**Name: Muhammad Wasif Nazir**

**Sap id** **:15049**

**Class:** **Bscs 3 Sem A.**

**Super market billing system**

**About**

We made a Supermarket billing system and we will be using C++ language

**Functionality**

In this program we made **four classes**

* Bill report
* Add or remove or edit item
* Show item details
* Exit to the program

In this process first of all we have **to add the item**. After we select add item, we have four options the first one is add item details. The second one is edit item details .the third one is delete the item details and the fourth one goes back to the main menu.

After adding the item, **selecting the item**, we will go on the third class which is show item detail

In this class we will have **the expiry date the manufacture date** as well as stock date of the item

After that which is **program goes to the first class the Bill** report .after selecting all the items I will get a bill report of these items.

**Bill report all of the item will be added** and the bill will be in front of us

**Advantages**

It is an **efficient system**

This system is **prompt and quick**

This system allow **faster sale**

It also **reduces mistakes**

The balance of their stories and **keeps track of customer purchase history**

It also has the **entire product in stock** and if a product is out of stock it can show it

You can **add multiple items** with this and you can also see their prices over the screen before the billing

#include<iostream>

#include<windows.h>

#include<conio.h>

#include<fstream>

#include<cstring>

#include<cstdio>

#include<cstdlib>

#include<iomanip>

using namespace std;

int k=7,r=0,flag=0;

COORD coord = {0, 0};

void gotoxy(int x, int y)

{

COORD coord;

coord.X = x;

coord.Y = y;

SetConsoleCursorPosition(GetStdHandle(STD\_OUTPUT\_HANDLE), coord);

}

struct date

{

int mm,dd,yy;

};

ofstream fout;

ifstream fin;

class item

{

int itemno;

char name[25];

date d;

public:

void add()

{

cout<<"\n\n\tItem No: ";

cin>>itemno;

cout<<"\n\n\tName of the item: ";

cin>>name;

cout<<"\n\n\tManufacturing Date(dd-mm-yy): ";

cin>>d.mm>>d.dd>>d.yy;

}

void show()

{

cout<<"\n\tItem No: ";

cout<<itemno;

cout<<"\n\n\tName of the item: ";

cout<<name;

cout<<"\n\n\tDate : ";

cout<<d.mm<<"-"<<d.dd<<"-"<<d.yy;

}

void report()

{

gotoxy(3,k);

cout<<itemno;

gotoxy(13,k);

puts(name);

}

int retno()

{

return(itemno);

}

};

class amount: public item

{

float price,qty,tax,gross,dis,netamt;

public:

void add();

void show();

void report();

void calculate();

void pay();

float retnetamt()

{

return(netamt);

}

} amt;

void amount::add()

{

item::add();

cout<<"\n\n\tPrice: ";

cin>>price;

cout<<"\n\n\tQuantity: ";

cin>>qty;

cout<<"\n\n\tTax percent: ";

cin>>tax;

cout<<"\n\n\tDiscount percent: ";

cin>>dis;

calculate();

fout.write((char \*)&amt,sizeof(amt));

fout.close();

}

void amount::calculate()

{

gross=price+(price\*(tax/100));

netamt=qty\*(gross-(gross\*(dis/100)));

}

void amount::show()

{

fin.open("itemstore.dat",ios::binary);

fin.read((char\*)&amt,sizeof(amt));

item::show();

cout<<"\n\n\tNet amount: ";

cout<<netamt;

fin.close();

}

void amount::report()

{

item::report();

gotoxy(23,k);

cout<<price;

gotoxy(33,k);

cout<<qty;

gotoxy(44,k);

cout<<tax;

gotoxy(52,k);

cout<<dis;

gotoxy(64,k);

cout<<netamt;

k=k+1;

if(k==50)

{

gotoxy(25,50);

cout<<"PRESS ANY KEY TO CONTINUE...";

getch();

k=7;

system("cls");

gotoxy(30,3);

cout<<" ITEM DETAILS ";

gotoxy(3,5);

cout<<"NUMBER";

gotoxy(13,5);

cout<<"NAME";

gotoxy(23,5);

cout<<"PRICE";

gotoxy(33,5);

cout<<"QUANTITY";

gotoxy(44,5);

cout<<"TAX";

gotoxy(52,5);

cout<<"DEDUCTION";

gotoxy(64,5);

cout<<"NET AMOUNT";

}

}

void amount::pay()

{

show();

cout<<"\n\n\n\t\t\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

cout<<"\n\t\t DETAILS ";

cout<<"\n\t\t\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

cout<<"\n\n\t\tPRICE :"<<price;

cout<<"\n\n\t\tQUANTITY :"<<qty;

cout<<"\n\t\tTAX PERCENTAGE :"<<tax;

cout<<"\n\t\tDISCOUNT PERCENTAGE :"<<dis;

cout<<"\n\n\n\t\tNET AMOUNT :Rs."<<netamt;

cout<<"\n\t\t\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

}

int main()

{

cout.setf(ios::fixed);

cout.setf(ios::showpoint);

cout<<setprecision(2);

fstream tmp("temp.dat",ios::binary|ios::out);

menu:

system("cls");

gotoxy(25,2);

cout<< "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Hyper Mart \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"<< endl ;

gotoxy(25,3);

cout<<"\n\t\t1.Bill Report\n\n";

cout<<"\t\t2.Add/Remove/Edit Item\n\n";

cout<<"\t\t3.Show Item Details\n\n";

cout<<"\t\t4.Exit\n\n";

cout<<"\t\tPlease Enter Required Option: ";

int ch,ff;

float gtotal;

cin>>ch;

switch(ch)

{

case 1:

ss:

system("cls");

gotoxy(25,2);

cout<<"Bill Details";

gotoxy(25,3);

cout<<"================\n\n";

cout<<"\n\t\t1.All Items\n\n";

cout<<"\t\t2.Back to Main menu\n\n";

cout<<"\t\tPlease Enter Required Option: ";

int cho;

cin>>cho;

if(cho==1)

{

system("cls");

gotoxy(30,3);

cout<<" BILL DETAILS ";

gotoxy(3,5);

cout<<"ITEM NO";

gotoxy(13,5);

cout<<"NAME";

gotoxy(23,5);

cout<<"PRICE";

gotoxy(33,5);

cout<<"QUANTITY";

gotoxy(44,5);

cout<<"TAX %";

gotoxy(52,5);

cout<<"DISCOUNT %";

gotoxy(64,5);

cout<<"NET AMOUNT";

fin.open("itemstore.dat",ios::binary);

if(!fin)

{

cout<<"\n\nFile Not Found...";

goto menu;

}

fin.seekg(0);

gtotal=0;

while(!fin.eof())

{

fin.read((char\*)&amt,sizeof(amt));

if(!fin.eof())

{

amt.report();

gtotal+=amt.retnetamt();

ff=0;

}

if(ff!=0) gtotal=0;

}

gotoxy(17,k);

cout<<"\n\n\n\t\t\tGrand Total="<<gtotal;

getch();

fin.close();

}

if(cho==2)

{

goto menu;

}

goto ss;

case 2:

db:

system("cls");

gotoxy(25,2);

cout<<"Bill Edit";

gotoxy(25,3);

cout<<"=================\n\n";

cout<<"\n\t\t1.Add Item Details\n\n";

cout<<"\t\t2.Edit Item Details\n\n";

cout<<"\t\t3.Delete Item Details\n\n";

cout<<"\t\t4.Back to Main Menu ";

int apc;

cin>>apc;

switch(apc)

{

case 1:

fout.open("itemstore.dat",ios::binary|ios::app);

amt.add();

cout<<"\n\t\tItem Added Successfully!";

getch();

goto db;

case 2:

int ino;

flag=0;

cout<<"\n\n\tEnter Item Number to be Edited :";

cin>>ino;

fin.open("itemstore.dat",ios::binary);

fout.open("itemstore.dat",ios::binary|ios::app);

if(!fin)

{

cout<<"\n\nFile Not Found...";

goto menu;

}

fin.seekg(0);

r=0;

while(!fin.eof())

{

fin.read((char\*)&amt,sizeof(amt));

if(!fin.eof())

{

int x=amt.item::retno();

if(x==ino)

{

flag=1;

fout.seekp(r\*sizeof(amt));

system("cls");

cout<<"\n\t\tCurrent Details are\n";

amt.show();

cout<<"\n\n\t\tEnter New Details\n";

amt.add();

cout<<"\n\t\tItem Details editted";

}

}

r++;

}

if(flag==0)

{

cout<<"\n\t\tItem No does not exist...Please try again!";

getch();

goto db;

}

fin.close();

getch();

goto db;

case 3:

flag=0;

cout<<"\n\n\tEnter Item Number to be deleted :";

cin>>ino;

fin.open("itemstore.dat",ios::binary);

if(!fin)

{

cout<<"\n\nFile Not Found...";

goto menu;

}

fin.seekg(0);

while(fin.read((char\*)&amt, sizeof(amt)))

{

int x=amt.item::retno();

if(x!=ino)

tmp.write((char\*)&amt,sizeof(amt));

else

{

flag=1;

}

}

fin.close();

tmp.close();

fout.open("itemstore.dat",ios::trunc|ios::binary);

fout.seekp(0);

tmp.open("temp.dat",ios::binary|ios::in);

if(!tmp)

{

cout<<"Error in File";

goto db;

}

while(tmp.read((char\*)&amt,sizeof(amt)))

fout.write((char\*)&amt,sizeof(amt));

tmp.close();

fout.close();

if(flag==1)

cout<<"\n\t\tItem Succesfully Deleted";

else if (flag==0)

cout<<"\n\t\tItem does not Exist! Please Retry";

getch();

goto db;

case 4:

goto menu;

default:

cout<<"\n\n\t\tWrong Choice!!! Try again";

getch();

goto db;

}

case 3:

system("cls");

flag=0;

int ino;

cout<<"\n\n\t\tEnter Item Number :";

cin>>ino;

fin.open("itemstore.dat",ios::binary);

if(!fin)

{

cout<<"\n\nFile Not Found...\nProgram Terminated!";

goto menu;

}

fin.seekg(0);

while(fin.read((char\*)&amt,sizeof(amt)))

{

int x=amt.item::retno();

if(x==ino)

{

amt.pay();

flag=1;

break;

}

}

if(flag==0)

cout<<"\n\t\tItem does not exist....Please Try again!";

getch();

fin.close();

goto menu;

case 4:

system("cls");

gotoxy(20,20);

cout<<"ARE YOU SURE, YOU WANT TO EXIT (Y/N)?";

char yn;

cin>>yn;

if((yn=='Y')||(yn=='y'))

{

gotoxy(12,20);

system("cls");

cout<<endl;

cout<<endl;

cout<<endl;

cout<<endl;

cout<<endl;

cout<<endl;

cout<<endl;

cout<<endl;

cout<<endl;

cout<<endl;

cout<<"\n \t \t\t \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* THANKS FOR SHOPPING \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

getch();

exit(0);

}

else if((yn=='N')||(yn=='n'))

goto menu;

else

{

goto menu;

}

default:

cout<<"\n\n\t\tWrong Choice....Please Retry!";

getch();

goto menu;

}

system("pause");

getchar();

return 0;

}

