VISVESVARAYA TECHNOLOGICAL, UNIVERSITY
JNANA SANGAMA, BELAGAVI- 590018

Add-on course mini project report on

"CUSTOMER BILLING SYSTEM USING C LANGUAGE "

Submitted in partial fulfillment of the requirement for the award of the degree of

BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE AND ENGINEERING

Submitted by

ARSHAN SHAIK   2VD20CS008
PRAJWAL NAIK   2VD20CS023

Under the guidance of

PROF. SALEEM HEBBAL
PROF. ABHAYKUMAR INCHAL

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
KLS VISHWANATHARAO DESHPANDE INSTITUTE OF TECHNOLOGY, HALIYAL-581329
2021-2022

KLS VISHWANATHARAO DESHPANDE
INSTITUTE OF TECHNOLOGY, HALIYAL-581329

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE

Certified that the project work entitled

"CUSTOMER BILLING SYSTEM USING C LANGUAGE "

A Bonafide work carried out by

ARSHAN SHAIKH(2VD20CS008)   PRAJWAL NAIK(2VD20CS023)

In partial fulfillment of the requirement for the award of **Bachelor Of Computer Science And Engineering Visvesvaraya Technology University, Belagavi ,**during the year 2021-2022. It is certified that all the corrections/suggestion indicated for the internal assessment have been incorporated in the report. The project work report has been approved has it satisfies the academic requirements in the respect of the project work prescribed for the Bachelor of Engineering degree

Signature of guide

Prof. Saleem Hebbal
Prof. Abhaykumar Inchal

Signature of HOD

Prof. Poornima Raikar

Seal of principal

Dr. V.A. Kulkarni

1

2

ACKNOWLEDGEMENT

First of all, we are indebted to the ALMIGHTY GOD for giving us an opportunity to excel in our efforts to complete this project on time .

Our heartfelt gratitude to our guide, **Prof. Saleem Hebbal and Prof. Abhaykumar Inchal ,** computer science and engineering department for the valuable suggestion and guidance in the preparation of the project.

We are extremely grateful to **Prof. Poornima Raikar ,**Head of computer science and engineering department, for providing all the required resources for the successful completion of the project.

We are truly grateful to **Dr. V.A. Kulkarni ,** Principal, KLS's Vishwanatharao Deshpande Institute of Technology ,Haliyal for providing all the necessary resources for the successful completion of the project.

We express our thanks to all the staff and friends for all the help and co-ordination extended in bringing out this project successfully in time.

We will be failing in duty if we do not acknowledge with the grateful thanks to the authors of the references and other literature referred to in this project. last but not the least, we are very much thankful to our parents who guided us in every step which we took.

-**Project Associates**
ARSHAN SHAIH
PRAJWAL NAIK

TABLE OF CONTENTS

1. Acknowledgement

2. Abstract

3. index

Abstract

This Billing system can be deployed in a real world situation. For example, it could be implemented for a telecommunication company to have effective billing of the customer and it could also be deployed as contractor to already existing networks. Hopefully, at the end of the day the program will be able to satisfied the under listed objectives that would bridge the gap on short coming in the billing system.

Services: Service is the entity offered by the company and targeted to the customers.

Accounts: The customer account includes customer contact profile information, account type, login information, and payment method.

Ratings: Rating is the process of converting usage records from one form to another, like converting usage units to its cost.

Payments: Each customer in the system has an account balance, which affects any invoices requested by the customer and any payments done by the customer.

Invoices: It is the entity generated by the billing system to inform the customer that he must pay for his service usage or ordering.

<u>INDEX</u>

introduction:

At its most basic definition, a billing system is **the process by which a business bills and invoices customers**. Billing systems often include payment software that automates the process of collecting payments, sending out recurring invoices, expense tracking, and invoice tracking

* ❖ Applictaion to automate blling and ordering of any store
* ❖ Stock management- tells when its time to reorder and how to purchase
* ❖ Billing system generate the invoice easier and faster
* ❖ Handel large volume of data
* ❖ Genral benefits.

The most important task in billing is **getting a reminder to intimate the due date to the customer**. These reminders make sure the company is paid on time

Invoicing software lets **you generate invoices quickly and make sure you receive faster payments**. In short, your workload will be reduced and you can have track of ongoing activities. For example, you can easily keep tabs on your business expenses and even send professional invoices to your multiple clients quickly

PROBLEM DEFINATION :

Komi (stationery product)

❖ SHOP FACED THE FOLLOWING PROBLEMS:
1. Maintaining large number of bill registers
2. Maintaining customer and product details
3. Accessing customer and product details
4. Managing stock
5. Generating purchase and sales report

Features:

- ❖ Manage multiple billing records
- ❖ Change recurring billing cycle
- ❖ View all account charges on unified billing statement
- ❖ Create customer record
- ❖ Creating product record
- ❖ Multiple export format
- ❖ Auto-saving of the invoice
- ❖ Security provided by providing different access levels: super user(admin),stock manager, sales representative, simple user
- ❖ Unique session id to the user
- ❖ Regular updates to subscribed customers
- ❖ Stocks alerts
- ❖ Barcode reading
- ❖ Accessing previous bills

Methology

Algorithm:

Step 1: START

Step 2: Variable decleration a = 40, b = 50, c = 60, d = 70, e, f, g, h, total, i, j, k, l, m, discount,id

step 3:
  print enter the customer mobile number-\t\n");
  print PRODUCT AVILABLE AND THEIR PRICE\n\n");

 print the price of Pen
 print the price of Scale
 print the price of Eraser
 print the price of Pencil
 print enter the quantity Pen
 print enter the quantity Scale
 print enter the quantity Eraser
 print enter the quantity Pencil
step 4:
{
    i = (a * e);
    j = (b * f);
    k = (c * g);
    l = (d * h);
    total = i + j + k + l;

    amount = total + (0.17 * total);
    m = amount * 0.05;

step 5: print THE BILL GENERATED

Print customer mobile number
Print The items purchased
Print Product Quantity Product Price Total
Print Scale
Print Eraser
Print Pen
Print Pencil

   print The total
   print The total price after tax applied
   print Discount is
   print payable amount
   print thank you for shopping with us

step 6: END

Program:

```c
#include <stdio.h>
#include <conio.h>
#include <time.h>

int main()
{
    int a = 30, b = 15, c = 10, d = 10, e, f, g, h, total, i, j, k, l, m, discount, id;
char s[40];
    float amount;
    printf("\t\twelcome to VDIT co-operative store \n");
    time_t tm;
    time(&tm);
    printf("\t\t\t\t\t\tdate & time = %s \n", ctime(&tm));
    printf("enter the customer mobile number-\t\n"); // customer mobile is taken
as  id
    scanf("%d", &id);
    printf("enter the customer name \n",&s);
    scanf("%s",&s);
    printf("PRODUCT AVILABLE AND THEIR PRICE\n\n");
    printf("\t\t the price of Pen\t%d\n", a);
    printf("\t\t the price of Scale\t%d\n", b);
    printf("\t\t the price of Eraser \t%d\n", c);
    printf("\t\t the price of Pencil \t%d\n\n", d);
    printf("enter the quantity Pen\n", &e);
    scanf("%d", &e);
    printf("enter the quantity Scale\n", &f);
    scanf("%d", &f);
    printf("enter the quantity Eraser\n", &g);
    scanf("%d", &g);
    printf("enter the quantity Pencil\n", &h);
    scanf("%d", &h);
    {
        i = (a * e);
        j = (b * f);
        k = (c * g);
        l = (d * h);
        total = i + j + k + l;
        amount = total + (0.17 * total);
        m = amount * 0.05;
        discount = amount - m;
```

```c
    }
    FILE *fp;
    fp = fopen("billingsyestemaccountss.txt", "a+");
    printf("\nTHE BILL GENERATED\n\n");
    printf("customer mobile number %d\n\n", id);
    printf("The items purchased\n ");
    printf("Product\tQuantity\t\tProduct Price\t\tTotal\n");
    printf("Scale\t\t %d \t\t\t%d\t\t\t%d\n", f, b, j);
    printf("Eraser \t\t %d \t\t\t%d \t\t\t%d\n ", g, c, k);
    printf("Pen \t\t %d \t\t\t%d\t\t\t%d\n", e, a, i);
    printf("Pencil \t\t %d \t\t\t%d\t\t\t%d\n", h, d, l);
    printf("**********************************************************
********************\n");
    printf("The total=%d\n", total);
    printf("The total price after tax applied=%f\n", amount); // tax aplied on goods
purchased is 17%
    printf("Discount  is 5%%\n");
  printf("%s has to pay  =%d  amount\n\n",s, discount);
  printf("\t\t*******thank you for shoppping with   us***************\n\n\n");
  fprintf(fp, "THE BILL GENERATED\n\n");
    fprintf(fp, "customer mobile number %d\n",id);
    fprintf(fp, "The items purchased\n\n ");
    fprintf(fp, "Product\tQuantity\t\tPrice\t\tTotal\n");
    fprintf(fp, "Scale\t\t %d  \t\t\t%d\t\t\t%d\n", f, b, j);
    fprintf(fp, "Eraser \t\t %d \t\t\t\t%d \t\t\t%d\n ", g, c, k);
    fprintf(fp, "Pen \t\t %d \t\t\t\t%d\t\t\t%d\n", e, a, i);
    fprintf(fp, "Pencil \t\t %d \t\t\t\t%d\t\t\t%d\n", h, d, l);
    fprintf(fp,
"****************************************************************************
**************\n");
    fprintf(fp, "The total=%d\n", total);
    fprintf(fp, "The total price after tax applied=%f\n", amount);
    fprintf(fp, "Discount  is 5%%\n");
    fprintf(fp, "%s has to pay  =%d  amount\n\n",s, discount);
    fprintf(fp, "%s", "\t\t*******thank you for shoppping
with  us***************");
    fclose(fp);
    return 0;
}
```

Output:-
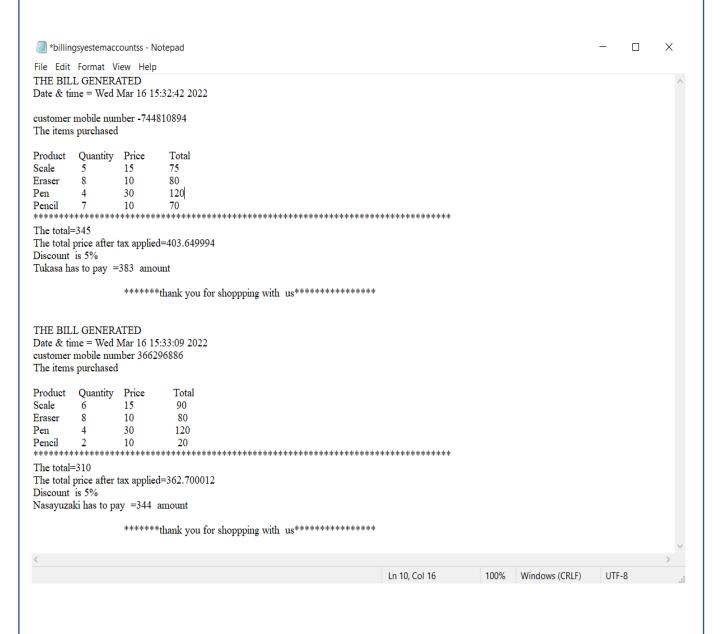
```
PS E:\ADD-ON project> gcc billing.c
PS E:\ADD-ON project> .\a.exe
                welcome to VDIT co-operative store

                                            date & time = Wed Mar 16 15:32:42 2022


enter the customer mobile number-
7845123698
enter the customer name
Tukasa
PRODUCT AVILABLE AND THEIR PRICE

                the price of Pen        30
                the price of Scale      15
                the price of Eraser     10
                the price of Pencil     10

enter the quantity Pen
4
enter the quantity Scale
5
enter the quantity Eraser
8
enter the quantity Pencil
7

THE BILL GENERATED

customer mobile number -744810894

The items purchased
 Product        Quantity                Product Price           Total
Scale           5                       15                      75
Eraser          8                       10                      80
 Pen            4                       30                      120
Pencil          7                       10                      70
***********************************************************************************
The total=345
The total price after tax applied=403.649994
Discount   is 5%
Tukasa has to pay   =383   amount

            *******thank you for shoppping with    us*****************
```

Output:-

```
PS E:\ADD-ON project> .\a.exe
                welcome to VDIT co-operative store
                                            date & time = Wed Mar 16 15:33:09 2022

enter the customer mobile number-
8956231478
enter the customer name
Nasayuzaki
PRODUCT AVILABLE AND THEIR PRICE

                the price of Pen        30
                the price of Scale      15
                the price of Eraser     10
                the price of Pencil     10

enter the quantity Pen
4
enter the quantity Scale
6
enter the quantity Eraser
8
enter the quantity Pencil
2

THE BILL GENERATED

customer mobile number 366296886

The items purchased
 Product         Quantity                 Product Price           Total
Scale            6                        15                      90
Eraser           8                        10                      80
 Pen             4                        30                      120
Pencil           2                        10                      20
*********************************************************************************
The total=310
The total price after tax applied=362.700012
Discount  is 5%
Nasayuzaki has to pay  =344   amount

                *******thank you for shoppping with   us****************
```

Output:-

- All the bills generated are saved in filename.txt format

*billingsyestemaccountss - Notepad

File Edit Format View Help

```
THE BILL GENERATED
Date & time = Wed Mar 16 15:32:42 2022

customer mobile number -744810894
The items purchased

Product   Quantity   Price        Total
Scale     5          15           75
Eraser    8          10           80
Pen       4          30           120
Pencil    7          10           70
*******************************************************************
The total=345
The total price after tax applied=403.649994
Discount  is 5%
Tukasa has to pay  =383  amount

                *******thank you for shoppping with  us***************


THE BILL GENERATED
Date & time = Wed Mar 16 15:33:09 2022
customer mobile number 366296886
The items purchased

Product   Quantity   Price        Total
Scale     6          15           90
Eraser    8          10           80
Pen       4          30           120
Pencil    2          10           20
*******************************************************************
The total=310
The total price after tax applied=362.700012
Discount  is 5%
Nasayuzaki has to pay  =344  amount

                *******thank you for shoppping with  us***************
```

Ln 10, Col 16   100%   Windows (CRLF)   UTF-8

Conclusion

This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.

The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updation so that the user cannot enter the invalid data, which can create problems at later date.

Source:

- source code crackers for date and time
    - https://github.com/code -cracker/code-cracker

- about billing system
    - https://en.m.Wikipedia.org/wiki/billing

- C the complete refrence
    - Book by Herbert Schilldt

- Project implemented on
    - Visual studio code 2021

- File saved on
    - notepad