

Project Title: BILLING MANAGEMENT SYATEM

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Project Submitted to: Mr. Kumar Poudyal

Subject: Object Oriented Programming (C++)

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Introduction :

Super market billing system is a simple application built in C++. This project uses basically two things – use of various functions and file handling.

The project is relatively simple to understand as there are just a few features. Listed below are the key features of this project:

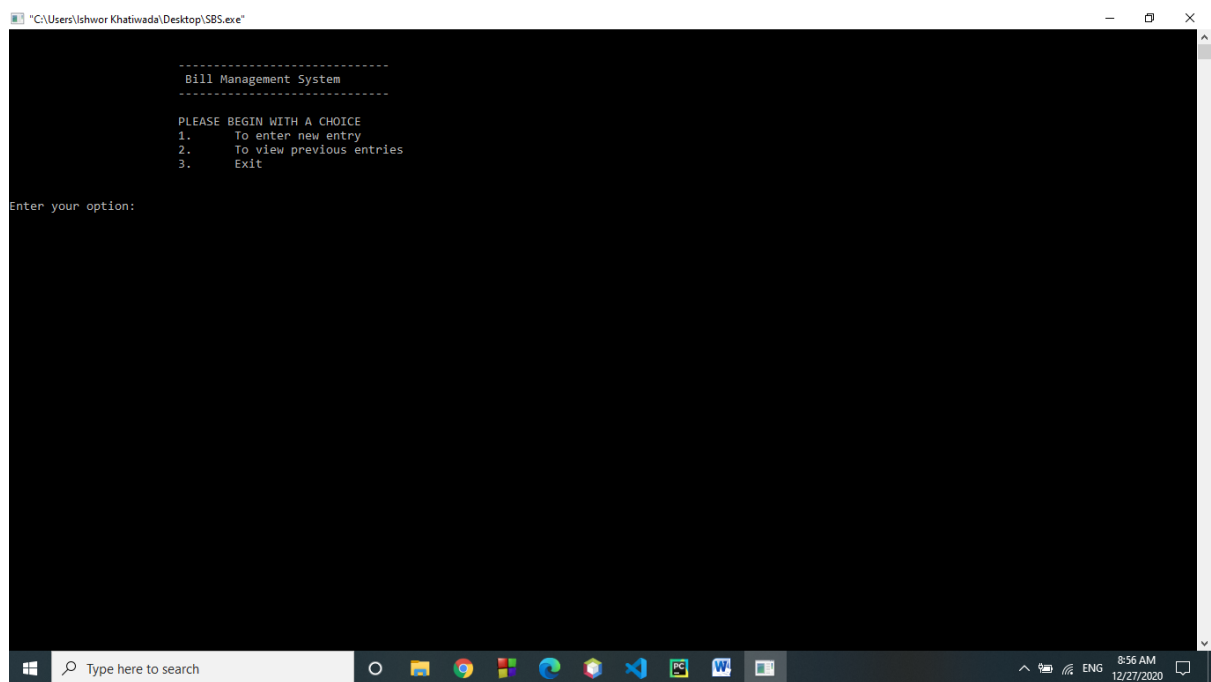
- **To Add new Entry for Billing**
- **Show Previous Entry**

In the program at first user has to enter the total number of products purchased this is for the repetition of the loop for **Nth** times Repetition of loop.

IFSTREAM are which performs input/output operations on the file they are associated with i.e. **data.TXT** whereas, **OFSTREAM** represents the output file stream and is used to create files and to write information to files i.e. **abc.TXT**.

For switching between conditions **switch case** is used and 3various options are provided.

Output Screenshots:



```
-----  
Bill Management System  
-----  
  
PLEASE BEGIN WITH A CHOICE  
1.    To enter new entry  
2.    To view previous entries  
3.    Exit  
  
Enter your option:
```

```
"C:\Users\Ishwor Khatriwada\Documents\2nd semester bit texas\C++ Notes-dipendra sir\project.exe"
Enter The total number of items purchased 1
Enter the name of each items purchased 1: biskit
Enter the quantity: 5
Enter price of each item 1: 20
Name of Item    Quantity    Price    Total Price    Total vat
biskit         5          20       100           100
Total:
-----
Quantity= 5          Sum= 100          With Vat:113
-----
****PAYMENT SUMMARY****
Total cash given by buyer: 120
Remaining cash to be paid to customer : 7
Press any key to continue . . . .
```

SOURCE CODE:

```
#include<iostream>
#include<process.h>
#include<fstream>
#include <stdlib.h>
using namespace std;

class head
{
    char Iname[50][50];

public:
    int totalitems;
    float Qty[3];
    float price[3];
    int vatprice[3];
    int tprice[3];
    void input();
    void output();
};
class vat:public head
```

```

{
    float vats;
public:
    void vatcal();
    void outputs();
    void sum();
};

//      INPUT FUNCTION

void head::input()
{
    system("CLS");
    cout<<"\nEnter The total number of items purchased ";
    cin>>totalitems;

    for(int i=0; i<totalitems; i++)
    {
        cout<<"\nEnter the name of each items purchased "<<i+1<<": ";
        cin>>Iname[i];
        cout<<"Enter the quantity: ";
        cin>>Qty[i];
        cout<<"Enter price of each item "<<i+1<<": ";
        cin>>price[i];
        tprice[i]=Qty[i]*price[i];
    }
}

//      OUTPUT FUNCTION

void head::output()
{
    int a;

    ifstream infile("data.TXT");
    infile>>a;

    ofstream outfile("data.TXT");
    a+=1;
    outfile<<a;
    outfile.close();

    {ofstream outfile("abc.TXT", ios::app);
    outfile<<endl<<"Bill No.: "<<a<<endl;
    outfile<<"-----"<<endl;
cout<<"\n";
    cout<<"Name of Item\tQuantity  Price  Total Price Total vat\n";
    for(int i=0;i<totalitems;i++)
    {

```

```

        outfile<<"Name: "<<Iname[i]<<" Qty: "<<Qty[i]<<" Price:
"<<tprice[i]<<"vat:"<<vatprice[i]<< endl;
        cout<<Iname[i]<<"\t\t"<<Qty[i]<<"\t  "<<price[i]<<"\t  "<<tprice[i]<< "\n';
    }

    outfile<<"-----"<<endl;
    outfile.close();
}

```

// VAT CALCULATION

```

void vat::vatcal()
{
    input();
    for(int i=0;i<totalitems;i++)
    {
        vatprice[i]=tprice[i]+(0.13*tprice[i]);
    }
}

```

// VAT OUTPUTS

```

void vat::outputs()
{
    output();

    float cash=0,sum=0,qty=0,sumt=0;

    for(int i=0;i<totalitems;i++)
    {
        sumt+=tprice[i];
        sum+=vatprice[i];
        qty+=Qty[i];
    }
    cout<<"\nTotal:";
    cout<<"\n-----";
    cout<<"\n\tQuantity= "<<qty<<"\t\t Sum= "<<sumt<<"\t\tWith Vat:"<<sum;
    cout<<"\n-----";
}

```

pay:

```

cout<<"\n\n\t\t*****PAYMENT SUMMARY*****\n";
cout<<"\n\t\tTotal cash given by buyer: ";
cin>>cash;

if(cash>=sum)
    cout<<"\n\t\tRemaining cash to be paid to customer : "<<cash-sum<<"\n';

else

```

```

        {
            cout<<"\n\t\tCash given is less than total amount!!!";

            goto pay;
        }
    }

//      THE MAIN FUNCTION OF PROGRAM

int main()
{
    vat obj;
    char opt, ch;
    int a=1;
    ifstream fin;

    start:
        do{
            system("PAUSE");
            system("CLS");
            cout<<"\n\n\t\t-----";
            cout<<"\n\t\tBilling Management System";
            cout<<"\n\t\t\t\t\t-----";
            cout<<"\n\n\t\tENTER YOUR CHOICE TO BEGIN";
            cout<<"\n\t\t\t1.\t For New Entry\n\t\t\t2.\t To view previous entries\n\t\t\t3.\t Exit\n";
            cout<<"\n\nEnter your option: ";
            cin>>opt;
            switch(opt)
            {
            case'1':
                obj.vatcal();

                obj.outputs();
                goto start;
            case'2':

                fin.open("abc.TXT", ios::in);
                while(fin.get(ch))
                {
                    cout<<ch;
                }
                fin.close();

                goto start;
            case'3':
                exit(0);
            default:

```

```
        cout<<"\a";  
    }  
    }while(opt!=3);  
}
```