




BILLING SYSTEM

USING PYTHON

MINI PROJECT -II



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01

ABSTRACT



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ABSTARCT

- Billing System using Python is an application software built using python. It can be used at all place transaction for computerized billing including supermarkets, Restaurants, Grocery stores , other products sales etc.



- In traditional system of billing, store owners use pen and paper billing which becomes very hard to keep track of the sales, bills etc. The Billing system application automatically creates a copy of the bills for the day in a folder which can be accessed any time for any purpose.





ABSTARCT

- It has a list of items to billed that can be customized based on the type of store or type of items which are sold and need billing and invoicing. It also has the features to update the quantity of the items added for billing.





02

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INTRODUCTION





INTRODUCTION

- Bill is a written document that contains the details of the goods sold or services provided to the customer.
- Bill is prepared by the service provider and handed over to the buyer.
- In the olden days, bills were manually prepared by entering all details related to every business service.
- But with the advancement in technology, you can make use of a billing software which will help prepare your bills, speed up the process and improve accuracy as well.





INTRODUCTION

- Essential details in a bill will include the seller and buyer name, address, contact details. The bill number for easy tracking, the product sold or service offered details including the cost, tax details, and the payment instructions.





INTRODUCTION

FEATURES

- The billing software offers several features that make the life of the business easy. You only have to install the software once and you can keep generating bills in the future.



- **Invoice generation** – It is the basic feature of every billing software in India which will create a professional invoice by extracting the project, time, and customer details.





INTRODUCTION

- **Customer record creation** – Some advanced billing software help in summarizing the customer's details and the purchase information. The smart system will segregate the details under the name of each customer for easy retrieval and reference.





INTRODUCTION



BENEFITS OF BILLING SOFTWARE FOR SMALL BUSINESSES

- Cost-Effective
- Intelligent Management System
- Error-Free
- Safe & Secure
- Compliance Adherence
- Minimizes late payments
- Minimizes missed payments
- Maintains a professional image
- Maintain a Professional Image
- Automation





03

LITERATURE SURVEY





LITERATURE SURVEY



Invoicing orders for payments and clients process account payables accordingly. A dedicated system that functions at the back-end is a billing and invoicing software that shortens the invoicing time and proceeds faster payments.





LITERATURE SURVEY

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Bills and Receipts Years Back

The handwritten paper invoices were in huge prevalence earlier and they were the only source to keep the documentation of the deal. However, it went challenging to manage and maintain, especially for the organizations engaged in multiple businesses and hundreds of transactions in a day.

McKEESPORT HOSPITAL

ACCOUNTS PAYABLE WEEKLY IN ADVANCE

CHECK ☒ Cash McKeesport, Pa., 2-4 1943

Rec'd of Eleanor Davis

Twenty Nine & 50 100 DOLLARS

For same

ROOM WARD 101 REG. NO. 42-5238

Board & Nursing	10 50		
Delivery Room	10 00		
Operating Room			
Anesthetic	5 00		
Laboratory Exam.	3 00		
Drugs	1 00		
Ambulance			
X-Ray			
Cardio			
			29 50

McKeesport Hospital

19542 Rec'd by aa B

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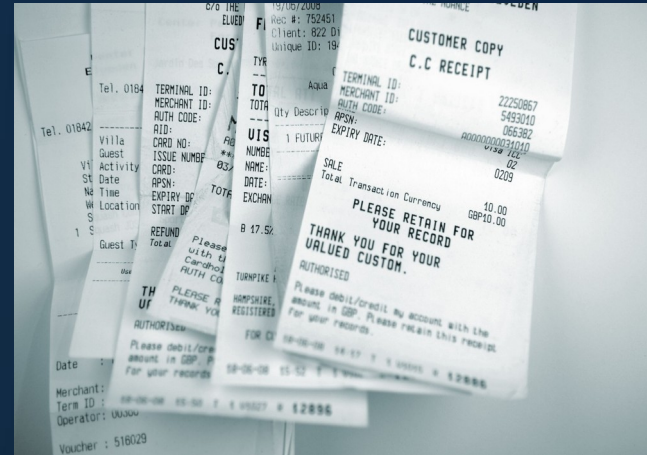




LITERATURE SURVEY

E-Invoices

The new age invoices are well-documented and professional-looking e-receipts. They are electronically generated. Hence, the chances of errors are comparatively less. They are easily maintainable and can be stored safely on your computer, laptop or mobile.





LITERATURE SURVEY



Key Features of Billing

- Creating professional and customized invoices.
- Creating customer records including personal and purchase details of the customers.
- Predefined communication templates for more personalized accounting.
- Currency setting for seamlessly connecting the billing & invoicing system with the rest of the software architecture





LITERATURE SURVEY



Key Features of Billing

- Import/export customers including sending quotes to them using a centralized database.
- No external system needed for invoicing, payment, and tax reporting.





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REQUIREMENTS





REQUIREMENTS



SOFTWARE

- OS: Windows or Linux
- Python
- Text Editor: Visual Code or Sublime or Notepad etc.



HARDWARE

- Processor: Intel Core i3 and above
- RAM: 2 GB and above
- Monitor: Resolution of 1024 X 768 or higher
- Keyboard and Mouse





05

DESIGN





DESIGN

Basic Structure

The basic software contains basic structure which houses the name of the restaurant, the buttons and the options that can be used for a particular function. It contains the following:

- Title Bar with the name of the Restaurant
- Customer Details section

The screenshot shows a software window with a title bar. Below the title bar is a section titled 'Customer Details'. This section contains two input fields: one labeled 'Name' and another labeled 'Contact'. The labels are in blue text, and the input fields are white with blue borders. The entire section is highlighted with a red border.



DESIGN

Items details Section

Item

Name

Price

Quantity

Add Item

Remove Item

Update Quantity

Clear

Your Order

Name	Rate	Quantity	Price
------	------	----------	-------

Total Price

Bill

Cancel Order





DESIGN

- Items list(Menu)

Menu	
Select Type	<input type="text"/>
Show	Show All
Name	Price
#Tea & Coffee	
Tea	40
Coffee Mocachino	51
Coffee Americano (Black)	55
Coffee Espresso	60
Ice Tea (Lemon)	51
Coffee Cappuccino	51
Espresso (Black)	55
Cold-Coffee (Frappe)	70
#Beverages	
*Areated Beverages	
Cola / Orange / Lemon	55
Diet Pepsi	55
Fresh Lime Soda Sweet / Salt	60
Mineral Water	55
Fresh lime Water Sweet / Salt	60





DESIGN

- Print Window

Bill

Nameeth Multicusine Restaurant
No. 100 New Airport Road, Chagalatti, Bengaluru-562149
GST NO:- 34VASFD2215HKAAA

BILL

Date:- 22 / 5 / 2021 (Saturday)
Customer Name:- Sample Bill
Customer Contact:- 1234567890

Time:- 23 : 22 : 1

DESCRIPTION	RATE	QUANTITY	AMOUNT
Coffee Americano (Black)	55	1	55
Coffee Espresso	60	1	60
Total price : Rs. 115 /-			





06



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IMPLEMENTATION





IMPLEMENTATION

This project is implemented by using python Tkinter Module. The Tkinter Module is a GUI module which helps in creating GUI based programs and applications. Python provides the standard library Tkinter for creating the graphical user interface for desktop based applications.



The whole project is of one single module which consists of different section like the item list, top header with name and text field where name and contact of the buyer has to be entered. On the left hand side it has the Items attributes like ADD button, UPDATE button, DELETE button, Bill button and CLEAR button.





IMPLEMENTATION



This GUI application is build by using Tkinter library of python. We need to first import everything from tkinter library, which gives us the command of `from tkinter import *`. The GUI application view is created by using the code `top=Tk()`. The button then are created using the button command `newbutton = Button(parent, text = "Green", fg = "red")`.



```
from tkinter import *
from tkinter import ttk
import tkinter.messagebox as tmsg
import os
import time

menu_category = ["Tea & Coffee","Beverages","Fast Food","Starters","Main Course","Dessert"]

menu_category_dict = {"Tea & Coffee":"1 Tea & Coffee.txt","Beverages":"2 Beverages.txt",
                      "Fast Food":"3 Fast Food.txt",
                      "Starters":"4 Starters.txt","Main Course":"5 Main Course.txt",
                      "Dessert":"6 Dessert.txt"}
```





IMPLEMENTATION



The list of items to be invoiced or billed are given using text to the program. We create a separate Folder in the parent folder of the program. The folder contains various text documents named after the section of item it contains, these document are named and maintained as per the section of items it contains so that it is easy for our search module to get a particular set of items



Name	Date modified	Type	Size
1 Tea & Coffee.txt	24-05-2020 03:53	Text Document	1 KB
2 Beverages.txt	24-05-2020 03:53	Text Document	1 KB
3 Fast Food.txt	24-05-2020 03:53	Text Document	2 KB
4 Starters.txt	24-05-2020 03:53	Text Document	1 KB
5 Main Course.txt	24-05-2020 03:53	Text Document	2 KB
6 Dessert.txt	24-05-2020 03:53	Text Document	1 KB



Section of items that can be billed





IMPLEMENTATION



The program also is made to store the printed bills in a folder with sub-folder of the date of the transaction, all the transactions done for a day will be auto saved in the folder.

This helps the store owners in reviewing the bills if they need to do it, or any other means of review. The bills are saved with the name of the customer along with the contact number of them.



Name	Date modified	Type	Size
Nameeth 9087654321.txt	22-05-2021 23:39	Text Document	2 KB
Sample Bill1234567890.txt	22-05-2021 23:22	Text Document	2 KB



Auto saved bill folder





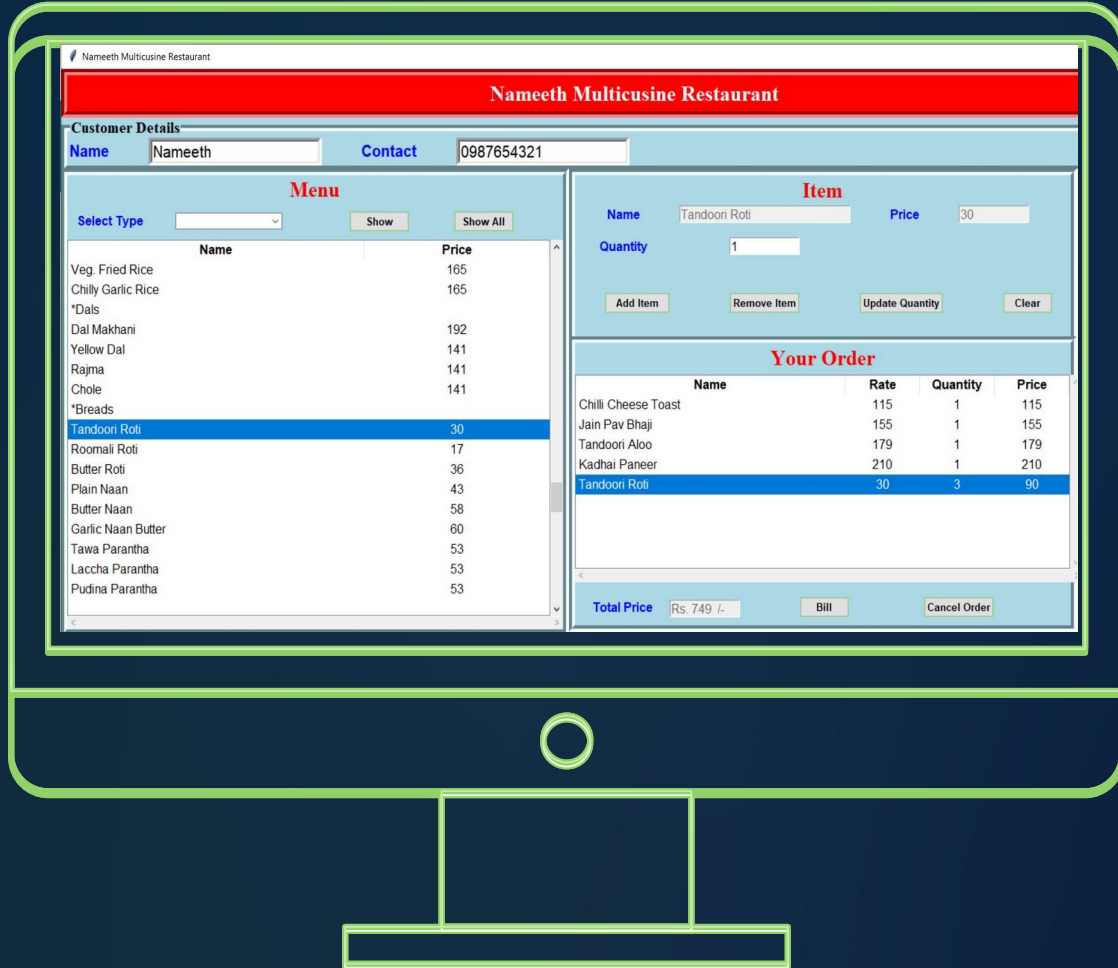
07



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RESULTS





RESULTS

OUTPUT:

Nameeth Multicusine Restaurant

Nameeth Multicusine Restaurant

Customer Details

Name **Contact**

Menu

Select Type

Name	Price
#Tea & Coffee	
Tea	40
Coffee Mocachino	51
Coffee Americano (Black)	55
Coffee Espresso	60
Ice Tea (Lemon)	51
Coffee Cappuccino	51
Espresso (Black)	55
Cold-Coffee (Frappe)	70
#Beverages	
*Areated Beverages	
Cola / Orange / Lemon	55
Diet Pepsi	55
Fresh Lime Soda Sweet / Salt	60
Mineral Water	55
Fresh lime Water Sweet / Salt	60

Item

Name **Price**

Quantity

Your Order

Name	Rate	Quantity	Price
------	------	----------	-------

Total Price

Empty Interface

RESULTS

OUTPUT:

Nameeth Multicusine Restaurant

Nameeth Multicusine Restaurant

Customer Details

Name Contact

Menu

Select Type Show Show All

Name	Price
Veg. Fried Rice	165
Chilly Garlic Rice	165
*Dals	
Dal Makhani	192
Yellow Dal	141
Rajma	141
Chole	141
*Breads	
Tandoori Roti	30
Roomali Roti	17
Butter Roti	36
Plain Naan	43
Butter Naan	58
Garlic Naan Butter	60
Tawa Parantha	53
Laccha Parantha	53
Pudina Parantha	53

Item

Name Price

Quantity

Add Item Remove Item Update Quantity Clear

Your Order

Name	Rate	Quantity	Price
Chilli Cheese Toast	115	1	115
Jain Pav Bhaji	155	1	155
Tandoori Aloo	179	1	179
Kadhai Paneer	210	1	210
Tandoori Roti	30	3	90

Total Price Bill Cancel Order

Interface with billing details

RESULTS

OUTPUT:

Bill

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Generated Bill



08

CONCLUSION



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CONCLUSION

In this project we created a GUI based application software that is used for billing using python. This helps in eliminating all the cons in manual billing and helps the store owners by making it automate. It also helps them by keep track of their sales, buyers information etc. It saves time for the store owner by making things computerized, he no more needs to spend time manually writing bills, keeping a backup of it etc.





CONCLUSION

FUTURE ENHANCEMENTS

Future enhancements of this project could be:

- Adding Inventory module with optional mode which can be used for super market
- Making UX interface better
- Feature where bills are also sent to the WhatsApp of customer number
- Feature of auto GST for big business





THANK
YOU

