# RESTAURANT BILLING SYSTEM USING PYTHON

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**Abstract -** *A billing system can be very useful within a business environment. Instead of making bills manually or to sum up the total manually, it is very much time consuming and also may have some human errors like adding up the wrong total or adding wrong items into the bill. When making a hand written bill the owner and customer both have to repeatedly check the total, items added, etc. It also sometimes results into a Bad Impression towards the Restaurant from a Customer. Ideally, user should be able to generate bill without any mistakes and quickly, enabling them to fasten or improve their process. To overcome this problem, we have come up with this project, that is, Restaurant Billing System Using Python.*

***Key Words***: **billing system, python, busines environment, faster, quickly, useful…**

## 1. INTRODUCTION

Restaurant Billing System Using Python can be very useful within a business environment. Instead of doing manual work for making up a bill at Restaurant, which gets tiring and time consuming, you can generate a bill including tax and service charges in just few clicks. When making up a bill manually at a Restaurant may contain some human errors like adding wrong items into the bill or summing up their total also may end up wrong, it also sometimes results into a Bad Impression towards the Restaurant from a Customer. Ideally, user should be able to generate bill without any mistakes and quickly, enabling them to fasten or improve their process. To overcome this problem, we have come up with this project, that is, Restaurant Billing System Using Python.

The Restaurant Billing System Using Python is very useful to small business or restaurant or cafe or food truck owners. This helps the owner to fasten the process which is bug free and easy to use. It also has a calculator to ease the use of the user. This project firstly has the menu and then adds up the selected items by customer and sums up the total of all items adds tax and service charges and displays total. To perform any other operation like division, multiplication, etc calculator is also

## 2. MOTIVATION AND TECHNICAL RELAVANCE

The Restaurant industry is enlarging rapidly and restaurant owners are keen to improve every section of their business. Though much attention is paid to digitalizing the restaurant management and the menu, but not many business owners realize the importance of applying digital billing software in the restaurant. The customers' experience at your restaurant includes the billing and payment experiences too. Billing software provides some exclusive features that ease up the restaurant services. It upgrades the billing process and uplift the customers' experience. It enables customers to pay bills more easily. The software can generate detailed bills that eliminate the need to calculate bills separately when the guests wish to know total GST amount.

Apart from billing, the software enables you to organize a number of processes at the restaurant. It makes your system more effective and helps you provide faster and easy services to the customers. So many times, customers leave unhappy due to improper billing. When the crowd is vast in the restaurant, it might take you some time to generate manual bills that may leave your customers unsatisfied. This is where the automated billing system can be used. It generates digital bills automatically and allows customers to make quick payments

## 3. PROPOSED SYSTEM

Since many restaurant or café owners make bills for their customers manually with a pen paper. This sometimes results into an error of total or wrong items added or some items missing in bill or extra items added. This may end up by building up a bad impression of customer towards the Café or restaurant. So, to overcome this problem we've come up with this helpful project named Restaurant Billing System Using Python.

We all love going to cafes or restaurants but when it takes time for them to make a bill or if they Make wrong bill then it's time consuming. So, to avoid all such chaos our project will help in All possible terms.
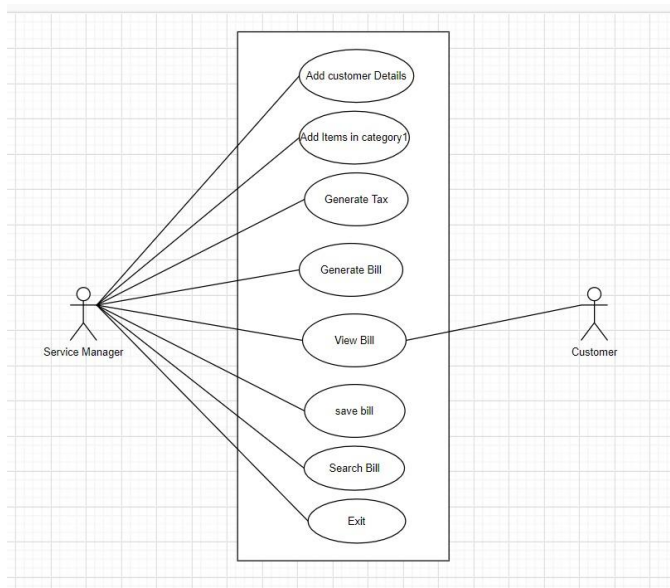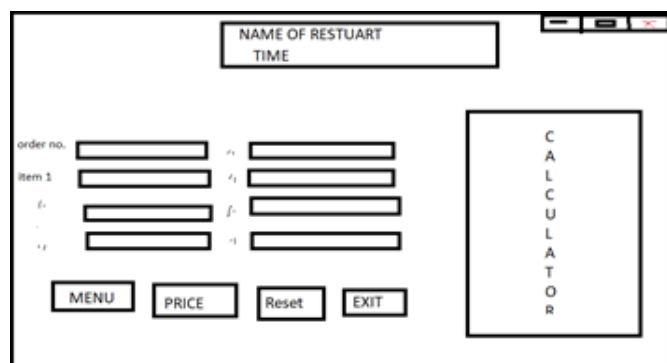
**Fig -1**: User Case Diagram



**Fig -2**: Restaurant Billing System Using Python

## 4.   SYSTEM REQUIRMENTS AND SPECIFICATIONS

Here we are including the software's and hardware's used for developing the project and implementing the project

A.   Software Requirements

1.   Python 3,9
2.   Notepad
3.   Any OS

B.   Hardware Requirements

1.   2 GB RAM or above
2.   Intel i3 Processor or above
3.   32 Bit System or above

## 5.   SYSTEM IMPLEMENTATION

Restaurant Billing System is developed using Python. While using this billing management system, you can easily calculate total bill of the customer. Moreover, the total bill is

calculated including service charges and state tax. All you need to do is just fill up the blank boxes with item quantities and click on total button. The program will display your total bill. This system can be used in restaurants, cafe and food truck for calculating bills in a short period of time and it's not time consuming. It's easy to operate and understand by users. There is no any error and warning contents in the project. The design is so simple that user won't find it difficult to use and navigate.

To ease the use of the user we even have a calculator added to our system which performs all basic operations like Addition, Subtraction, Division and Multiplication. We'll display Menu, Order no., Total and Reset. We assure that the project is bug free and easy to use.

Since the program is for restaurant or providing services. It will add services charges and state taxes respectively.
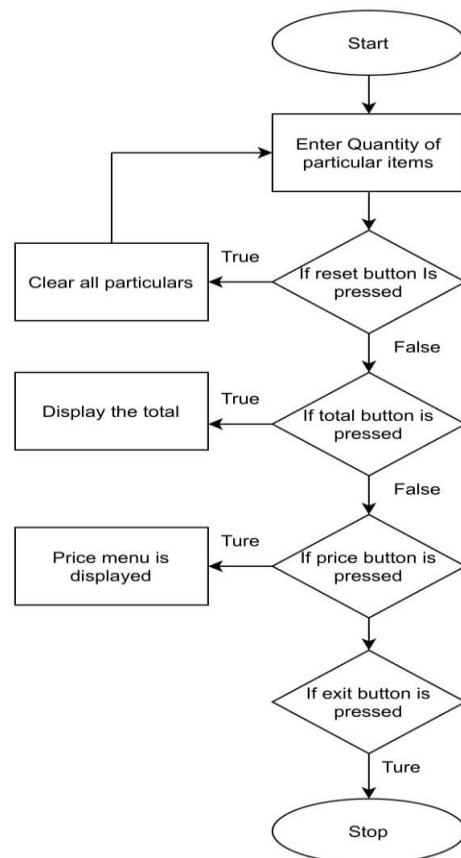


**Fig -3**: Restaurant Billing System Using Python Flowchart

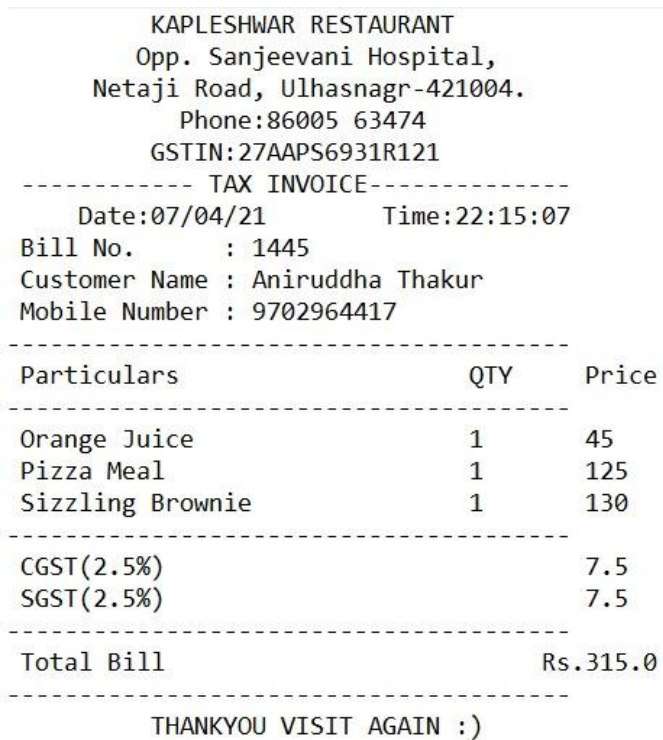**Fig -4**: Restaurant Billing System Using Python Home screen



**Fig -5**: Restaurant Billing System Using Python Digital Bill

## 6. FUTURE WORK

In future, this application can be updated with some more food items. Many other latest features will be added. Project will surely be enhanced with respect to looks and appearance and also as per user requirements. Many more functionalities will be added. Some enhancement can also be done with calculator. For now, this application generates the bill but with respect to future application it will be enhanced that it will also print a bill. It can also be used on a large scale. Many more modification can do with menu or prices or tax as well. It will be easy to use and bug free to all future or upcoming users. This can also be enhanced in future as per customer requirements. Many more features can be added. This will surely help users instead of making a bill manually

## 7. ACKNOWLEDGEMENTS:

## 8. CONCLUSION

The urge for the digital restaurant management systems is increasing day by date. Restaurant Billing System Using Python is a perfect solution for this. Through this the ease of access and flexibility of the day to day works in the restaurant is made simpler. The features such as bill number, CGST and SGST make this software user friendly. Both the management side and worker site can manage the data easily using such a system. It is very good and reliable system which can be in corporate to the chain of hotels so can easily maintained and addressed

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