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SALOKHENAGAR, KOLHAPUR**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
(2021-22)**



**A Mini Project Report on  
“Canteen Billing System”**

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**Under the guidance of  
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**DEPARTMENT OF COMPUTER SCIENCE AND  
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# CERTIFICATE



This is to certify that the following members have satisfactorily completed the Mini Project work entitled “**Canteen Billing System**” at SY (CSE) semester-IV as prescribed in the syllabus of “Shivaji University, Kolhapur” during the academic year 2021-2022.

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## **ABSTRACT**

This project is aimed at developing a Restaurant Billing System. The purpose of the project is to develop a user-friendly GUI based billing system. The application can be accessed and effectively used by the user. The billing system contains the menu which is available in the restaurant. The owner or the cashier has to check the item ordered by the customer and enter the number of orders given for a particular item in the menu. Once the items are selected, the cashier can automatically get the total and the receipt will be generated. A simple GUI is provided for the easy access. The system's design is so simple that users won't find it difficult to use and understand. This project stores the created menu in the canteen ,modify the menu by the admin only .

The canteen billing system can provide service to the user by reducing the waiting time and by calculating the prices in a matter of a second. Hand billing or billing through a cash register takes times and serving a greater number of customers in less time becomes impossibility.

# INTRODUCTION

C++ is known for its general-purpose nature that makes it applicable in almost each domain of the software development. This project report has been designed, created, on the programming language 'C++'. This language has been a fascination for us and due to this reason, we have made a small project based on this language. Canteen Billing System is a windows application designed to help users to maintain and organize Canteen. Our application is easy to use for both beginning and advanced users. It features a familiar and an attractive user interface combined with strong searching, insertion and deletion capabilities. Canteen billing system is the system where all the aspects related to the proper management of canteen is done. These aspects involve managing information about the various products, customers, billing etc. This system provides an efficient way of managing the canteen information. Also allows the customer to purchase and pay for the items purchased.

The billing software refers to a **complete Canteen billing system** that can allow you to perform a *smooth order as well as to maintain all additional activities* such as order management, production system, inventory tracking, and so on. Moreover, a Canteen billing system is mainly a **centralized controlling system** that place order using accessing the data base for the menu.

The “Canteen Billing System” or “CBS” is an application to automate the process of information recording and billing of a Canteen. This desktop based application is designed to administer its users and customers. CBS is a billing system, made for the effective utilization of modern technology in the organization. It is an automated software that can handle a lot of information about the restaurant’s order, Product data. It has the capability to process bills and gather information about its Costing and billing history. It is designed for the sole purpose of efficiency, speed and accuracy. Waterfall Model is used to develop this software where different requirements are identified at first, analyse the requirements then design the software using various tools and techniques and using the development language the software is developed. Different testing like unit testing and integration testing are done during the development process

## BACKGROUND

old times, from manual billing system is a complex procedure to handle, what manual procedure actually includes is billing a customer on a bill book and keep the data in hard copy to see the earnings, it is ok till a short period but as the number of bill book rises it becomes hard to handle and keep the data up to date. This project is all about overcoming that particular problem on small scale.

## CONCEPT

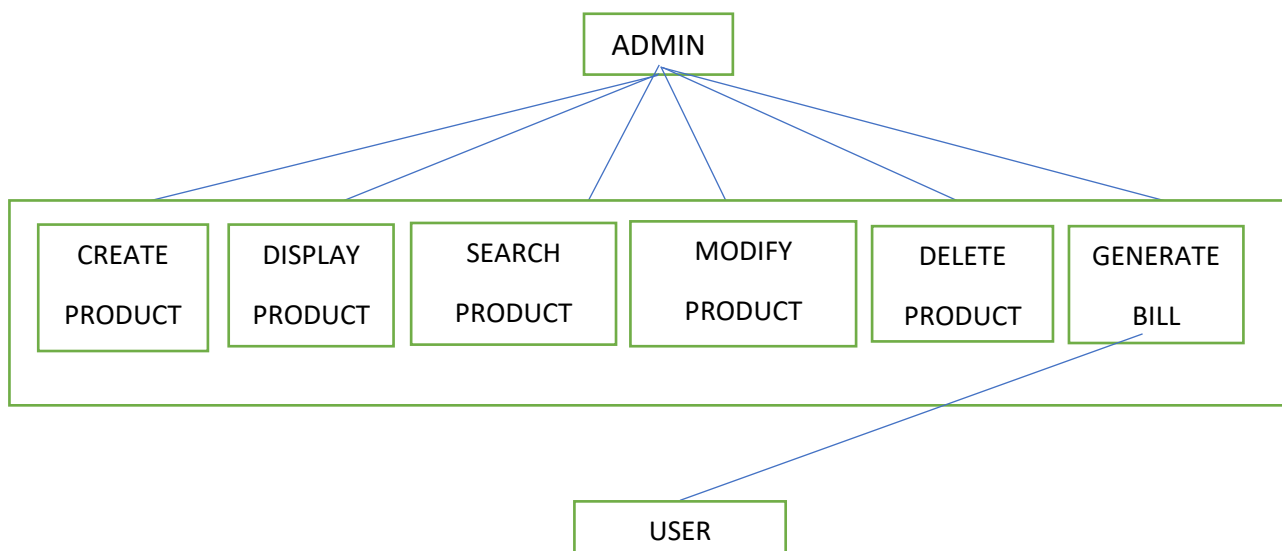
The concept of this application is for billing the customers college Canteen, according to the dishes/cuisines they order. his software calculates the amount automatically including all Taxes, the user just needs to input product code and number of plates.

So, through this application, the manual system for billing the customers in small scale canteen can be replaced by this billing system and automated billing system can be introduced to them.

This software can be implemented on any system with all the given functionalities. Wastage of paper can also be stopped (used in billing), that's what makes this project an Eco-Friendly Project. (This is a prototype of Restaurant Billing System)

## PROPOSED SYSTEM

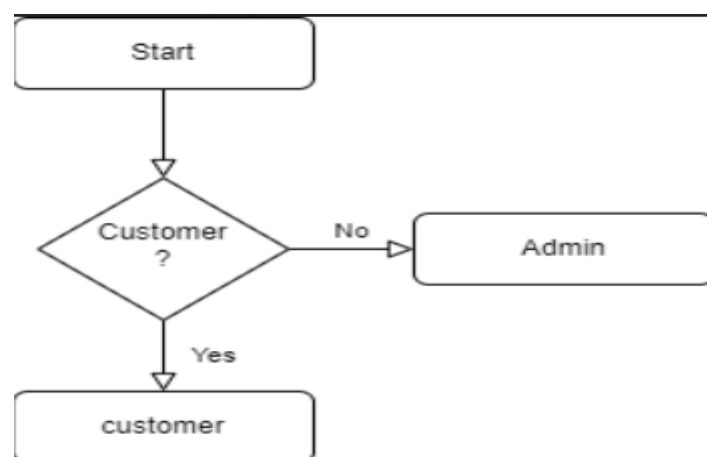
Since many canteen owners make bills for their customers manually with a pen paper. This sometimes results into an error of total or wrong items added or some items missing in bill or extra items added. This may end up by building up a bad impression of customer towards the canteen. So, to overcome this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



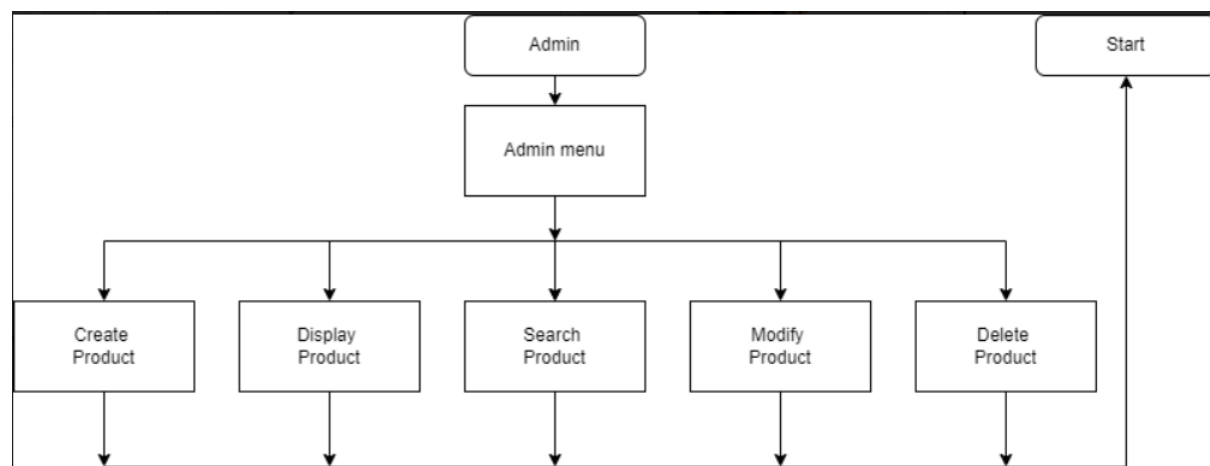
## SYSTEM IMPLEMENTATION

canteen Billing System is developed using C++. While using this billing management system, you can easily calculate total bill of the customer. All you need to do is just insert item code ,item quantities and press enter 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 canteen or providing services. It will add services charges and state taxes respectively

### PROGRAM INITIAL PROCESS

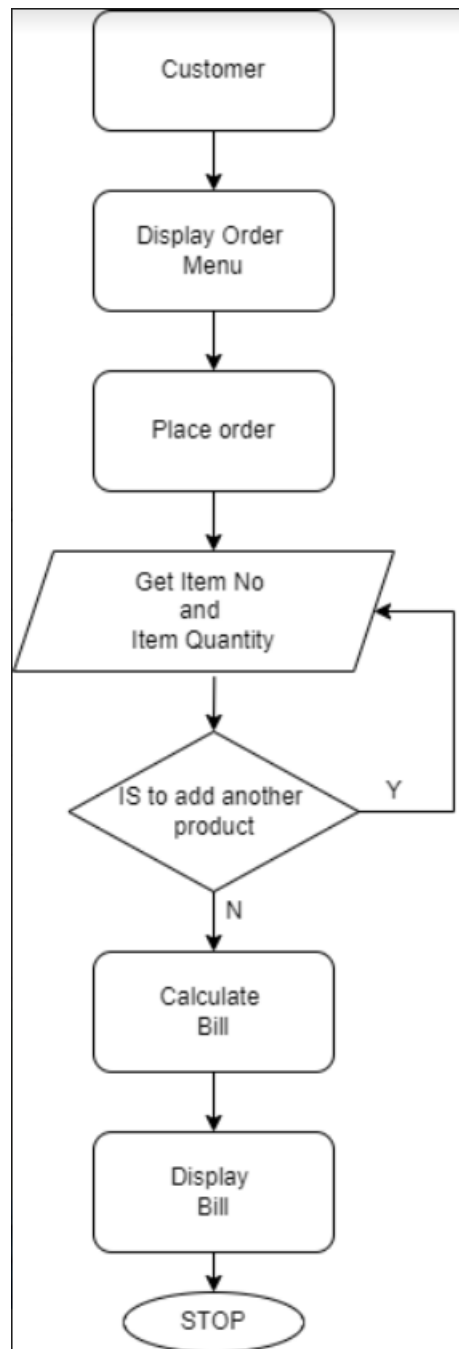


### ADMIN SECTION PROCESS FLOW CHART





## CUSTOMER SECTION PROCESS FLOW CHART



## CUSTOMER SECTION PROCESS :

### Step :-1 : Display menu

```
PRODUCT MENU
=====
P.NO      NAME      PRICE
=====
1         Pohe      10
2         Chai       7
3         Samose     15
=====
Press Enter to Place Order ->

```

### Step :-2 :Place Order

```
=====
Press Enter to Place Order ->

=====
PLACE YOUR ORDER
=====
Enter the product no. of the product : 1

Quantity in number : 2

Do you want to order another product [y/n] : y
=====
Enter the product no. of the product : 2

Quantity in number : 1

Do you want to order another product [y/n] : n
```

### Step :-3 :Calculate and generate a bill

Get product number and quantity. Calculate the total amount and generate Bill.

```
Thank you for placing order !!!
=====
No      Name      Quantity      Price      Amount
=====
1       Pohe      2             10         20
2       Chai       1             7          7
=====
TOTAL AMOUNT : RS.27
=====

```

## ADMIN SECTION PROCESS

### 1.Create Product-

Read product number, product price from the user and save to shop.txt file.

```
Product Menu!!!

The Product No. of The Product :      1
The Name of The Product       :      Pohe
The Price of The Product      :      10

=====
The Product No. of The Product :      2
The Name of The Product       :      Chai
The Price of The Product      :      7

=====
The Product No. of The Product :      3
The Name of The Product       :      Samose
The Price of The Product      :      15

=====
The Product No. of The Product :      4
The Name of The Product       :      Shira
The Price of The Product      :      12

=====
```

### 2.Display All Product-

Read data from shop.txt file and display product number, name and price for all product.

```
Product Menu!!!

The Product No. of The Product :      1
The Name of The Product       :      Pohe
The Price of The Product      :      10

=====
The Product No. of The Product :      2
The Name of The Product       :      Chai
The Price of The Product      :      7

=====
The Product No. of The Product :      3
The Name of The Product       :      Samose
The Price of The Product      :      15

=====
The Product No. of The Product :      4
The Name of The Product       :      Shira
The Price of The Product      :      12

=====
```

### 3. Search Product –

Read product number from user and search product number in shop.txt file.

```
The Product No. of The Product : 4
The Name of The Product       : Shira
The Price of The Product      : 12
```

### 4.Modify Product-

Modify the previous data of the product from shop.txt file.

```
      To Modify
The Product No. of The Product : 4
The Name of The Product       : Shira
The Price of The Product      : 12

Please Enter The New Detail

Please Enter The Product No. of The Product : 4

Please Enter The Name of The Product : Uppit

Please Enter The Price of The Product : 15

Record Updated Successfully...
```

### 5.Delete Product-

Get product number to delete product and erase the respective data from shop.txt data.

```
Please enter the product no to delete : 4

Record Deleted
```

## Conclusion

Finally, in the Canteen billing system source code, the outcome of all the time hard work is here. We have a system which takes the necessary choices of the customer according to the various filter like price, Availability . Then he is able to place the order accordingly and then the system calculates all the total of the order with taxes and then it can dispatch the bill that is handed over to the customer.

Customer according to the choice pay bill via cash or debit card or credit card method. Hence all the process works perfect, full filling the demands. The urge for the digital restaurant management systems is increasing day by date. Canteen Billing System Using C++ 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 Storing product data for further uses. Both the management side and customer 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

## Reference

<https://www.google.co.in/>

<https://www.youtube.com>

<https://www.geeksforgeeks.org/>

<https://github.com>