CHANDAN KUMAR(21103040)

GURPARTAP(21103053)

OOPS PROJECT CODE

CG Pharmaceutical Management System

IMPLEMENTATION OF CODE

```cpp
#include<iostream>
#include<iomanip>
#include<fstream>
#include<cstring>

using namespace std;

int count=0,j=0,m=0;
class item     // c
{
public:

    string itemname;
    float price;
    int stock;

    ~item()
    {

       stock=0;
    }
    friend void add(item a[],int h);
    friend void display(item b[],int j);
};
class person  // c
{

protected:
    string name;
public:
    void getname()
    {
```

```cpp
        cout<<"\n\t\t\t\t\tEnter your name:";
        cin>>name;
    }

};

class admin:public person    //c
{

    string pin,cpin;
public:
    admin()
    {
        cout<<"\n\t\t\t\t\tEnter your name:";
        cin>>name;
set:
        cout<<"\n\t\t\t\t\tSet your pin:";
        cin>>pin;
        cout<<"\n\t\t\t\t\tConfirm your pin:";
        cin>>cpin;

        if(pin==cpin)
        {
            cout<<"\n\t\t\t\t\tAccount created successfully.\n";
            ofstream fp;
            fp.open("admin.txt");
            fp<<cpin<<endl;
            fp.close();


        }
        else
        {
            cout<<"\n\t\t\t\t\tInvalid pin !!!\n";
            goto set;
        }

    }
    friend void update(item x[],int j,int y);        // friend function
    friend void adminupdate(item x[],int j,int y);    // friend function
```

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```cpp
};


class customer:public person   //c
{
    string mail,ph;              //  v

    float bill=0;              // v
public:
    void getdetails()
    {
        cout<<"\n\t\t\t\t\t\tEnter your phone number:";
        cin>>ph;
        cout<<"\n\t\t\t\t\t\tEnter your mail-id:";
        cin>>mail;

    }
    void buy(item o[]);
};
class cart                // c
{
public:

    string iname;            // v
    int quant;
    float rate,sum=0;

    friend void displaybill(cart d[],int m,float bill);
    void updatecart(string a,int q,float p)
    {
        iname=a;
        quant=q;
        rate=p;
        sum=q*p;

    }
};


void update(item x[],int j,int y)
```

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```cpp
{
    x[j].stock = x[j].stock - y;
}
void adminupdate(item x[],int j,int y)
{
    x[j].stock = y;
}
void add(item a[],int h)
{
    cout<<"\n\t\t\t\t\t\tEnter the item name:";
    cin>>a[h].itemname;
    cout<<"\n\t\t\t\t\t\tEnter item price per unit:";
    cin>>a[h].price;
    cout<<"\n\t\t\t\t\t\tEnter the stock availability:";
    cin>>a[h].stock;
    cout<<"\n\t\t\t\t\t\t"<<a[h].itemname<<" is added successfully.\n";
}

void display(item b[],int j)          //  function
{
    int i;
    for(i=0; i<j; i++)
    {
        cout<<"\n\t\t\t\t\t\t"<<b[i].itemname<<" "<<"Stock :"<<b[i].stock<<" "<<"Price per
unit:"<<b[i].price;
        cout<<"\t";
        if(i>0)
        {
            if(i%2==0)
                cout<<endl;
        }


    }
}

void customer ::buy(item o[])              // derived class (inheritance)
{
    int t,q,m=0,opt;
    cart n[99];
```

```cpp
retry:
    cout<<"\n\t\t\t\t\t\tSelect the item:";
    cin>>t;
    cout<<"\n\t\t\t\t\t\t"<<o[t-1].itemname<<" "<<"Price per unit:"<<o[t-1].price<<"
"<<"Stock :"<<o[t-1].stock<<endl;

    cout<<"\n\t\t\t\t\t\tEnter the quantity:";
    cin>>q;
    if(q>o[t-1].stock)
    {
        cout<<"\n\t\t\t\t\t\tInsufficient Stock !!!\n";
        goto retry;

    }

    bill+=q*o[t-1].price;
    n[m].updatecart(o[t-1].itemname,q,o[t-1].price);
    update(o,t-1,q);
g:
    cout<<"\n\t\t\t\t\t\tPress 0 to continue Shopping\n\t\t\t\t\t\tPress 1 to Checkout\n";
    cin>>opt;
    if(opt==0)
    {

        m++;
        goto retry;
    }
    else if(opt==1)
    {
        displaybill(n,m,bill);
    }
    else
    {
        cout<<"\n\t\t\t\t\t\tInvalid choice !!!\n";
        goto g;
    }

}

void displaybill(cart d[],int m,float bill)          // function
```

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```cpp
{
    int i;

    cout<<left<<setw(10)<<"NAME"<<left<<setw(5)<<"QUANTITY"<<left<<setw(8)<<"Price
/unit"<<left<<setw(5)<<"AMOUNT"<<endl;
    for(i=0; i<=m; i++)
    {
        cout
                << left
                << setw(10)
                << d[i].iname
                << left
                << setw(5)
                <<  d[i].quant
                << left
                << setw(5)
                <<  d[i].rate
                << left
                << setw(5)
                <<  d[i].sum
                << endl;
    }
    cout<<left<<setw(50)<<"TOTAL"<<":"<<setw(10)<<bill<<endl;
    for(i=0; i<80; i++)
        cout<<"-";
    cout<<endl;
    cout<<left<<setw(50)<<"GRAND TOTAL"<<":"<<setw(10)<<(0.18*bill)+bill<<endl;
    for(i=0; i<80; i++)
        cout<<"-";
}

void chatbot()          //  function
{

    int chatc,flag=0,f;
    char b;
    while(1)
    {
        cout<<"\n\t\t\t\t\t\tAnswer few basic questions and get help from our experts:";
        cout<<"\n\t\t\t\t\t\tYour problem is related to:\n"<<endl;
```

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```cpp
    cout<<"\t\t\t\t\t\t 1.Eyes\n\t\t\t\t\t\t 2.Nose\n \t\t\t\t\t\t 3.Stomach\n\t\t\t\t\t\t
4.Muscle\n\t\t\t\t\t\t 5.Skip anyway\n";
    cout<<"\n\t\t\t\t\t\tEnter your choice:";
    cin>>chatc;
    switch(chatc)
    {
    case 1:
        cout<<"\t\t\t\t\t\tDo you have itching eyes (y/n):";
        cin>>b;
        if(b=='y')
            flag++;
        cout<<"\t\t\t\t\t\tDo you have red/pink colored eyes (y/n):";
        cin>>b;
        if(b=='y')
            flag++;
        cout<<"\t\t\t\t\t\tDo you get puss at eye corners in the morning (y/n):";
        cin>>b;
        if(b=='y')
            flag++;
        cout<<"\t\t\t\t\t\tHow long has this been going on:";
        cin>>f;
        if(flag>2)
        {
            cout<<"\n\t\t\t\t\t\tYou have symptoms of Allergic Conjuctivities.";
            cout<<"\n\t\t\t\t\t\tThese are the prescribed tablets by our doctors:";
            cout<<"\n\t\t\t\t\t\t 1.Fluorosine\n\t\t\t\t\t\t 2.Fluorometholone\n";
            return;
        }
        break;

    case 2:
        flag=0;


        cout<<"\t\t\t\t\t\tDo you have running nose (y/n):";
        cin>>b;
        if(b=='y')
            flag++;
        cout<<"\t\t\t\t\t\tDou you feel difficulty in breathing (y/n):";
        cin>>b;
```

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```
        if(b=='y')
            flag++;
        cout<<"\t\t\t\t\t\tDo you have itching throat (y/n):";
        cin>>b;
        if(b=='y')
            flag++;
        cout<<"\t\t\t\t\t\tDo you have cough,fever,and headache (y/n):";
        cin>>b;
        if(b=='y')
            flag++;
        cout<<"\t\t\t\t\t\tHow long has this been going on:";
        cin>>f;
        if(b=='y')
            flag++;
        if(flag>=3)
        {
            cout<<"\n\t\t\t\t\t\tYou have symptoms of Viral Cold.";
            cout<<"\n\t\t\t\t\t\tThese are the prescribed tablets by our doctors:";
            cout<<"\n\t\t\t\t\t\t 1.Dolo 650\n\t\t\t\t\t\t 2.Sinarest\n\t\t\t\t\t\t 3.Vicks action
500\n";
            return;
        }
        else
        {
            cout<<"\n\t\t\t\t\t\tYou have mild symptoms of cold.";
            cout<<"\n\t\t\t\t\t\tThese are the prescribed tablets by our doctors:";
            cout<<"\n\t\t\t\t\t\t 1.Sinarest\n\t\t\t\t\t\t 2.Vicks action 500\n";
            return;
        }
        break;
    case 3 :
        flag=0;
        cout<<"\t\t\t\tDo you have burning pain in chest,bitter taste,frequent burping and
hiccups,dry cough (y/n):";
        cin>>b;
        if(b=='y')
        {
            flag++;
            cout<<"\n\t\t\t\t\t\tYou have symptoms of Acidity.";
            cout<<"\n\t\t\t\t\t\tThese are the prescribed medicine by our doctors:";
```

```cpp
            cout<<"\n\t\t\t\t\t\t1.Digene\n\t\t\t\t\t\t 2.Eno\n";
            return;
        }
        if(b=='n')
        {
            cout<<"\n\t\t\t\t\t\tDo you have cramps in stomach (y/n):";
            cin>>b;
            if(b=='y')
            {
                flag++;
                cout<<"\n\t\t\t\t\t\tThese are the prescribed tablets by our doctors:";
                cout<<"\n\t\t\t\t\t\t1.Buscopan\n\t\t\t\t\t\t 2.Buscogast\n";
                return;
            }
            if(b=='n')
            {
                cout<<"\t\t\t\t\t\tDo you have dysentry (y/n):";
                cin>>b;
                if(b=='y')
                {
                    flag++;
                    cout<<"\n\t\t\t\t\t\tThese are the prescribed tablets by our doctors:\n";
                    cout<<"\n\t\t\t\t\t\t1.Diasyn\n\t\t\t\t\t\t 2.Norflox\n";
                    return;

                }

            }

        }
        break;
    case 4:
        flag=0;
        cout<<"\t\t\t\t\t\tDo you have muscle ache (y/n):";
        cin>>b;
        if(b=='y')
        {
            flag++;
            cout<<"\n\t\t\t\t\t\tThese are the prescribed tablets by our doctors:\n";
            cout<<"\n\t\t\t\t\t\t 1.Crocin\n\t\t\t\t\t\t 2.Crampnil\n";
```

```
            return;

        }


        cout<<"\t\t\t\t\t\tDo you have muscle catch (y/n):";
        cin>>b;
        if(b=='y')
        {
            flag++;
            cout<<"\n\t\t\t\t\t\tThese are the prescribed tablets by our doctors:\n";
            cout<<"\n\t\t\t\t\t\t 1.Nexneuron\n\t\t\t\t\t\t 2.Catch D3 500\n";
            return;

        }



    case 5:
        return;
        break;
    default:
        cout<<"\n\t\t\t\t\t\tInvalid choice !!!\n";
    }



    }


}



int main()
{

    item t[999];
    customer c[9999];
    int choice,opt,sel,k=0,u,count;          // v
    string pin,checkpin;             // system fuction for background colour
    cout<<"\n\t";
    for(int r=0; r<190; r++)
```

CHANDAN KUMAR(21103040)

GURPARTAP(21103053)

```cpp
    cout<<"*";
cout<<"\n\n\t\t\t\t\t\t\tCG Pharmaceutical Management System\n\n\t";
for(int r=0; r<190; r++)
    cout<<"*";
cout<<"\n\n";
chatbot();
while(1)
{
here:
    cout<<"\n\t\t\t\t\t 1.Admin\t\t 2.Customer\t\t 3.Chatbot\t\t 4.Exit\n";
    cout<<"\t\t\t\t\tEnter your choice:";
    cin>>choice;
    switch (choice)
    {
    case 1:
       if(count==0)
       {
          cout<<"\n\t\t\t\t\t\tAdmin SignUp\n";
          admin a;
          count++;
       }
       else
       {
          cout<<"\n\t\t\t\t\t\tAdmin Login:";
jump:
          cout<<"\n\t\t\t\t\t\tEnter your pin:";
          cin>>pin;
          ifstream fp;
          fp.open("admin.txt");

          while ( !fp.eof() )
          {

             fp>>checkpin;
          }

          if( pin==checkpin)
          {
             cout<<"\n\t\t\t\t\t\tLogged in Successfully\n";
             while(1)
```

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GURPARTAP(21103053)

```cpp
            {
            cout<<"\n\t\t\t\t\t 1.Add\t\t 2.Display Stock\t\t 3.Update\t\t 4.Delete\t\t
5.Log-out\n";
            cout<<"\n\t\t\t\t\tEnter your choice:";
            cin>>opt;
            switch (opt)
            {
            case 1:
                add(t,j);
                j++;
                break;
            case 2:

                display(t,j);
                break;
            case 3:
                cout<<"\n\t\t\t\t\t\tSelect the item:";
                cin>>sel;
                cout<<"\n\t\t\t\t\t\tEnter the available stock:";
                cin>>u;
                adminupdate(t,sel-1,u);
                break;
            case 4:
                cout<<"\n\t\t\t\t\t\tSelect the item you want to delete:";
                cin>>sel;
                t[sel-1].~item();
                break;
            case 5:
                goto here;


            default:
                cout<<"\n\t\t\t\t\t\tInvalid choice !!!\n";


            }

        }
        }
        else
```

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GURPARTAP(21103053)

```cpp
            {

                cout<<"\n\t\t\t\t\t\tInvalid pin !!!\n";
                goto jump;
            }
        }
        break;
    case 2:
newcust:
        c[k].getname();
        c[k].getdetails();
        while(1)
        {
            cout<<"\n\t\t\t\t\t 1.Display\t\t 2.Buy\t\t 3.Exit\t\t 4.MainMenu\n";
            cout<<"\t\t\t\t\tEnter your choice:";
            cin>>opt;
            switch (opt)
            {
            case 1:
                display(t,j);

                break;
            case 2:
                c[k].buy(t);
                k++;
                cout<<"\n\t\t\t\t\t\tThanks for shopping !!!!\n";
                break;
            case 3:
                goto newcust;
                break;
            case 4:
                goto here;
                break;

            default:
                cout<<"\n\t\t\t\t\t\tInvalid choice !!!\n";
            }
        }
    case 3:
        chatbot();
```

```
            break;
        case 4:
            exit(0);

        default:
            cout<<"\n\t\t\t\t\t\tInvalid choice !!!\n";



        }


    }


    return 0;
}
```