COMPUTERSCIENCE

PROJECT ON

Supermarket

Billing System

CLASS:12-A

2017-2018

TABLE OF CONTENTS

Acknowledgement

This is my great pleasure to acknowledge the assistance and guidance of the individuals who helped me to complete the project. First and foremost I express my deep gratitude to Computer Science teacher Mr. ASHOK KUMAR TRIVEDI for enthusiastic support. I also thank my Principal Mrs. Neera Bhardwaj. I would also like to thank my parents and my brother for encouraging me during the course of this project. They provided their precious time for giving me valuable suggestions. Finally I would like to thank CBSE for giving me this opportunity to undertake this project.

Certificate

This is to certify that ████████████████████ New Green Field School, Alaknanda has successfully completed his project in computer practicals as prescribed by CBSE in the year 2017-2018.

Date :

Registration No. ████████████████

HEADER FILES USED AND THEIR PURPOSE

1. **FSTREAM.H** – for file handling, cin and cout

2. **PROCESS.H** – for exit() function

3. **CONIO.H** – for clrscr() and getch() functions

4. **STDIO.H** – for standard I/O operations

5. **STRING.H** – for string handling

6. **CTYPE.H** – for character handling

```
//*******************************************
// HEADER FILE USED IN PROJECT
//*******************************************
#include<conio.h>
#include<stdio.h>
#include<process.h>
#include<fstream.h>
//*******************************************
// CLASS USED IN PROJECT
//*******************************************
class product
{
int pno;
char name[50];
float price,qty,tax,dis;
public:
```

```cpp
void create_product()

{

cout<<"\nPlease Enter The Product No. of The
Product ";

cin>>pno;

cout<<"\n\nPlease Enter The Name of The Product
";

gets(name);

cout<<"\nPlease Enter The Price of The Product
";

cin>>price;

cout<<"\nPlease Enter The Discount (%) ";

cin>>dis;

}

void show_product()

{

cout<<"\nThe Product No. of The Product :
"<<pno;

cout<<"\nThe Name of The Product : ";

puts(name);

cout<<"\nThe Price of The Product : "<<price;

cout<<"\nDiscount : "<<dis;
```

```cpp
}
int retpno()
{return pno;}
float retprice()
{return price;}
char* retname()
{return name;}
int retdis()
{return dis;}
}; //class ends here


//********************************************
****************
// global declaration for stream object, object
//********************************************
*****************
fstream fp;
product pr;
//********************************************
****************
// function to write in file
```

```cpp
//******************************************************
void write_product()
{
fp.open("Shop.dat",ios::out|ios::app);
pr.create_product();
fp.write((char*)&pr,sizeof(product));
fp.close();
cout<<"\n\nThe Product Has Been Created ";
getch();
}
//******************************************************
// function to read all records from file
//******************************************************
void display_all()
{
clrscr();
cout<<"\n\n\n\t\tDISPLAY ALL RECORD !!!\n\n";
fp.open("Shop.dat",ios::in);
while(fp.read((char*)&pr,sizeof(product)))
```

```cpp
{
pr.show_product();
cout<<"\n\n=====================================\
n";
getch();
}
fp.close();
getch();
}
//*********************************************
****************
// function to read specific record from file
//*********************************************
*****************
void display_sp(int n)
{
int flag=0;
fp.open("Shop.dat",ios::in);
while(fp.read((char*)&pr,sizeof(product)))
{
if(pr.retpno()==n)
{
```

```cpp
clrscr();

pr.show_product();

flag=1;

}

}

fp.close();

if(flag==0)

cout<<"\n\nrecord not exist";

getch();

}
//************************************************
// function to modify record of file
//************************************************
void modify_product()

{

int no,found=0;

clrscr();

cout<<"\n\n\tTo Modify ";

cout<<"\n\n\tPlease Enter The Product No. of The
Product";
```

```cpp
cin>>no;

fp.open("Shop.dat",ios::in|ios::out);

while(fp.read((char*)&pr,sizeof(product)) &&
found==0)

{

if(pr.retpno()==no)

{

pr.show_product();

cout<<"\nPlease Enter The New Details of
Product"<<endl;

pr.create_product();

int pos=-1*sizeof(pr);

fp.seekp(pos,ios::cur);

fp.write((char*)&pr,sizeof(product));

cout<<"\n\n\t Record Updated";

found=1;

}

}

fp.close();

if(found==0)

cout<<"\n\n Record Not Found ";

getch();
```

```cpp
}
//*********************************************************
// function to delete record of file
//*********************************************************
void delete_product()
{
int no;
clrscr();
cout<<"\n\n\n\tDelete Record";
cout<<"\n\nPlease Enter The product no. of The
Product You Want To Delete";
cin>>no;
fp.open("Shop.dat",ios::in|ios::out);
fstream fp2;
fp2.open("Temp.dat",ios::out);
fp.seekg(0,ios::beg);
while(fp.read((char*)&pr,sizeof(product)))
{
if(pr.retpno()!=no)
{
```

```cpp
fp2.write((char*)&pr,sizeof(product));

}

}

fp2.close();

fp.close();

remove("Shop.dat");

rename("Temp.dat","Shop.dat");

cout<<"\n\n\tRecord Deleted ..";

getch();

}
//********************************************
*****************
// function to display all products price list
//********************************************
*****************
void menu()
{
clrscr();

fp.open("Shop.dat",ios::in);

if(!fp)

{
```

```cpp
cout<<"ERROR!!! FILE COULD NOT BE OPEN\n\n\n Go
To Admin Menu to create File";

cout<<"\n\n\n Program is closing ....";

getch();

exit(0);

}

cout<<"\n\n\t\tProduct MENU\n\n";

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

cout<<"P.NO.\t\tNAME\t\tPRICE\n";

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

while(fp.read((char*)&pr,sizeof(product)))

{

cout<<pr.retpno()<<"\t\t"<<pr.retname()<<"\t\t"<
<pr.retprice()<<endl;

}

fp.close();

}


//************************************************
****************
```

```cpp
// function to place order and generating bill
for Products
//***********************************************
*****************
void place_order()
{
int order_arr[50],quan[50],c=0;
float amt,damt,total=0;
char ch='Y';
menu();
cout<<"\n============================";
cout<<"\n PLACE YOUR ORDER";
cout<<"\n============================\n";
do{
cout<<"\n\nEnter The Product No. Of The Product
: ";
cin>>order_arr[c];
cout<<"\nQuantity in number : ";
cin>>quan[c];
c++;
cout<<"\nDo You Want To Order Another Product ?
(y/n)";
```

```cpp
cin>>ch;
}while(ch=='y' ||ch=='Y');
cout<<"\n\nThank You For Placing The
Order";getch();clrscr();
cout<<"\n\n*****************************INVOI
CE*********************\n";
cout<<"\nPr No.\tPr Name \tQuantity Price
\tAmount \tAmount afterdiscount\n";
for(int x=0;x<=c;x++)
{
fp.open("Shop.dat",ios::in);
fp.read((char*)&pr,sizeof(product));
while(!fp.eof())
{
if(pr.retpno()==order_arr[x])
{
amt=pr.retprice()*quan[x];
damt=amt-(amt*pr.retdis()/100);
cout<<"\n"<<order_arr[x]<<"\t"<<pr.retname()<<"\
t"<<quan[x]<<"\t"<<pr.retprice()<<"\t"<<amt<<"\t
\t"<<damt;
total+=damt;
}
}
```

```cpp
fp.read((char*)&pr,sizeof(product));

}

fp.close();

}

cout<<"\n\n\t\t\t\t\tTOTAL = "<<total;

getch();

}

//*********************************************************
****************

// INTRODUCTION FUNCTION

//*********************************************************
****************

void intro()

{

clrscr();

gotoxy(31,11);

cout<<"SUPER MARKET";

gotoxy(35,14);

cout<<"BILLING";

gotoxy(35,17);

cout<<"PROJECT";

cout<<"\n\nMADE BY : SAGAR ARORA";
```

```cpp
cout<<"\n\nSCHOOL :NEW GREEN FIELDS SCHOOL";

getch();

}

//******************************************
****************

// ADMINSTRATOR MENU FUNCTION

//******************************************
****************

void admin_menu()

{

clrscr();

char ch2;

cout<<"\n\n\n\tADMIN MENU";

cout<<"\n\n\t1.CREATE PRODUCT";

cout<<"\n\n\t2.DISPLAY ALL PRODUCTS";

cout<<"\n\n\t3.QUERY ";

cout<<"\n\n\t4.MODIFY PRODUCT";

cout<<"\n\n\t5.DELETE PRODUCT";

cout<<"\n\n\t6.VIEW PRODUCT MENU";

cout<<"\n\n\t7.BACK TO MAIN MENU";

cout<<"\n\n\tPlease Enter Your Choice (1-7) ";

cin>>ch2;
```

```cpp
getch();
switch(ch2)
{
case '1': clrscr();
write_product();
break;
case '2': display_all();break;
case '3':
int num;
clrscr();
cout<<"\n\n\tPlease Enter The Product No. ";
cin>>num;
display_sp(num);
break;
case '4': modify_product();break;
case '5': delete_product();break;
case '6': menu();
getch();
case '7': break;
default:cout<<"\a";admin_menu();
```

```cpp
          }
          }
```

```cpp
//**************************************************
//**************
// THE MAIN FUNCTION OF PROGRAM
//**************************************************
//*****************
void main()
{
char ch;
intro();
do
{
clrscr();
cout<<"\n\n\n\tMAIN MENU";
cout<<"\n\n\t01. CUSTOMER";
cout<<"\n\n\t02. ADMINISTRATOR";
```

```cpp
cout<<"\n\n\t03. EXIT";

cout<<"\n\n\tPlease Select Your Option (1-3) ";

ch=getche();

switch(ch)
{

case '1': clrscr();

place_order();

getch();

break;

case '2': admin_menu();

break;

case '3':exit(0);

default :cout<<"\a";

}

}while(ch!='3');

getch();

}
//**********************************************
****************
// END OF PROJECT
//**********************************************
****************
```

```
//*************************************************
*****************

// OUTPUT SCREEN

//*************************************************
*****************
```

OUTPUT:

```
                         SUPER MARKET

                           BILLING

                           PROJECT

MADE BY : SAGAR ARORA

SCHOOL :NEW GREEN FIELDS SCHOOL_
```

```
    MAIN MENU

    01. CUSTOMER

    02. ADMINISTRATOR

    03. EXIT

    Please Select Your Option (1-3) 1
```

```
            Product MENU

==================================================
P.NO.           NAME            PRICE
==================================================
1               chips(lays)         78
2               biscuits            200
3               cosmetics           500
4               veg combo           699
5               fruit combo         999
6               tools(harley)       5999
7               cold drinks         599


=============================
 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 : 3

Quantity in number : 6

Do You Want To Order Another Product ? (y/n) y


Enter The Product No. Of The Product : 7

Quantity in number : 7
```

```
Enter The Product No. Of The Product : 5

Quantity in number : 45

Do You Want To Order Another Product ? (y/n) n


Thank You For Placing The Order_
```

```
*****************************INVOICE*************************

Pr No.   Pr Name          Quantity Price  Amount   Amount after discount

1        chips(lays)      2        78      156      146.639999
3        cosmetics        6        500     3000     2820
7        cold drinks      7        599     4193     3941.419922
5        fruit combo      45       999     44955    44055.898437

                                          TOTAL = 50963.957031_
```

```
    MAIN MENU

    01. CUSTOMER

    02. ADMINISTRATOR

    03. EXIT

    Please Select Your Option (1-3) 2_
```

```
ADMIN MENU

1.CREATE PRODUCT

2.DISPLAY ALL PRODUCTS

3.QUERY

4.MODIFY PRODUCT

5.DELETE PRODUCT

6.VIEW PRODUCT MENU

7.BACK TO MAIN MENU

Please Enter Your Choice (1-7) 1_
```

```
Please Enter The Product No. of The Product 7

Please Enter The Name of The Product pens

Please Enter The Price of The Product 100

Please Enter The Discount (%) 2


The Product Has Been Created
```

```
ADMIN MENU

1.CREATE PRODUCT

2.DISPLAY ALL PRODUCTS

3.QUERY

4.MODIFY PRODUCT

5.DELETE PRODUCT

6.VIEW PRODUCT MENU

7.BACK TO MAIN MENU

Please Enter Your Choice (1-7) 4
```

```
To Modify

Please Enter The Product No. of The Product 7

The Product No. of The Product : 7
The Name of The Product : cold drinks

The Price of The Product : 599
Discount : 6
Please Enter The New Details of Product

Please Enter The Product No. of The Product 7


Please Enter The Name of The Product doors

Please Enter The Price of The Product 12000

Please Enter The Discount (%) 2


     Record Updated_
```

```
ADMIN MENU

1.CREATE PRODUCT

2.DISPLAY ALL PRODUCTS

3.QUERY

4.MODIFY PRODUCT

5.DELETE PRODUCT

6.VIEW PRODUCT MENU

7.BACK TO MAIN MENU

Please Enter Your Choice (1-7) 5_
```

```
        Delete Record

Please Enter The product no. of The Product You Want To Delete 7


        Record Deleted .._
```

```
ADMIN MENU

1.CREATE PRODUCT

2.DISPLAY ALL PRODUCTS

3.QUERY

4.MODIFY PRODUCT

5.DELETE PRODUCT

6.VIEW PRODUCT MENU

7.BACK TO MAIN MENU

Please Enter Your Choice (1-7) 6_
```
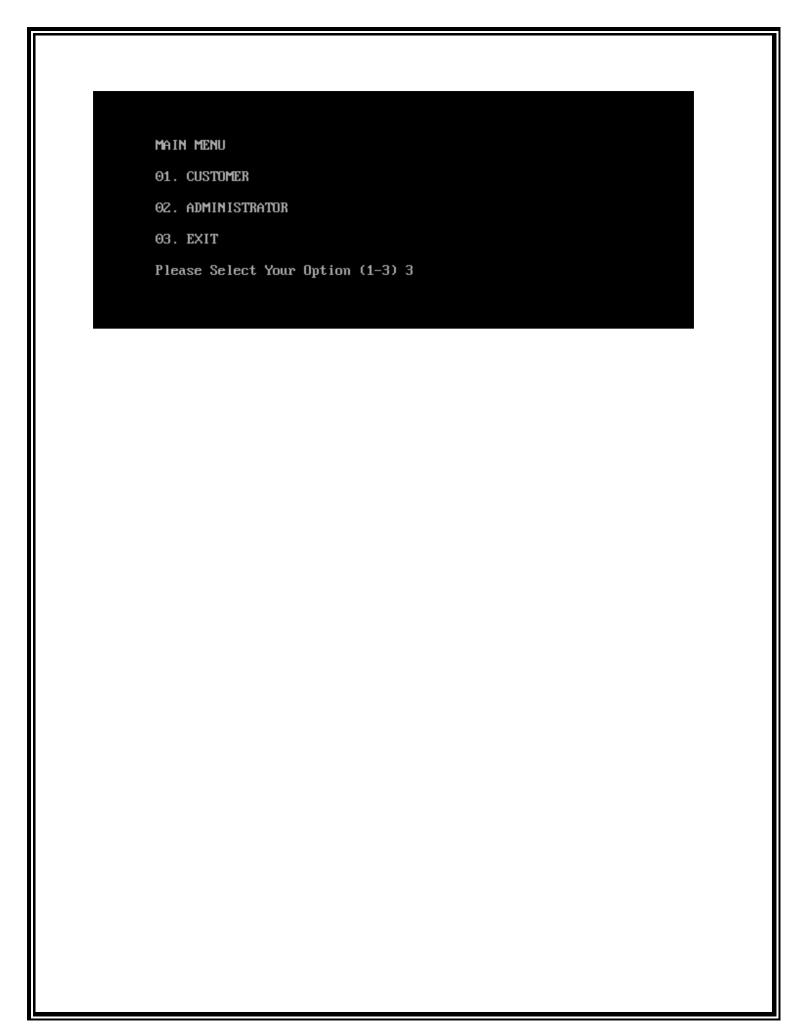
```
        Product MENU

=================================================
P.NO.         NAME          PRICE
=================================================
1             chips(lays)         78
2             biscuits            200
3             cosmetics           500
4             veg combo           699
5             fruit combo         999
6             tools(harley)       5999
```

```
MAIN MENU

01. CUSTOMER

02. ADMINISTRATOR

03. EXIT

Please Select Your Option (1-3) 3
```

BIBLIOGRAPHY

Computer Science In C++ By :–

Preeti Arora And Pinky Gupta

(Sultan Chand)