



# **COMPUTER SCIENCE & ENGINEERING**

## **RESTAURANT BILL APPLICATION**

SUBMITTED TO-

Mr. Sagar Pande

SUBMITTED ON-

November 2020

SUBMITTED BY-

Mrityunjay Reddy

Pratyush Pranjal

# **ABSTRACT**

The purpose of this project is in fulfilling the requirements of user working at a restaurant to calculate bill along with the tax to be paid by the customer. The design and development of this Restaurant Bill Application provides an efficient way to the user to manage billing system of a restaurant by simply providing him with an easy to use interface that comes along with a menu widget with defined prices of menu items. Therefore, making it easy for any ordinary person to manage the billing system at a restaurant

The domain “Restaurant Billing Application” enables faster calculation of the bill to be paid by the customer at the same time generating a receipt for the same thus ensuring efficient workflow and releasing the user from the hassle of manually calculating the bill which not only saves time but reduces the possibility of errors in calculation and otherwise. The programming language that has been used in the application is python.

# **ACKNOWLEDGEMENTS**

We express our deep sense of gratitude to our respected professor Mr. Sagar Pande, Department of CSE, Lovely Professional University for mentoring us throughout the project with the necessary guidance and much valuable insights. We would stay forever thankful to sir for the keen interest and thorough encouragement extended which was consistently displayed throughout the period of project work.

We express our thanks to all those who contributed for the successful completion of our project work.

With gratitude,

Mrityunjay Reddy – 11915922

Pratyush Pranjal – 11906033

# INDEX

## CONTENTS

- 1. Introduction**
- 2. Review of Literature**
- 3. Project Contribution**
  - Material and Methods
  - Results
  - Discussion
- 4. References**
  - Appendices

# INTRODUCTION

In order to manage a restaurant in a fast and easier way, GST enabled restaurant billing system is a complete solution. In order to escape instances that challenge the free flow of your delivery management, restaurant billing system is designed in such a way that it can take care of a restaurant's service efficiently.

With the help of Restaurant billing system one can take care of tables and kitchen orders. By means of a hard copy record of number of orders taken, this restaurant billing system displays the menu items and gives the functionality to order n number of items to the customers present in a restaurant.

## REVIEW OF LITERATURE

### Project Analysis-

This application contains following modules:

1. Menu Window
2. Calculator window
3. Bill Display Box
4. Total Calculation Window

Individuals, with empty stomach, hate to wait for long in queue to get their order served. Speed in restaurant operation is much needed to satisfy customers to the fullest. Our restaurant billing system is easy-to-use and fast with intuitive layout. It will increment the speed of a restaurant operation to a great extent. The drink section and the food section are laid out separately to promote ease of use and increase efficiency at the same time.

The owner should be able to gain an insight of restaurant activity. This would help to make better plans for a restaurant. One should be able to figure out what items are being sold greatly, what dishes are sold abundantly and so forth. The restaurant billing software provides a count of separate items that are ordered by a customer thus at the same time generates a receipt to keep a track of what's been ordered, this would help greatly in order to get an idea of what's been ordered over a period of time which would further help in altering menu items

# The Interface

Restaurant Billing System

**RISTORANTE BILLING SYSTEM** 21:52:05 **RECORDS**

Total Receipt Reset Exit

0

7	8	9	+
4	5	6	-
1	2	3	*
0	C	=	/

<input type="checkbox"/> Cocktail	R50	0
<input type="checkbox"/> Iced Tea	R45	0
<input type="checkbox"/> Hot Chocolate	R60	0
<input type="checkbox"/> Orange Juice	R35	0
<input type="checkbox"/> Milk Shake	R70	0
<input type="checkbox"/> Mountain Dew	R40	0
<input type="checkbox"/> Sting	R55	0
<input type="checkbox"/> Coffee	R75	0

<input type="checkbox"/> Fried Chicken	R200	0
<input type="checkbox"/> Pizza	R250	0
<input type="checkbox"/> Crispy pasta	R100	0
<input type="checkbox"/> Rice Bowl	R60	0
<input type="checkbox"/> Chinese Noodles	R120	0
<input type="checkbox"/> Aloo Parantha	R30	0
<input type="checkbox"/> Fried Momos	R80	0
<input type="checkbox"/> Chilli Potato	R100	0

Total of Drinks		Paid Tax	
Total of Foods		Sub Total	
Service Charge		Total	

## Menu

This is the menu of the restaurant; the restaurant has two different sections. The food section and the drinks section

<input type="checkbox"/> Cocktail	R50	0
<input type="checkbox"/> Iced Tea	R45	0
<input type="checkbox"/> Hot Chocolate	R60	0
<input type="checkbox"/> Orange Juice	R35	0
<input type="checkbox"/> Milk Shake	R70	0
<input type="checkbox"/> Mountain Dew	R40	0
<input type="checkbox"/> Sting	R55	0
<input type="checkbox"/> Coffee	R75	0

<input type="checkbox"/> Fried Chicken	R200	0
<input type="checkbox"/> Pizza	R250	0
<input type="checkbox"/> Crispy pasta	R100	0
<input type="checkbox"/> Rice Bowl	R60	0
<input type="checkbox"/> Chinese Noodles	R120	0
<input type="checkbox"/> Aloo Parantha	R30	0
<input type="checkbox"/> Fried Momos	R80	0
<input type="checkbox"/> Chilli Potato	R100	0

## Total Tab

The total tab displays the total that must be paid by the customer at the same time it also bifurcates the tax and subtotal giving the complete demarcation of the bill

Total of Drinks	<input type="text"/>	Paid Tax	<input type="text"/>
Total of Foods	<input type="text"/>	Sub Total	<input type="text"/>
Service Charge	<input type="text"/>	Total	<input type="text"/>

## Calculator Window And Bill Display box

This is a simple calculator attached in the application that helps to perform simple applications. The calculator is integrated with a display screen that generates the bill receipt of the customer

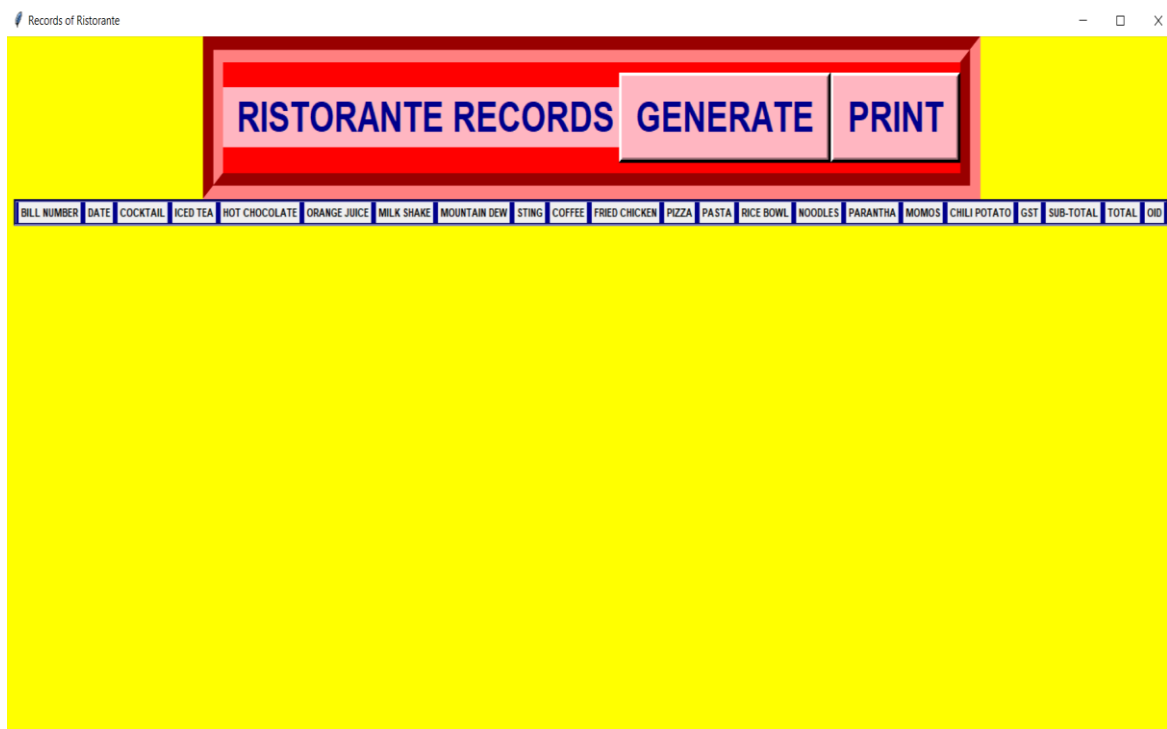
TotalReceiptResetExit

0

789+  
456-  
123\*  
0C=/

## Database Management:

This bill application also comes with additional feature such as database management system where the user can refer to a special window which can be accessed by clicking the “RECORDS” button which right next to the application name. Here, in the figure shown below after ordering a set of dishes and getting their total and receipt generation, the user can come here and easily click on the “GENERATE” button, followed by the “PRINT” button, which would add the order in the database for future reference.



Here, all the details of the order will always be available. This window can easily be referred for future references.



# OBJECTIVES

The application will be extremely beneficial for the user intending to use and operate their calculation.

“Restaurant Billing Application” is a simple application, which is especially generated and designed to calculate bills in a restaurant

Following are the major objectives behind the new proposed system:

- We try not to make it complicated. Its easy to use and is user friendly.
- All sorts of simple calculations can be performed.
- It increases efficiency and saves the time.
- Includes receipt generation along with date of receipt
- Values can be easily entered, and GST can easily be calculated.
- Orders and bill generation are particularly stored in database so that it can used in the future for any sort of reference.

## Material and Methods

- **We used Python in this application.**
- **Time module is used to compute the date .**
- **Tkinter module is used for the creation of the application .**
- **We have also used SQL Lite for database management purpose.**

# RESULTS

The Restaurant Billing Application System is a user-friendly platform which allows all the user to perform simple calculation tasks in the interference like – number of drink items, number of food items , simple calculator and receipt generator included with database management system for the user's convenience. Users can easily perform calculations on their own or they can let the system do that part of the job. It is the most easy-to-use and comfortable application for any user.

# REFERENCES

- **GeeksforGeeks**
- **Tutorial Point**
- **Exchangerate-api.com**

Done by:

D. Mrityunjay Reddy	11915922	K19JF - B68 (Group Leader)
Pratyush Pranjali	11906033	K19JF - B62