VIRTUAL ORDERING SYSTEM

An online meal ordering system is software that enables restaurants to accept and manage orders sent through the internet. The first is a website or mobile app that allows hungry consumers to browse the menu and place an online order. A complete sales channel for the restaurant is provided through an online ordering and delivery system. This means that the restaurant can use it to increase profits and improve organizational efficiency. It also helps restaurant owners to save money on labour and the area needed to service for happy costumers. This Virtual Ordering System is built on the basic concept of ordering fast meal and calculating total food costs. The client can make a request by selecting from the menu.

PROBLEM STATEMENT:

The purpose of the Virtual Food Ordering System is to make the users comfortable from their home. The internet and technological advancements are having a great impact on restaurant operations. With most people spending a big part of their day on the internet, it provides a huge market potential for restaurants. In fact, the demand for online restaurant ordering continues to grows among restaurant consumers. Restaurant owners and managers consistently look for

solutions that allow customers to place orders online and have food delivered fast.

OBJECTIVE:

To develop a software for providing food order applications of a customer in an online environment in order to nurture the needs of an online foodstuff users to have additional functionalities that makes the customer to have a convenient environment for ordering food.

LIST OF MODULES:

Collection of personal information

Facilities done to make them order their food

Billing Scheme

EXPLANATION OF MODULES:

1)Collection of personal information

Personal information from the customers like name, location, address, phone number are collected in order to make the work of delivery easy and comfortable.

2) Facilities done to make them order their food

Various hotels, restaurants, bakeries, dessert showrooms in their locality will be displayed and the orderings are taken from the hotels which were available currently.

3) Billing scheme

Finally, the details of the particular customer with order details will be displayed.

CONCEPTS USED HEIRARCHICAL INHERITANCE

```
Hierarchical inheritance - public mode class A{
};
class B:public A{
};
class C:public A{};
```

CONSTRUCTORS AND DESTRUCTORS

Constructors are special member function which does not return anything and it is used to allocate the memory location and to initial the member variables

Destructors are special member function which is used to deallocate the memory and to delete the objects.

POLYMORPHISM-VIRTUAL FUNCTION

Virtual functions plays a key role in the implementation of run-time polymorphism. The base class overridden methods alone should be defined as virtual functions. the base class must be assigned with pointer object.

FILE HANDLING

In this project file handling is used to store the user's info and address and the bill amount

CODE:

```
#include<iostream>
#include<fstream>
using namespace std;
class customer{
      protected:
             string name, email, username, username1, p, p1;
             double mobileno;
             int choice, cr, cr1;
             char address[50];
      public:
             int getdata();
             int login();
             int getchoice();
             virtual int getdish(){
             return 0;
             }
};
class nonveg:public customer{
      protected:
```

```
int
choice1,n1,c1[10],q1[10],total,p1[9]={150,114,185,185,170,150,13,40,50},p2[7
]={105,186,160,160,146,130,66};
            int p3[9]={120,160,180,150,16,50,13,40,60};
      public:
            nonveg();
            void gethotel();
            int getdish();
            ~nonveg(){}
};
class veg:public customer{
      protected:
            int
choice2,n2,c2[10],q2[10],total2,pr1[7]={150,100,200,75,190,100,160},pr2[9]={
99,170,150,70,80,60,80,40,150},pr3[9]={150,114,185,185,170,150,13,40,50};
      public:
            veg();
            void gethotel1();
            int getdish();
            ~veg(){}
};
class dessert:public customer{
      protected:
            int
choice3,n3,c3[10],q3[10],total3,pi1[9]={1560,1560,940,940,940,113,113,113,1
13},pi2[7]={60,70,80,65,50,30,30};
      public:
            dessert();
```

```
void gethotel2();
            int getdish();
            ~dessert(){}
};
class Bill:public customer{
      private:
            int m,pay,p2,up;
      public:
            void display(int p);
            void mode();
                  void disp(){
                  cout<<"\n\n"<<name<<",you will receive your order soon at
"<<address<<" and for further details about delivery,";
                  cout<<"we will contact you on "<<mobileno<<".";
                  cout<<"\n\n\t\t\tThankyou for your ordering with
us!!!\n\n";
            }
};
int main(){
      customer *c1;
      veg v1;
      nonveg n1;
      dessert d1;
      Bill b1;
      int ch1;
      ofstream f1;
      f1.open("sidenilo.txt",ios::out|ios::app);
```

```
ch1=b1.getdata();
      int nv,v,d;
      switch(ch1){
            case 1:
                    c1=&n1;
                    n1.gethotel();
                    nv=c1->getdish();
                    b1.display(nv);
                    f1<<"Bill:"<<nv<<"\n";
                         f1.write((char*)&b1,sizeof(b1));
break;
            case 2:
                         c1=&v1;
                         v1.gethotel1();
                    v=c1->getdish();
                     b1.display(v);
                     f1<<"Bill:"<<v<<"\n";
                    f1.write((char*)&b1,sizeof(b1));
break;
            case 3:
                         c1=&d1;
                         d1.gethotel2();
                    d=c1->getdish();
                         b1.display(d);
                         f1<<"Bill:"<<d<<"\n";
                         f1.write((char*)&b1,sizeof(b1));
```

```
break;
     b1.mode();
     b1.disp();
     f1<<"******************
*********\n\n";
     f1.close();
     return 0;
}
int customer::login(){
     cout<<"\nEnter the username :";</pre>
                cin>>username1;
                cout<<"\nEnter the password :";</pre>
                cin>>p1;
                cr=getchoice();
                return cr;
}
int customer::getchoice(){
           if(p1==p&&username1==username){
                      cout<<"\n\nEnter
                                         Your
                                                 Choice
                                                           :\n\t1.Non-
Veg\n\t2.Veg\n\t3.Dessert\n";
                      cin>>choice;
                      return choice;
                }
                else{
                      if(username1!=username)
```

```
cout<<"\n\tYour username is incorrect,Please
enter the correct username\n";
                       else if(p1!=p)
                             cout<<"\n\tYour Password is incorrect,Please
enter the correct password\n";
                       else
                             cout<<"\n\tYour Username and Password is
incorrect, Please enter the correct Username and Password\n";
                       login();
                 }
}
nonveg::nonveg(){
                 total=0;
}
void nonveg::gethotel(){
     cout<<"\nWelcome to the non-veg restaurants\n";</pre>
                 cout << "\n\t \t 1.Mug
                                                       Beans\n\t\t2.Blind
                                             and
Chemistry\n\t\t3.Chopstix\n";
                 cout<<"\n\nPlease choose the hotel.....";
                 cin>>choice1;
}
int nonveg::getdish(){
     if(choice1==1){
     cout<<"\t\t======\n";
                                  cout<<"\t
                                                          MENU\n";
```

```
cout<<"\t\t=======\n";
                                    cout<<"1.Giant meals - Rs.150\n";
                        cout<<"2.Veg sweet corn soup - Rs.114\n";
                        cout<<"3.Veg schezwan fried rice - Rs.185\n";
                        cout<<"4.Fried momos veg - Rs.185\n";
                        cout<<"5.Fried veg burger - Rs.170\n";</pre>
                        cout<<"6.Butter paneer - Rs.150\n";
                        cout<<"7.Idli - Rs.13\n";
                        cout<<"8.Dosa - Rs.40\n";
                        cout<<"9.Naan - Rs.50\n";
                        cout<<"\n\nEnter the number of foods you are going
to order:";
                        cin>>n1;
                        for(int i=0;i<n1;i++){
                              cout<<"Enter the food menu number:";
                              cin>>c1[i];
                              cout<<"Enter the quantity of the food:";
                              cin>>q1[i];
                                     }
                                     for(int i=0;i<n1;i++){
                                          for(int j=1;j<=9;j++){
                                                if(j==c1[i])
      total=total+(q1[i]*p1[j-1]);
                                           }
                                     }
```

```
return total;
                 }
                 else if(choice1==2){
     cout<<"\t\t======\n";
                                  cout<<"\t
                                                         MENU\n";
     cout<<"\t\t======\n";
                              cout<<"1.Paneer 65 - Rs.105\n";
                      cout<<"2.chicken Seekh Kebab - Rs.186\n";
                      cout<<"3.chicken Kebab - Rs.160\n";
                       cout<<"4.Chicken Schezwan Fried rice - Rs.160\n";
                      cout<<"5.Chicken Sandwich - Rs.146\n";
                      cout<<"6.Butterscotch shake - Rs.130\n";
                      cout<<"7.Sweet and salted lassi - Rs.66\n";
                      cout<<"\n\nEnter the number of foods you are going
to order:";
                      cin>>n1;
                      for(int i=0;i<n1;i++){
                            cout<<"Enter the food menu number:";
                            cin>>c1[i];
                            cout<<"Enter the quantity of the food:";
                            cin>>q1[i];
                                  for(int i=0;i<n1;i++){
                                       for(int j=1;j<=7;j++){
                                             if(j==c1[i])
```

```
}
                                  }
                                 return total;
                }
                else{
     cout<<"\t\t=======\n";
                                                        MENU\n";
                                 cout<<"\t
     cout<<"\t\t======\n";
                          cout<<"1.Gobi 65 - Rs.120\n";
                      cout<<"2.Boneless chicken - Rs.160\n";
                      cout<<"3.Butter chicken - Rs.180\n";
                      cout<<"4.Butter Paneer - Rs.150\n";
                      cout<<"5.Parotta - Rs.16\n";
                      cout<<"6.Naan - Rs.50\n";
                      cout<<"7.Idli - Rs.13\n";
                      cout<<"8.Dosa - Rs.40\n";
                      cout<<"9.Grilled chicken(quarter) - Rs.60\n";</pre>
                      cout<<"\n\nEnter the number of foods you are going
to order:";
                      cin>>n1;
                      for(int i=0;i<n1;i++){
                            cout<<"Enter the food menu number:";
                            cin>>c1[i];
```

total=total+(q1[i]*p2[j-1]);

```
cout<<"Enter the quantity of the food:";
                      cin>>q1[i];
                           }
                           for(int i=0;i<n1;i++){
                               for(int j=1;j<=7;j++){
                                    if(j==c1[i])
    total=total+(q1[i]*p3[j-1]);
                                }
                           }
                           return total;
             }
}
int customer::getdata(){
         ofstream f1;
             f1.open("sidenilo.txt",ios::out|ios::app);
    ======\n";
             cout<<"\n\t\t\t
                               SIDENILO ORDERING SYSTEM
                  \n";
    =======\n";
             cout<<endl<<endl;
             cout<<"\t\t\t'Food is the symbolic of love when words are
inadequate'\n\n";
```

```
cout<<"\nEnter Name :";</pre>
                   cin>>name;
                   f1<<"Name:"<<name<<"\n";
                   cout<<"\nEnter username :";</pre>
                   cin>>username;
                   f1<<"Username:"<<username<<"\n";
                   cout<<"\nEnter email :";</pre>
                   cin>>email;
                   f1<<"Email:"<<email<<"\n";
                   cout<<"\nEnter password :";</pre>
                   cin>>p;
                   f1<<"password :"<<p<<"\n";
                   cout<<"\nEnter Mobile Number :";</pre>
                   cin>>mobileno;
                   f1<<"Mobilenumber:"<<mobileno<<"\n";
                   cout<<"\nEnter address :";</pre>
                   cin>>address;
                   f1<<"Address:"<<address<<"\n";
                   cout<<"\n\nThankyou for signing up......";</pre>
                         cr1=login();
                         return cr1;
                         f1.close();
}
veg::veg(){
      total2=0;
```

cout<<"\t\t\t\tSignup and Login\n";</pre>

```
}
void veg::gethotel1(){
           cout<<"\nWelcome to the veg restaurants\n";</pre>
                 cout << "\n\t\t1) Sangeethas \n\t\t2) Anandha
Bhavan\n\t\t3)Veg Paradise\n";
                 cout<<"\n\nPlease choose the hotel.....";
                 cin>>choice2;
}
int veg::getdish(){
     if(choice2==1){
     cout<<"\t\t======\n";
                                  cout<<"\t
                                                         MENU\n";
     cout<<"\t\t=======\n";
                                  cout<<"1.meals - Rs.150\n";
                       cout<<"2.variety rice - Rs.100\n";
                       cout<<"3.fried rice - Rs.200\n";
                       cout<<"4.Butter naan - Rs.75\n";
                      cout<<"5.Panneer butter masala - Rs.190\n";
                       cout<<"6.Gobi 65 - Rs.100\n";
                       cout<<"7.Gobi manjurian - Rs.160\n";
                      cout<<"\n\nEnter the number of foods you are going
to order:";
                       cin>>n2;
                      for(int i=0;i<n2;i++){
                            cout<<"Enter the food menu number:";
```

```
cout<<"Enter the quantity of the food:";
                            cin>>q2[i];
                                  }
                                  for(int i=0;i<n2;i++){
                                       for(int j=1;j<=7;j++){
                                             if(j==c2[i])
     total2=total2+(q2[i]*pr1[j-1]);
                                       }
                                  }
                                  return total2;
     }
     else if(choice2==2){
cout<<"\t\t======\n";
                                 cout<<"\t
                                                        MENU\n";
     cout<<"\t\t=======\n";
                   cout<<"1.Paneer Shawarma - Rs.99\n";
                      cout<<"2.Paneer Shawarma pizza - Rs.170\n";
                      cout<<"3.Corn Shawarma pizza - Rs.150\n";
                      cout<<"4.Lemon and mint mojito - Rs.70\n";
                      cout<<"5.Blue curaco mojito - Rs.80\n";
                      cout<<"6.Fruit salad with icecream - Rs.60\n";
                      cout<<"7.Brownie with ice cream - Rs.80\n";
                      cout<<"8.Lime juice - Rs.40\n";
```

cin>>c2[i];

```
cout<<"9.Kitkat milkshake - Rs.150\n";
                      cout<<"\n\nEnter the number of foods you are going
to order:";
                      cin>>n2;
                      for(int i=0;i<n2;i++){
                            cout<<"Enter the food menu number:";
                            cin>>c2[i];
                            cout<<"Enter the quantity of the food:";
                            cin>>q2[i];
                                 for(int i=0;i<n2;i++){
                                      for(int j=1;j<=9;j++){
                                            if(j==c2[i])
     total2=total2+(q2[i]*pr2[j-1]);
                                       }
                                 }
                                 return total2;
     }
     else{
     cout<<"\t\t======\n";
                                 cout<<"\t
                                                       MENU\n";
     cout<<"\t\t=======\n";
                  cout<<"1.Giant meals - Rs.150\n";
                      cout<<"2.Veg sweet corn soup - Rs.114\n";
```

```
cout<<"3.Veg schezwan fried rice - Rs.185\n";
                          cout<<"4.Fried momos veg - Rs.185\n";
                         cout<<"5.Fried veg burger - Rs.170\n";</pre>
                         cout<<"6.Butter paneer - Rs.150\n";
                         cout<<"7.Idli - Rs.13\n";
                         cout<<"8.Dosa - Rs.40\n";
                         cout<<"9.Naan - Rs.50\n";
                         cout<<"\n\nEnter the number of foods you are going
to order:";
                         cin>>n2;
                         for(int i=0;i<n2;i++){
                                cout<<"Enter the food menu number:";
                                cin>>c2[i];
                                cout<<"Enter the quantity of the food:";
                                cin>>q2[i];
                                       }
                                       for(int i=0;i<n2;i++){
                                             for(int j=1;j<=9;j++){
                                                   if(j==c2[i])
      total2=total2+(q2[i]*pr3[j-1]);
                                             }
                                       }
                                      return total2;
      }
}
dessert::dessert(){
```

```
total3=0;
}
void dessert::gethotel2(){
                 cout<<"\nWelcome to the non-veg restaurants\n";
                 cout<<"\n\n\t\t1)Ibaco\n\t\t2)Famous
Jigarthanda\n\t\t3)Hott Spott\n";
                 cout<<"\n\nPlease choose the hotel.....";
                 cin>>choice3;
}
int dessert::getdish(){
     if(choice3==1){
           cout<<"\t\t======\n";
           cout<<"\t
                                  MENU\n";
           cout<<"\t\t======\n";
                 cout<<"1.Black forest icecream cake - Rs.1560\n";
                 cout<<"2.Blackcurrent Rich Cream Icecream Cake -
Rs.1560\n";
             cout<<"3.Chocolate Overload icecream cake - Rs.940\n";</pre>
             cout<<"4.Swiss choco Symphony icecream cake - Rs.940\n";
             cout<<"5.Caramel walnut icecream cake - Rs.940\n";
             cout<<"6.Bean vanilla icecream - Rs.113\n";
             cout<<"7.Belgian Chocoholic icecream - Rs.113\n";
             cout<<"8.Butterscotch Bliss icecream - Rs.113\n";
             cout<<"9.Cotton candy icecream - Rs.113\n";</pre>
             cout<<"\n\nEnter the number of foods you are going to order :";
             cin>>n3;
                       for(int i=0;i<n3;i++){
```

```
cout<<"Enter the food menu number:";
                      cin>>c3[i];
                      cout<<"Enter the quantity of the food:";
                      cin>>q3[i];
                            }
                            for(int i=0;i<n3;i++){
                                  for(int j=1;j<=9;j++){
                                       if(j==c3[i])
total3=total3+(q3[i]*pi1[j-1]);
                                  }
                            }
                            return total3;
}
else if(choice3==2){
cout<<"\t\t=======\n";
                            cout<<"\t
                                                   MENU\n";
cout<<"\t\t======\n";
                            cout<<"1.Mini Jigarthanda - Rs.60\n";
                 cout<<"2.Jumbo Jigarthanda - Rs.70\n";
                 cout<<"3.Special Jigarthanda - Rs.80\n";
                 cout<<"4.Jigarthanda with nuts - Rs.65\n";
                 cout<<"5.Basanthi - Rs.50\n";
                 cout<<"6.Rasamlai(2 pcs) - Rs.30\n";
                 cout<<"7.Rosemilk - Rs.30\n";
```

```
cout<<"\n\nEnter the number of foods you are going
to order:";
                 cin>>n3;
                    for(int i=0;i<n3;i++){
                         cout<<"Enter the food menu number:";
                         cin>>c3[i];
                         cout<<"Enter the quantity of the food:";
                         cin>>q3[i];
                              }
                              for(int i=0;i<n3;i++){
                                   for(int j=1;j<=9;j++){
                                        if(j==c3[i])
    total3=total3+(q3[i]*pi2[j-1]);
                                   }
                              }
                              return total3;
    }
     else
               cout<<"Service to this hotel is currently unavailable....\n";
}
void Bill::display(int p){
                                                         ''\n\t
                                  <<
          cout
cout << "\t\t|
                                                 Sidenilo Ordering
System
           |"<<endl;
                                                           "\t\t
                              cout
                                             <<
```

```
cout << endl;
                                  cout << endl;
                                  cout << "\t\t Bill No : CP51
                                                                  Order
: NB1353"<<endl;
                                  cout << endl;
                                  cout << endl;
                                  cout << "\t\t Cashier : Harry"<<endl;</pre>
                                  cout << endl;
            cout<<"\t\t\t YOUR TOTAL BILL IS Rs."<<p<<endl;</pre>
            cout<<"\t\t\t\t\t";
                                                                 ''\n\t
                                  cout
                                                  <<
}
void Bill::mode(){
     cout<<"\n\n\t\tEnter the choice you are going to pay the payment \n";</pre>
     cout << "\n\t\t1.Cash on delivery\n\t\t2.UPI\n\n";
     cin>>m;
     if(m==1)
           cout<<"\n\tThankyou for choosing cash on delivery you will receive
your bill and order soon\n\n";
     else{
           cout<<"Enter UPI ID:";
           cin>>up;
           cout<<"Enter password :";</pre>
           cin>>p2;
           cout<<"Enter the payment:";
```

```
cin>>pay;
cout<<"Payment paid successfully\n\n";
}</pre>
```

OUTPUT:

```
SIDENILO ORDERING SYSTEM

'Food is the symbolic of love when words are inadequate'

Signup and Login

Enter Name :Raje

Enter username :raje24

Enter email :raje243@gmail.com

Enter password :hr2428

Enter Mobile Number :9629363236

Enter address :1H/1514ANikilasannagar

Thankyou for signing up......

Enter the username :raje24

Enter the password :hr233
```

```
Enter address :1H/1514ANikilasannagar

Thankyou for signing up......
Enter the username :raje24

Enter the password :hr233

Your Password is incorrect,Please enter the correct password

Enter the username :raje24

Enter the password :hr2428

Enter Your Choice :

1.Non-Veg
2.Veg
3.Dessert

1

Welcome to the non-veg restaurants

1.Mug and Beans
2.Blind Chemistry
3.Chopstix
```

FILE OUTPUT:



DESCRIPTION OF OUTCOMES:

Virtual ordering system is based on the concept of getting user's information and to order the food they want. There is a login system for this project.

CONCLUSION:

Thus the virtual ordering system is used for the people to order the food whatever they want and whenever they want. This system is userfriendly.