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INTRODUCTION

This project is on "Restaurant Billing". A Restaurant is a place where the customers come to eat their meals and pay for it. Before the era of computers began, All the tasks like how many meals where eaten by the customer, and how much they have to pay for it, where all done manually or where done by a particular person. At this era of modern computing, All such simple tasks are performed by our very own computer. We have constructed this project with great simplicity, that it is very easy for a person, maintaining the cash to easily calculate the bill for the customers. The Cashier enters the meals eaten by the customer, and the computer calculates the bill for it. We have done this project in C++ programming language.

OBJECTIVE

To make a software to process bills in a Restaurant, that is fast in processing, having good user interface, error free, easily maintainable and the gets the job done for the user in a jiffy.

AIM

Project entitled "Restaurant Billing" is being done for a restaurant named "HOTEL MANGALA".

HARDWARE AND SYSTEM SPECIFICATION

Processor : Intel® Pentium® 3558U @ 1.70GHz

Platform   : Windows 8.1

Hard disk   : 500GB

Monitor   : LCD

Keyboard   : Enhanced

IDE(Integrated Development Environment)   : Turbo C++

CLASSES AND FUNCTIONS

Class

Item

Member Functions

1.display() :used for displaying item details

2.vdisplay() : used by the function Master to display all item details

3.itcd() : returns item code

4.retprice() : returns item price

Functions

1.biller() : used for calculating the bill for the customer.

2.Master() :used for displaying all the items along with its dertails.

3.notfound() :used for displaying a message when the required item is not found.

4.intro() : used for displaying the people who worked on this project.

PROGRAM

```
//RESTAURANT BILLING
//*********************************************************
//HEADER FILES
//*********************************************************
#include<iostream.h>
#include<string.h>
#include<fstream.h>
#include<process.h>
#include<conio.h>
//*********************************************************
//FUNCTION PROTOTYPES
//*********************************************************
void biller(void);
void Master(void);
void notfound(void);
int itcd(void);
int retprice(void);
void display(void);
void vdisplay(void);
void intro(void);
//*********************************************************
//CLASS
//*********************************************************
class item
{
char itname[20];
float price;
public:
int itcode;
float qt;
void display();
void vdisplay();
```

```cpp
int itcd();
int retprice();
};//ENDING OF CLASS DEFINITION
//*******************************************************
int amount=0;
int item::retprice()
{
return price;
}

void item::display()
{
cout<<" "<<itcode<<"        "<<itname<<"       "<<price<<"        ";
}
void item::vdisplay()
{
cout<<itcode<<"\t"<<itname<<"\t"<<price<<"\t";
}
int item::itcd()
{
return itcode;
}
//*******************************************************
//GLOBAL DECLARATION OF OBJECT OF CLASS ITEM
//*******************************************************
item it;
int i;
//*******************************************************
***************
//THE MAIN FUNCTION
//*******************************************************
void main()
{
clrscr();
start:
```

```cpp
int it_code;
cout<<"\n\t\t\t\tHOTEL MANGALA,KODUNGALLUR\n\n";
cout<<"Welcome to the Restaurant Billing Program\n";
cout<<"1.Go to Billing \n";
cout<<"2.See the Master Data \n";
cout<<"3.Project Credits\n";
cout<<"4.Exit"<<" \n";
cout<<"\nEnter your option: ";
char ch1;
cin>>ch1;
switch(ch1)
{
case '1':biller();
        break;
case '2':Master();
        break;
case '3':intro();
case '4':exit(0);
default:cout<<"Invalid option ";
cout<<"Exiting...";
getch();
}
getch();
}
//***********************************************************
//FUNCTION WHICH DOES THE WHOLE BILLING PROCEDURES
//***********************************************************
void biller()
{
beg:            //tag is used for goto
int j,it_code,qt;
cout<<"\nEnter Item Code: ";
cin>>it_code;
ifstream fin("master.dat",ios::in);
while(!fin.eof())
```

```cpp
{
fin.read((char*)&it,sizeof(it));
if(it.itcd()==it_code)
{
int pri;
cout<<"Enter quantity or number of the selected food: ";
cin>>qt;
cout<<"\nItem-Code"<<" "<<"Item-Name"<<" "<<"Price"<<"
"<<"Quantity"<<" "<<"Total-Price\n";
it.display();
pri=it.retprice();
cout<<qt<<"\t"<<qt*pri;
int cash=qt*pri;
amount=amount+cash;
cout<<"\n\nWant to enter more food items,if yes please enter y or enter
p, it wil proceed to billing: ";
char ch;
cin>>ch;
if(ch=='p')
cout<<"\n->>>>>> TOTAL AMOUNT: "<<amount;
else
biller();
enter:        //tag is used for goto
cout<<"\n\n1.Restart the Program \n";
cout<<"2.Exit the Program\n";
cout<<"Enter your choice: ";
char chr;
cin>>chr;
switch(chr)
{
case '1':amount=0;
        main();
        break;
case '2':exit(0);
default:cout<<"\nWrong option,Enter your choice again, ";
```

```cpp
goto enter;
}
}
}
notfound();
}
//**********************************************************
//THE FUNCTION THAT DISPLAYS THE ITEM LIST
//**********************************************************
void Master()
{
ifstream filin2;
filin2.open("master.dat",ios::in);
cout<<"\n";
cout<<"Code"<<"\t"<<"Name"<<"\t"<<"Price\n";
for(i=0;i<15;i++)
{
filin2.read((char*)&it,sizeof(it));
it.vdisplay();
cout<<"\n";
}
cout<<"\nEnter 'y' to go back to Main Menu or Enter 'e' to exit : ";
char charac;
cin>>charac;
if(charac=='y')
main();
else
exit(0);
filin2.close();
}
//**********************************************************
//NOTFOUND() FUNCTION DISPLAYS A MESSAGE WHEN AN ITEM
SEARCHED IS NOT FOUND
//**********************************************************
void notfound()
```

```cpp
{
cout<<"Item not found\n";
cout<<"Please enter again\n";
biller();
}
//*****************************************************
//INTRODUCTION
//*****************************************************
void intro()
{
cout<<"\nRESTAURANT BILLING ";
cout<<"PROJECT";
cout<<"\n\nMADE BY : SHRIAMRUT V,ABHINAV KS,ADITH KD,VIGNESH
TP";
cout<<"\n\nSCHOOL : AMRITA VIDYALAYAM,KODUNGALLUR";
}
//*****************************************************
//END OF PROJECT
//*****************************************************
```

OUTPUT

HOTEL MANGALA,KODUNGALLUR

Welcome to the Restaurant Billing Program

1.Go to Billing

2.See the Master Data

3.Project Credits

4.Exit

Enter your option:

1.Go to Billing

Enter Item Code: 3

Enter quantity or number of the selected food: 2

Item-Code	Item-Name	Price	Quantity	Total-Price
3	Idli	30	2	60

Want to enter more food items,if yes please enter y or enter p,it will proceed to billing: y

Enter Item Code: 10

Enter quantity or number of the selected food: 1

Item-Code	Item-Name	Price	Quantity	Total-Price
10	Tea	10	1	10

Want to enter more food items,if yes please enter y or enter p,it will proceed to billing: y

Enter Item Code:11

Enter quantity or number of the selected food: 2

Item-Code	Item-Name	Price	Quantity	Total-Price
11	Boost	25	2	50

Want to enter more food items,if yes please enter y or enter p,it will proceed to billing: p

->>>>>>TOTAL AMOUNT: 120

1.Restart the Program

2.Exit the Program

Enter your choice:1

2.See the Master Data

Code	Name	Price
1	Roti	55
2	Dosa	40
3	Idli	30
4	Wada	35
5	Poori	50
6	Mdosa	55
7	Rdosa	50
8	Biriani	60
9	Coffee	15
10	Tea	10
11	Boost	25
12	Juice	30
13	Peda	10
14	Jilabi	15
15	Laddo	12

Enter 'y' to go back to Main Menu or Enter 'e' to exit : y

3.Project Credits

RESTAURANT BILLING PROJECT

MADE BY : SHRIAMRUT V,ABHINAV KS,ADITH KD,VIGNESH TP

SCHOOL : AMRITA VIDYALAYAM,KODUNGALLUR

BIBLIOGRAPHY

- *Programming: Principles and Practise Using C++(2nd Edition) By Bjarne Stroustrup*
- *Programming in C++ By E.Balaguruswamy*
- *Computer Science with C++ By Sumita Arora*
- *The C++ Programming Language By Bjarne Stroustrup*
- *Computing Concepts With C++ Essentials By Cay Horstman*
- *The C++ Standard Library By Nicholai Josuttis*
- *Google*