+

(self.hair\_spray.get() \* 340)+

(self.body\_lotion.get() \* 260)

)

self.total\_cosmetics.set("Rs. "+str(self.total\_cosmetics\_prices))

self.tax\_cos.set("Rs. "+str(round(self.total\_cosmetics\_prices\*0.05)))

#====================Total Grocery Prices

self.total\_grocery\_prices = (

(self.wheat.get()\*100)+

(self.food\_oil.get() \* 180)+

(self.daal.get() \* 80)+

(self.rice.get() \*80)+

(self.sugar.get() \* 170)

)

self.total\_grocery.set("Rs. "+str(self.total\_grocery\_prices))

self.tax\_groc.set("Rs. "+str(round(self.total\_grocery\_prices\*0.05)))

#======================Total Other Prices

self.total\_other\_prices = (

(self.maza.get() \* 20)+

(self.frooti.get() \* 50)+

(self.coke.get() \* 60)+

(self.nimko.get() \* 20)+

(self.biscuits.get() \* 20)

)

self.total\_other.set("Rs. "+str(self.total\_other\_prices))

self.tax\_other.set("Rs. "+str(round(self.total\_other\_prices\*0.05)))

#Function For Text Area

def welcome\_soft(self):

self.txt.delete('1.0',END)

self.txt.insert(END," Welcome To ShopRetail\n")

self.txt.insert(END,f"\nBill No. : {str(self.c\_bill\_no.get())}")

self.txt.insert(END,f"\nCustomer Name : {str(self.cus\_name.get())}")

self.txt.insert(END,f"\nPhone No. : {str(self.c\_phone.get())}")

self.txt.insert(END,"\n===================================")

self.txt.insert(END,"\nProduct Qty Price")

self.txt.insert(END,"\n===================================")

#Function to clear the bill area

def clear(self):

self.txt.delete('1.0',END)

#Add Product name , qty and price to bill area

def bill\_area(self):

self.welcome\_soft()

if self.bath\_soap.get() != 0:

self.txt.insert(END,f"\nBath Soap {self.bath\_soap.get()} {self.bath\_soap.get() \* 40}")

if self.face\_cream.get() != 0:

self.txt.insert(END,f"\nFace Cream {self.face\_cream.get()} {self.face\_cream.get() \* 140}")

if self.face\_wash.get() != 0:

self.txt.insert(END,f"\nFace Wash {self.face\_wash.get()} {self.face\_wash.get() \* 240}")

if self.hair\_spray.get() != 0:

self.txt.insert(END,f"\nHair Spray {self.hair\_spray.get()} {self.hair\_spray.get() \* 340}")

if self.body\_lotion.get() != 0 :

self.txt.insert(END,f"\nBody Lotion {self.body\_lotion.get()} {self.body\_lotion.get() \* 260}")

if self.wheat.get() != 0:

self.txt.insert(END,f"\nWheat {self.wheat.get()} {self.wheat.get() \* 100}")

if self.food\_oil.get() != 0:

self.txt.insert(END,f"\nFood Oil {self.food\_oil.get()} {self.food\_oil.get() \* 180}")

if self.daal.get() != 0:

self.txt.insert(END,f"\nDaal {self.daal.get()} {self.daal.get() \* 80}")

if self.rice.get() != 0:

self.txt.insert(END,f"\nRice {self.rice.get()} {self.rice.get() \* 80}")

if self.sugar.get() != 0:

self.txt.insert(END,f"\nSugar {self.sugar.get()} {self.sugar.get() \* 170}")

if self.maza.get() != 0:

self.txt.insert(END,f"\nMaza {self.maza.get()} {self.maza.get() \* 20}")

if self.frooti.get() != 0:

self.txt.insert(END,f"\nFrooti {self.frooti.get()} {self.frooti.get() \* 50}")

if self.coke.get() != 0:

self.txt.insert(END,f"\nCoke {self.coke.get()} {self.coke.get() \* 60}")

if self.nimko.get() != 0:

self.txt.insert(END,f"\nNimko {self.nimko.get()} {self.nimko.get() \* 20}")

if self.biscuits.get() != 0:

self.txt.insert(END,f"\nBiscuits {self.biscuits.get()} {self.biscuits.get() \* 20}")

self.txt.insert(END,"\n===================================")

self.txt.insert(END,f"\n Total : {self.total\_cosmetics\_prices+self.total\_grocery\_prices+self.total\_other\_prices+self.total\_cosmetics\_prices \* 0.05+self.total\_grocery\_prices \* 0.05+self.total\_other\_prices \* 0.05}")

#Function to exit

def exit(self):

self.root.destroy()

#Function To Clear All Fields

root = Tk()

object = Bill\_App(root)

root.mainloop()