Python Project Based Assignment (INT 213)

Shop Billing Application

A Project report

Submitted in partial fulfillment of the requirements

for the award of degree of

Bachelor Of Technology (B.Tech)

Computer Science and Engineering (CSE)

Submitted to

Mr. Sagar Pande Sir

Department: School of Computer Science and Engineering

LOVELY PROFESSIONAL UNIVERSITY PHAGWARA, PUNJAB



Submitted on: November 2020

Submitted by

Name of Students: Sudeep Kumar, Mohammad Musheer Anwar, Harsh Mittal

Registration Numbers: 11917205, 11910270, 11910187



Abstract of Project

This project is under the course code of INT 213 (Python Programming) offered by lovely professional University .This project deals with the application of Graphical User Interface modules available in python library to built a model of desktop application for the shop billing purposes.

This project uses the "tkinter" library available in python to make the complete user interface and will explore different functions available in the library to be used to make the interface user friendly and attractive.

It contains the separate modules for different functionality like Login, for purchasing the goods from the whole sellers, for selling the goods to the buyer, bill generation, etc. also taken care of. It also contains different sections for goods so that user can select different section of goods as per their wish.

At last, this project is just a demo application of how everything work on the billing application and there is a lot more thing to add in further future so to make it more detailed and good application for general use.



Acknowledgements

In the present world of competition there is a race of existence in which those are having will to come forward succeed. Project is like a bridge between theoretical and practical working. With this willing I joined this particular project. First of all, I would like to thanks the supreme power of Almighty God who is obviously the one has always guided me to work on, the one has always guided me to work on the right path of life. Without his grace this project could not become a reality. Next to him are my parents, whom I am greatly indebted for me brought up with love and encouragement to this stage. I am feeling oblige in taking an opportunity to sincerely thanks my teacher "Mr. Sagar Pande Sir" department of computer Science and Engineering and mentors of Lovely Professional University who guided me towards doing this project of "Shop Billing Application" under the course code INT 213 as my course helped me to know the different aspects and utilization of Python programming Language in different purposes. I am highly obliged in taking the opportunity to thanks the Lovely Professional University which helped me and guided me to learn more about the very important Python Programming Language and its application towards GUI, File handling system etc, and also to different platforms which provide me the path for learning.

At last but not the least I want to thanks my friends, classmates and colleagues who help me in completing this Project on "Shop Billing Application" and for encouraging me for do this types of useful project to boost my knowledge. I have no valuable words to express my thanks but my heart is full of all the favours received from every person.

Sudeep Kumar, Mohammad Musheer Anwar, Harsh Mittal

11917205, 11910270, 11910187



Contents

S. No.	Title	Page
1	List of tables	5
2	List of Figures and Images	6
3	Introduction to Project Undertaken	7
4	Review of literature	8
5	Module 1: Login Page	9
8	Module 2: Forgot Password	13
9	Module 3: As Purchaser Window	15
10	Module 4: As Seller Window	23
11	Tables	31
12	Conclusion	33
13	References	34



List Of Tables

S. No.	Title	Page
1	Table-1(Born Baby Details)	31
2	Table-2(Men's Wear)	31
3	Table-3(Women's Wear)	31
4	Table-4 (Kitchen Utensils)	32
5	Table-5(Electronics Items)	32
6	Table-6(Stationary Items)	32



List Of Figures and Images

Modules	Images Number
Module -1	Fig.1.01,Fig.1.02 ,Fig.1.03 ,Fig. 1.04 Fig. 1.05, Fig. 1.06, Fig. 1.07
Module -2	Fig 2.01, Fig 2.02 , Fig 2.03
Module-3	Fig 3.01, Fig 3.02, Fig 3.03, Fig 3.04 Fig 3.05, Fig 3.06, Fig 3.07, Fig 3.08 Fig 3.09,Fig 3.10, Fig 3.11,Fig 3.12 Fig 3.13
Module-4	Fig 4.01, Fig 4.02, Fig 4.03, Fig 4.04 Fig 4.05, Fig 4.06, Fig 4.07, Fig 4.08 Fig 4.09,Fig 4.10, Fig 4.11,Fig 4.12 Fig 4.13
Module-5	Fig. 5.05, Fig. 5.02 ,Fig. 5.03 ,Fig. 5.04 Fig. 5.05, Fig. 5.06



Introduction To Project

This project is under the course code of INT 213 (Python Programming) offered by lovely professional University. This project deals with the application of Graphical User Interface modules available in python library to built a model of desktop application for the shop billing purposes.

In this project we will learn to apply the knowledge of the GUI (Graphical User Interface) with the help of python programming language. We are going to use "Tkinter" module to use all the needed functionality for the project. We are also going to use one extra module library called "pillow" as PIL to insert the image as background in our interface. We are going to use several widgets available in the "Tkinter" library in making the GUI for this project some of them like Label, Frames, entry boxes, search boxes, buttons, radio buttons etc. We are going to provide proper functioning to all the widgets to make our project executable upto a basic level and make it user friendly.

Now, as we are creating the shop billing desktop application we have to create multiples modules for proper functioning and that's exactly what we do. Here we create several modules like login page, forgot password, as seller window and as purchaser window. Here we have 2 options first is as seller login and second is as purchaser login both are different as we can see. There is a complete portal of seller window where the buyer can buy the items selection from a particular selection area and choose all the product in the selection in the same way there is a as purchaser window where the shop owner can take care of stock in the shop so by purchaser window they can buy stock from different whole sellers and maintain their stock.

Further, There is also the functionality of bill formation in which for the every transaction made a bill can be generated to track the record of all the selling as well as buying process which can be possible. The bill contains several information and it is possible to use that bill for future reference if needed.

For all the above mentioned purposes we are going to use editor like Visual Studio code, IDLE, Spyder, PyCharm, Jupyter notebook etc..., to code the whole application we can opt for any of the options for the editor available above its our choice. The whole detailed function and application of this project is mentioned in the later section where one can see the proper implementation of the making and functioning process and have some more ideas about the project.



Review of Literature

Objective and research gaps

Here we are going to take a short review about the project and see what can be done more in the future for making it more attractive and advanced. In upcoming section we will discuss the detailed description of the implementation and execution. The objective of this project is the learn how to use GUI knowledge to make a desktop application and make use aware of the concepts of the GUI and File Handling , by making this project we have gained a clarity of concepts and looking forward to implement it in more effective way by learning from our first attempt. The scope of the project is vey big we can do a lot more in this project by adding many more functionalities in it like we can connect the bill formation to the email so that the bill will be generated and sent automatically to the user or we can add the whole transaction process to pay the amount like we can use different function like internet banking, Cash, Google Pay, Phone Pay, Card payments like credit card and debit card to make to easy for the user. We can also make our project deployable in the form of "_name_.exe" file so that it can be installed in other systems too and user can use it.

Project contributions

This project is been done by our group members named, Sudeep Kumar, Mohammad Musheer Anwar and Harsh Mittal .The contribution of all the three members played a important role in completion of this project everyone role is just difficult to explain .Very briefly Harsh Mittal has done the parts of login and forgot password window and also provide us data to be used, Mohammad Musheer Anwar took care of the seller module completely and Sudeep Kumar is responsible for the functioning of the Purchaser module.

Materials And Methods

Here we had done whole project in the python programming language with version of python 3 using "tkinter" library we can use one of some basic editor available in this project listed below:

- Visual Studio Code
- > Py Charm
- Spyder
- Jupyter Notebook
- > IDLE

We followed object oriented methods or approach in this project we create different classes to implement the whole project as it gave us the distinction between different modules and we suppose it will be easy for us. Now in coming section we will discuss the complete detail implementation of the project module by module.



Module 1: Login Page

The module 1 is all focused about login page where make the GUI of the login pages using widgets of the "tkinter" library.

Window

Window is the main thing which get generated while using the tkinter it is the most basic element and all the functionality we do is under that specific window.

At first we made a wide window of tkinter of size "1500x800" and we give a background picture there. Then there is a frame which contains all the needed information of the login page like user id, user password, etc. the section of code is as below.

```
place | class | class | login | class | class | login | class | login | class | class
```

Fig 1.01

Frame

Frame is a type of widget we use to creating a space where we can do specific functioning it is used when we want a certain portion of the screen for a specific purposes in this case we are using it for login method purposes.

Inside the frame we used the label widgets of the "tkinter" library to show the command like login, username and user password there, label widget is used to show any text or entry in the tkinter GUI. The we also use radio button to provide the choice for the user to select one of the choice from the as purchaser and as seller. Then there is entry boxes widget

where the user can able to enter the inputs they want and button widgets to make it functioning. Buttons widgets used to provide the functioning in the GUI like what happen if this button is being clicked. All the functioning are also connected as per the inputs there and we also use different attributes under certain widgets like place,bg,fg etc to make it right .the sectional code are mentioned below.

```
self.Frame_login=Frame(self.root,bd=8,background="white",relief=GROOVE)
self.Frame_login.place(x=70,y=280,height=350,width=500)
self.var=IntVar()
self.login=Label(self.Frame_login,text="Login",font=("Forte",35,"bold"),bg="white",fg="black").place(x=50,y=20)
self.rad_1=Radiobutton(self.Frame_login,text="As-Seller",height=1,width=10,font=("Aparajita",17,"bold"),bg="white",fg="brown",
 variable=self.var,value=1).place(x=30,y=100)
self.rad_2=Radiobutton(self.Frame_login,text="As Purchaser",height=1,width=10,font=("Aparajita",17,"bold"),bg="white",fg="brown",
 variable=self.var,value=2).place(x=170,y=100)
self.username_value=StringVar()
self.username=Label(self.Frame_login,text="Username",font=("Comic Sans MS",13,"bold"),bg="white",fg="black").place(x=50,y=140)
 self.user_entry=Entry(self.Frame_login,font=("Aparajita",15,"bold"),bg="lightgrey",textvariable=self.username_value,relief=RIDGE).place
(x=50,y=180,width=350,height=35)
self.user_paasword_value=StringVar()
self.paasword=Label(self.Frame_login,text="Paasword",font=("Comic Sans MS",13,"bold"),bg="white",fg="black").place(x=50,y=220)
self.user_paasword=Entry(self.Frame_login,font=("Aparajita",15,"bold"),bg="lightgrey",textvariable-self.user_paasword_value,relief-RIDGE)
.place(x=50,y=250,width=350,height=35)
self.forget_paasword=Button(self.Frame_login,text="Forgot-Paasword?",bg="white",fg="brown",font=("Arial-Nova",10,"bold"),bd=0,
            nd=self.forgotpaasword).place(x=50,y=290)
self. login\_button=Button (self.root, text="Login", bg="white", fg="brown", font=("Arial Black", 15), bd=4, command=self. login\_function, bg="brown", font=("Arial Black", 15), bd=4, command=self. login\_function, bg=1, bd=4, comm
relief=RAISED, background="lightyellow").place(x=218,y=610,height=38,width=200)
```

Fig 1.02

Here we also implement the functionality for the login button. We took care of the all possibilities there and use message boxes to show the desired message as per the input of the user like input the user name, password not correct, please select the user type etc. The sectional code is as below:

Fig 1.03

Here as we go through the sectional code we can see the inbuilt user name and password for every user type if user enter the correct inputs it will work properly else show the desired messages.

The full screen output of the login page is there in the next page to demonstrate the functioning of the login page.

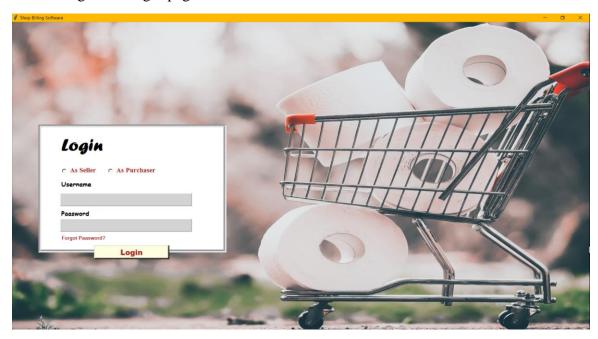


Fig 1.04(Basic Window)

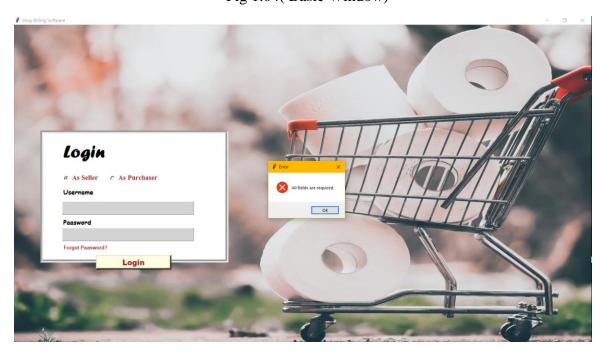


Fig 1.05(Window with Error)

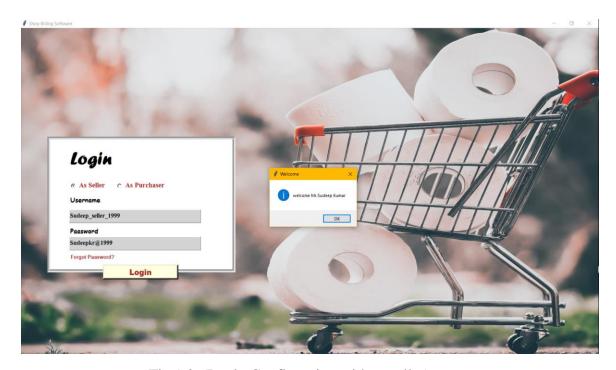


Fig 1.06(Login Confirmation with as seller)

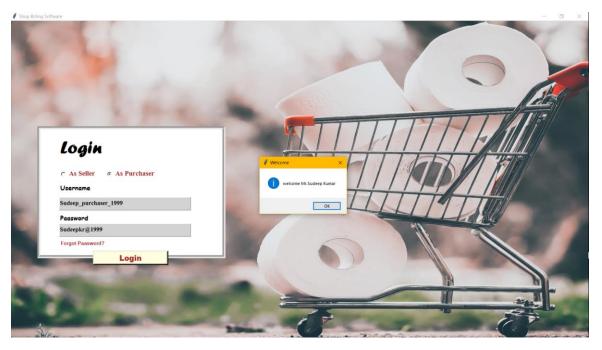


Fig 1.07(Login Confirmation with as purchaser)

There are other more message boxes but for different errors are also taken care of but for the reference one is being placed here. Here we use number of attribute in different widgets like bg, fg, font, width, height, place ,grid, pack etcand we also declare the variable to save the input entered from the user as specified in the code!.they are very useful to make the GUI interface one can go through the code snaps here to see how we use this attributes and for function calling through buttons or other widgets we use "command=function_name" to call . Now in next chapter we discuss the functioning of the forgot password page.



Module 2: Forgot Password Page

The forgot password window is one in which we can change our password by validating some of our profile details here we create the forgot password window by using "tkinter" GUI of size "500x300" which is static means we cannot change the size and orientation of the window. In this GUI window we put a frame again of similar size and inside the frame we can do the other stuffs .The sectional code for the gui window is as follow:

Fig 2.01

Now when we make a frame, inside the frame we give all the labels like, to show that it is a forgot password window we use the label "forgot password window" and again we use username, new password and confirm new password as the label and we give a text entry boxes widgets corresponding to each of the labels, where the user can enter the input specified. We use 2 buttons "Save" and "Cancel" to implement the functioning if we click save the new password should save and cancel will cancel all the process. For this we implement different function and by using "command" attribute in button we can able to use this function in our GUI. The sectional code snap is as below:

```
self.forgot_frame_Frame(self.root_1,bd=10,background="white",relief=RIDGE,bg="lightgrey").place(x=40,y=45,height=250,width=420)

self.heading=Label(self.root_1,text="Forgot Paasword",font=("Forte",20,"bold"),bg="lightgrey",fg="brown").place(x=60,y=60)

self.user_name_new=StringVar()

self.ask_user_id=Label(self.root_1,text="Enter Username",font=("Comic Sans MS",13,"bold"),bg="lightgrey",fg="black").place(x=60,y=90)

self.user_new_entry_Entry(self.root_1,font=("Aparajita",12,"bold"),bg="white",textvariable=self.user_name_new,relief=RIDGE).place(x=60,y=120,width=280,height=25)

self.user_new_paasword=StringVar()

self.user_new_paasword=Label(self.root_1,font=("Aparajita",12,"bold"),bg="white",textvariable=self.user_new_paasword,relief=RIDGE).place(x=60,y=180,width=280,height=25)

self.user_new_entry_lentry(self.root_1,font=("Aparajita",12,"bold"),bg="white",textvariable=self.user_new_paasword,relief=RIDGE).place(x=60,y=180,width=280,height=25)

self.user_confirm_new_paasword=Label(self.root_1,font=("Confirm new Paasword",font=("Comic Sans MS",13,"bold"),bg="lightgrey",fg="black").place(x=60,y=210)

self.user_new_entry_2=Entry(self.root_1,font=("Aparajita",12,"bold"),bg="white",textvariable=self.user_confirm_new_paasword,relief=RIDGE).place(x=60,y=240,width=280,height=25)

self.submit_button=Button(self.root_1,text="Save",fg="black",font=("Aparajita",14,"bold"),bd=4,relief=RAISED,background="lightyellow").place(x=64,y=280,height=35,width=80)

self.cancel_button(self.root_1,text="Save",fg="black",font=("Aparajita",14,"bold"),bd=4,relief=RAISED,background="lightyellow").place(x=64,y=280,height=35,width=80)
```

Fig 2.02

Here as we can see in the above snap there are variables we used to save the inputs given by the user there in the StringVar() variables so that it can be take in utilization in the further operations.

The final output screen is shown below:



Fig 2.03

This is the final output screen which allow user to do further implementations. Now further we are going to discuss the module 3 that is as purchaser window.



Module 3: Purchaser Window

Now here we are in module 3 where we discuss what was done to make the purchaser window. Now as the purchaser window is bit complex and have many sections we will discuss it by dividing it into small-small sections as mentioned below:

- ➤ Wholeseller Details
- Items Categories
- Categories window
- ➤ Billing Area
- ➤ Bill menu
- Operations buttons section

Now we will discuss the above sections one by one:

Wholeseller Details

In wholeseller details we are going to get 3 values first is wholeseller name, second is wholeseller contact number and the third is the bill number here bill number is used to search the bill for further uses once it is generated. There are 6 wholeseller options available here as for one whole seller for one categories of items(born baby, mens wear, women's wear, electronics, kitchen utensis and for stationary) below is the snap of that frame.



Fig 3.01

Here in the above frame the whole seller details are to be recorded.

Item categories

Here in the item categories we divide it into 6 parts as mentioned below:

- 1. Born baby items
- 2. Men's wear items
- 3. Women's wear items
- 4. Kitchen utensils
- 5. Electronic items
- 6. Stationary items

In the item categories user is allowed to select one of the categories as per their choice selecting the choice from the radio buttons corresponding to each items available there.

The snap of the item categories window is shown below:



Fig 3.02

Here is the item categories frame from where the user can choice its choices.

Categories window

In categories window we have the items corresponding to each categories mentioned above and the user can select their choices as per their wish by just going through some dropdown boxes and selecting the options and by entering the quantity they want. There is one confirm button in front of each and every until unless the user is not pressing that confirm buttons the selection would not be granted this is done to ensure complete freedom to the user to select and think as many as times before finalizing the items to be selected. Below is the category window of all 6 categories with explanation.

Born baby category window



Fig 3.03

This is the born baby category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like size price and quantity is available in the table section in the later part of the report.

Men's Wear Category window

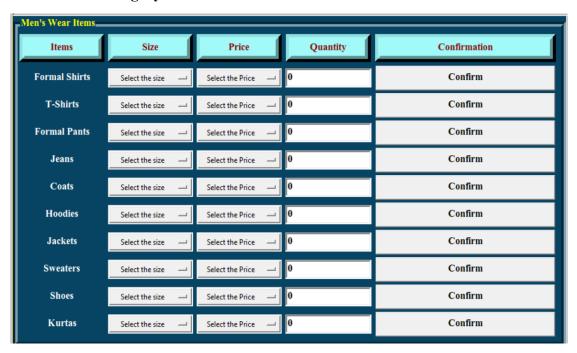


Fig 3.04

This is the Men's Wear category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like size price and quantity is available in the table section in the later part of the report.

Women's Wear Category window



Fig 3.05

This is the Women's Wear category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like size price and quantity is available in the table section in the later part of the report.

Kitchen Utensils Items Items Company Price Quantity Confirmation Pressure Cooker Confirm Select the company — Select the Price Induction Select the Price Confirm Select the company = Mixer Grinder Confirm Select the company = Select the Price Micro Oven Confirm Select the company = Select the Price **Dinner Set** Confirm Select the company — Select the Price **Utensils Stand** Confirm Select the company — Select the Price Select the company — Confirm Frying Pan Select the Price Confirm Spoon Set Select the company = Select the Price Select the company — **Cooking Pots** Select the Price Confirm Juicer Confirm Select the company — Select the Price

Kitchen Utensils Category Window

Fig 3.06

This is the Kitchen Utensils category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like company, price and quantity is available in the table section in the later part of the report.

Electronic Items Category Window



Fig 3.07

This is the Electronic Items category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like company, price and quantity is available in the table section in the later part of the report.

Stationary Items Category



Fig 3.08

This is the Stationary Items category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like company, price and quantity is available in the table section in the later part of the report.

❖ Billing Area

Now after categories window here we are with billing area where the bill is being show after generation or on searching after the user click the generate bill the bill there would be seen. For billing area we use textarea widget of "tkinter" and we write all the messages there and use file handling to save the bill in ".txt" format separately for purchaser bill and user bill in different directories.

The snap of the billing area with the sample bill is shown as below:

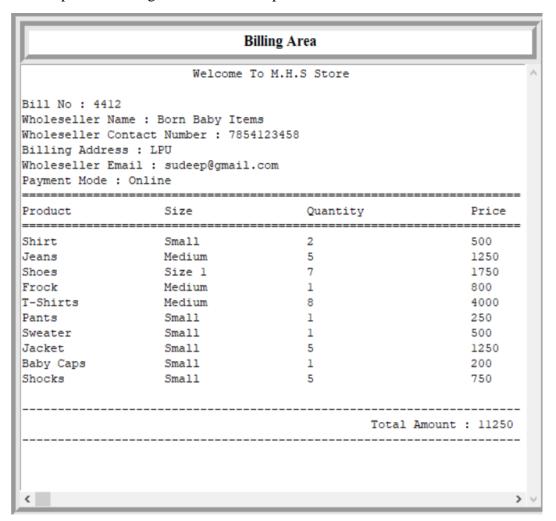


Fig 3.09

This is the sample bill which we can find once it is generated or searched.

❖ Bill Menu

The bill menu contains the record of the total amount of the different categories of things that we saw in the above sections. As we select the items from the categories form the item list the amount in the bill menu get updated corresponding to the categories which we have selected and as long as we continue selecting the items the amount will sum up to show final amount. There is also a specific entry of billing address, whole seller e-mail and payment mode which we have to select or give the input for the purpose of giving the data in bill generation. This whole data will be present there in the bill which will be generated. The below image show the window of the bill menu present in the GUI.

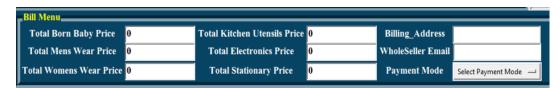


Fig 3.10

Operations Button section

This section contains the 4 button namely Total, Generate Bill, Clear and Exit. All of the above mentioned button are important Total button is for checking the total upto a certain instance of selection of items means in between selecting the items if we want to check the total amount till then we can check it by clicking it the total button. The generate bill button is used to generate the bill as we click the generate bill button it will show the bill in the billing area and ask whether we want to save the bill on not? If yes then the bill will be saved by its bill number in the specified folder and can be accessed later if needed. The clear button is there to clear the interface or we can say renew the interface if we give permission to the clear button it will undo all the changes which is being made till then and make the interface completely new to perform. And finally there is exit button which we use to exit the interface with giving the permission to it.

Here is the image of the section of buttons shown below:



Fig 3.11

Now as we discussed all the aspect of the as purchaser menu here is the final interface image which is going to be displayed as whole and we are going to execute all the above sections in that very interface.



Fig 3.12

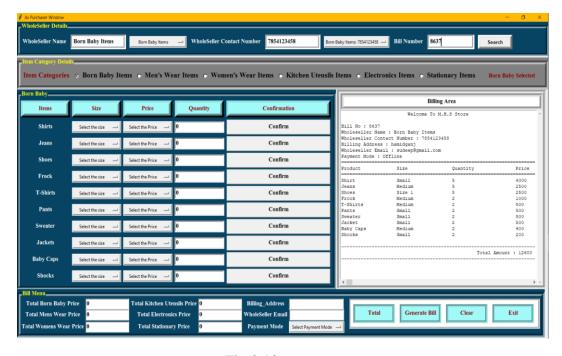


Fig 3.13



Module 4: Seller Window

Here we are in module 4, where we discuss what was done to make the Seller window. Now as the seller window have many sections we will discuss it by dividing it into small-small sections as mentioned below:

- Customer Details
- Items Categories
- Categories window
- ➢ Billing Area
- ➤ Bill menu
- Operations buttons section

Customers Details

In customer details we are going to get 3 values first is customer name, second is customer contact number and the third is the bill number here bill number is used to search the bill for further uses once it is generated. There are 6 options available here as for every customer categories of items(born baby, mens wear, women's wear, electronics, kitchen utensis and for stationary) below is the snap of that frame.



Fig 4.01

***** Item categories

Here in the item categories we divide it into 6 parts as mentioned below:

- 1.Born baby items
- 2.Men's wear items
- 3. Women's wear items
- 4. Kitchen utensils
- 5. Electronic items
- 6.Stationary items

In the item categories user is allowed to select one of the categories as per their choice selecting the choice from the radio buttons corresponding to each items available there.

The snap of the item categories window is shown below:



Fig 4.02

Categories window

In categories window we have the items corresponding to each categories mentioned above and the user can select their choices as per their wish by just going through some dropdown boxes and selecting the options and by entering the quantity they want. There is one confirm button in front of each and every until unless the user is not pressing that confirm buttons the selection would not be granted this is done to ensure complete freedom to the user to select and think as many as times before finalizing the items to be selected. Below is the category window of all 6 categories with explanation.

Born baby category window

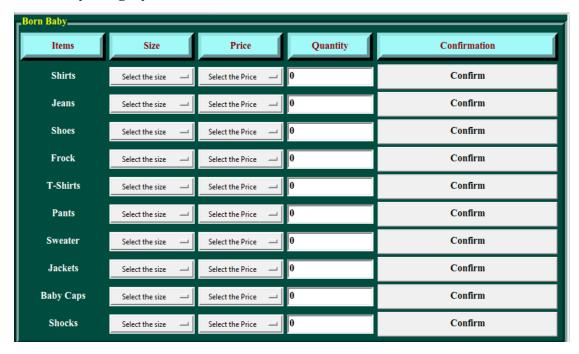


Fig 4.03

This is the born baby category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like size price and quantity is available in the table section in the later part of the report.

Men's Wear Category window

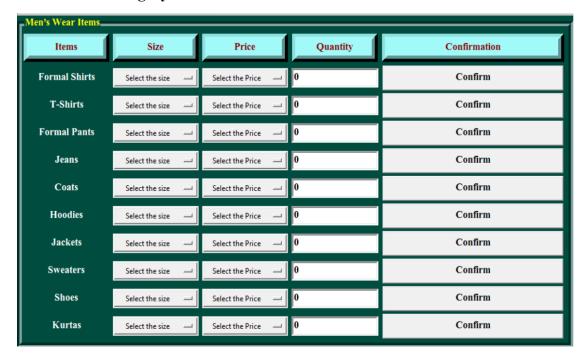


Fig 4.04

This is the Men's Wear category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like size price and quantity is available in the table section in the later part of the report.

Women's Wear Category window

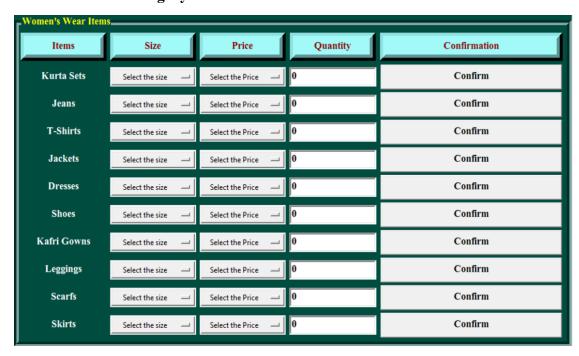


Fig 4.05

This is the Women's Wear category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like size price and quantity is available in the table section in the later part of the report.

Kitchen Utensils Category Window

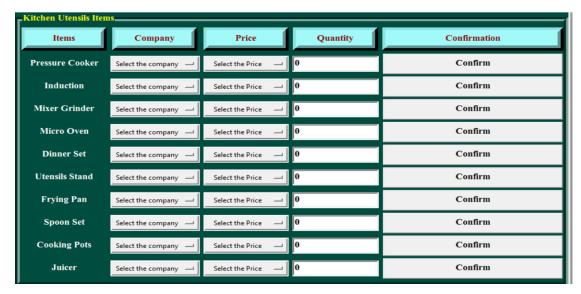


Fig 4.06

This is the Kitchen Utensils category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like company, price and quantity is available in the table section in the later part of the report.

Electronic Items Category Window

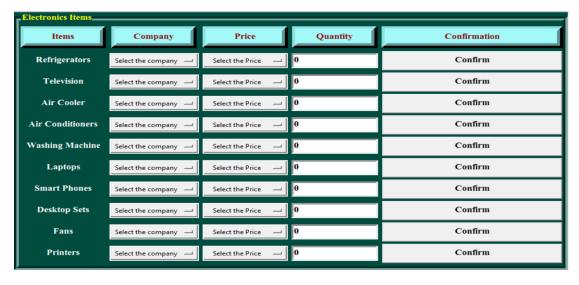


Fig 4.07

This is the Electronic Items category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like company, price and quantity is available in the table section in the later part of the report.

Stationary Items Category



Fig 4.08

This is the Stationary Items category window from which the user can select the item as per their need and the confirm button is also there for confirmation as mentioned above.

Here we have set of items from which user can select the choices, the details of this options like company, price and quantity is available in the table section in the later part of the report.

❖ Billing Area

Now after categories window here we are with billing area where the bill is being show after generation or on searching after the user click the generate bill the bill there would be seen. For billing area we use textarea widget of "tkinter" and we write all the messages there and use file handling to save the bill in ".txt" format separately for purchaser bill and user bill in different directories.

The snap of the billing area with the sample bill is shown as below:

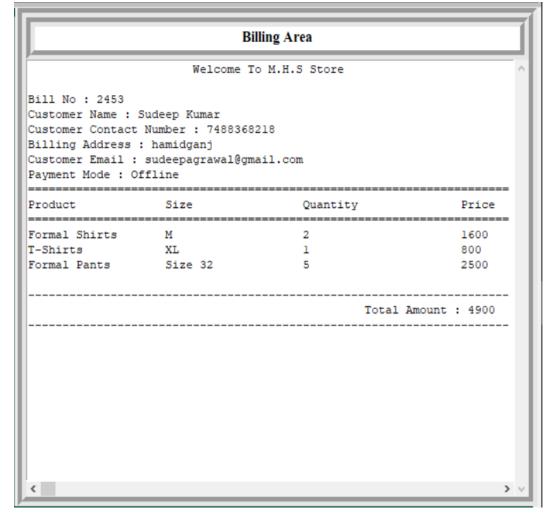


Fig 4.09

This is the sample bill which we can find once it is generated or searched.

❖ Bill Menu

The bill menu contains the record of the total amount of the different categories of things that we saw in the above sections. As we select the items from the categories form the item list the amount in the bill menu get updated corresponding to the categories which we have selected and as long as we continue selecting the items the amount will sum up to show final amount. There is also a specific entry of billing address, Customer e-mail and payment mode which we have to select or give the input for the purpose of giving the data in bill generation. This whole data will be present there in the bill which will be generated. The below image show the window of the bill menu present in the GUI.



Fig 3.10

Operations Button section

This section contains the 4 button namely Total, Generate Bill, Clear and Exit. All of the above mentioned button are important Total button is for checking the total upto a certain instance of selection of items means in between selecting the items if we want to check the total amount till then we can check it by clicking it the total button. The generate bill button is used to generate the bill as we click the generate bill button it will show the bill in the billing area and ask whether we want to save the bill on not? If yes then the bill will be saved by its bill number in the specified folder and can be accessed later if needed. The clear button is there to clear the interface or we can say renew the interface if we give permission to the clear button it will undo all the changes which is being made till then and make the interface completely new to perform. And finally there is exit button which we use to exit the interface with giving the permission to it.

Here is the image of the section of buttons shown below:



Fig 4.11

The screenshots of the basic seller window and a working seller window is attached below:

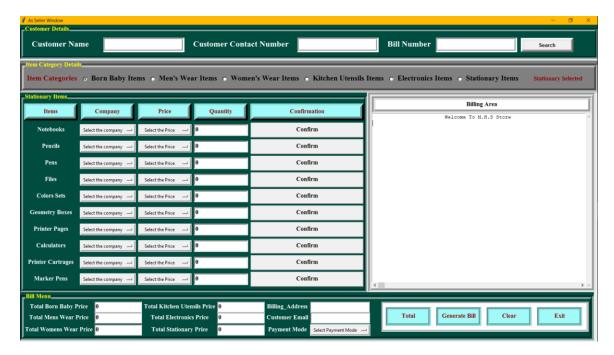


Fig 4.12



Fig 4.13

Now as we discussed the whole GUI window configuration completely where we discussed the whole process how we are going to do all the operation for seller and purchaser window each. Now in the next part we are having the list of table which is there in the data part of the project to make it work properly.

The list of the required tables are mentioned below:



Module 5 : Tables

	Born Baby Dress													
ITEMS	S	IZE	PRICES											
Shirts	Small	Medium	250	500	800	1000								
Jeans	Small	Medium	250	500	800	1000								
Shoes	Size 1	Size 2	250	500	800	1000								
Frock	Small	Small Medium		500	800	1000								
T-shirts	Small	Medium	250	500	800	1000								
Pants	Small	Medium	250	500	800	1000								
Sweater	Small	Medium	250	500	800	1000								
Jacket	Small	Medium	250	500	800	1000								
Baby Caps	Small	Medium	100	150	200	250								
Shocks	small	Medium	100	150	200	250								

Fig 5.01

	Mens Wear													
ITEMS SIZE									PRI	CES				
Formal Shirts	S	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000		
T-Shirts	S	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000		
Formal Pants	Size 28	Size 30	Size 32	Size 34	Size 36	Size 38	250	500	800	1000	3000	5000		
Jeans	Size 28	Size 30	Size 32	Size 34	Size 36	Size 38	250	500	800	1000	3000	5000		
Coat	S	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000		
Hoodie	s	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000		
Jacket	s	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000		
Sweater	s	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000		
Shoes	Size 7	Size 8	Size 9	Size 10			250	500	800	1000	3000	5000		
Kurtas	M	L	XI	2XI	3XI	4XI	250	500	800	1000	3000	5000		

Fig 5.02

	Womens Wear												
Items			Sizes	1					Pri	ices			
Kurta set	M	L	XI	2XI	3XI	4XI	250	500	800	1000	3000	5000	
Jeans	Size 28	Size 30	Size 32	Size 34	Size 36	Size 38	250	500	800	1000	3000	5000	
T-Shirts	S	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000	
Jackets	S	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000	
Dresses	s	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000	
Shoes	Size 7	Size 8	Size 9	Size 10			250	500	800	1000	3000	5000	
Kafri Gown	S	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000	
Leggings	Size 28	Size 30	Size 32	Size 34	Size 36	Size 38	250	500	800	1000	3000	5000	
Scarf	Small	Medium	Large				250	500	800	1000	3000	5000	
Skirts	s	M	L	XL	XXL	XXXL	250	500	800	1000	3000	5000	

Fig 5.03

	Kitchen Utensils													
Items		Comp	anies		Prices									
Pressure Cooker	United	Hawkins	Prestige	Milton	250	500	800	1000	3000	5000				
Induction	Bajaj	Usha	Prestige	L.G	250	500	800	1000	3000	5000				
Mixer Grinder	Bajaj	Sumit	Philips	Orient	250	500	800	1000	3000	5000				
Micro Oven	Samsung	Whirpool	Bajaj	L.G	250	500	800	1000	3000	5000				
Dinner Set	La Opala	Nayasa	Corelle	Borosil Mimosa	250	500	800	1000	3000	5000				
Utensils Stand	Krishna Wares	Hindware	DeoDap		250	500	800	1000	3000	5000				
Frying Pan	All-Clad	Le-Creuset	T-Fal	Calphalon	250	500	800	1000	3000	5000				
Spoon Set	Solimo	Signoraware	Prestige	Bergen Bagutee	250	500	800	1000	3000	5000				
Cooking Pots	Bajaj	Usha	Prestige	L.G	250	500	800	1000	3000	5000				
Juicer	Bajaj	Usha	Prestige	L.G	250	500	800	1000	3000	5000				

Fig 5.04

	Electronics													
Items Companies					Prices									
Refrigerator	Samsung	Whirpool	Haier	L.G		8000	10000	12000	15000	20000	25000	50000		
Telivision	L.G	Samsung	Sony	Panasonic		8000	10000	12000	15000	20000	25000	50000		
Air Cooler	Samsung	Whirpool	Voltas	L.G		8000	10000	12000	15000	20000	25000	50000		
Air Conditioner	Samsung	Whirpool	Haier	L.G		8000	10000	12000	15000	20000	25000	50000		
Washing Machine	Samsung	Whirpool	Haier	L.G		8000	10000	12000	15000	20000	25000	50000		
Laptops	Dell	H.P	Lenevo	Asus		30000	35000	40000	45000	50000	60000	70000		
SmartPhones	Samsung	Орро	Vivo	Motorolla	Apple	10000	15000	18000	21000	30000	48000	80000		
Desktop Sets	Dell	H.P	H.C.L	Acer		30000	35000	40000	45000	50000	60000	50000		
Fans	Usha	Orient	Bajaj	Havells		1000	2000	2500	3000	3500	4000	5000		
Printers	H.P	Canon	Epson	Panasonic		30000	35000	40000	45000	50000	60000	80000		

Fig 5.05

	Stationary													
Items Companies							Pri	ces						
Notebooks	Classmate	Universal Impex	Pappermint	Spectras	50	80	100	150	250	300				
Pencils	Natraj	Apsara	FunFun	Classmate	50	70	80	100						
Pens	Flair	Link Smart	Diploma	Cello	20	10	50	100						
Files	Ambasador	Neelkamal	Cobra		50	100	150	200						
Color Set	Camlin	Classmate	FunFun		50	80	100	150						
Geometry Boxes	FunFun	Classmate	Discovery	Camel	50	100	150	200						
Printer Pages	Century	TNPL	BillMatrix	J.K Copies	150	200	250	300						
Calculators	Casio	Citizen	Orpat	Flair	250	500	900	1200	1500					
Printer Cartrages	Sony	H.P	Canon	Epson	5000	7000	10000	15000	20000					
Marker Pen	Camlin	Link Smart	Cello	Flora	20	50	70	90	100					

Fig 5.06



Conclusion

In the process of making this project (BILLING SYSTEM), we came across many new things like usage of Tkinter library for GUI. Inside this library, we came across many different functions like:-

- 1. Labels
- 2. Entry box
- 3. Creating different Frames
- 4. Buttons
- 5. Radio Buttons
- 6. Check Box
- 7. Scroll Bar
- 8. Message Box
- 9. Fonts etc.

In this GUI application, we can login as Seller or Purchaser both. After login, we we have to mention or choose from the given option the wholeseller name ,their Mob.no and also bill number. After that we have the Items Categories option in which mainly six different catagories were given i.e: born baby, mans wear etc as mention above.

Then we have ten different available items for every category, along with the necessary details like MRPs, size, color, company etc. We can select the items according to our need.

After selecting the items, MRPs ,company etc , then we also create the bill with proper details in it i.e:Seller name, contact no, date , total amount, no of items, cost of each item etc, so to make it possible to fetch it for the further future uses as per need.

After that it show the message of conformation for generating the bill and there are camcel option also. We can also search the old bill by entering the bill no.

This project helped us to know about the new libraries here it is "tkinter" and it teaches us upto that extent that we are able to make projects like that in the coming future.



References

- 1. Text book: Introduction to Programming using Python By-Y.DANIEL LIANG
- 2. From the powerpoint presentation provided to us
- 3. From Internet
- 4. https://www.tutorialspoint.com/python/python_gui_programming.htm#:~:text=Tk_inter%20is%20the%20standard%20GUI,to%20the%20Tk%20GUI%20toolkit.&text=Import%20the%20Tkinter%20module.
- 5. https://www.geeksforgeeks.org/python-gui-tkinter/
- 6. https://www.youtube.com/watch?v=YXPyB4XeYLA
- 8. https://www.tutorialspoint.com/python/tk menubutton.htm

Above is all the references of the web links we go through to make this project possible upto the best we can. That's all for this project we are seeking to learn more and more about this in coming future.