

OOP PROJECT

CUTE CUPS COFFEE SHOP CODE

**Submitted by**

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# CUTE CUPS COFFEE SHOP

**Description:**

In our program, first we have to enter the login id and in case if the user has not entered the correct id so an error pop up is generated saying that “Don’t try to be smart ….. Enter correct id” if the user has entered correct id the system will ask for correct password which must contain 1 uppercase,1 lower case,1 digit and 1 special character and in case the password is not correct so an error pop up is generated and if user has entered the right password so then the system will work fine and a next screen will be presented and system will says “Welcome To Cute Cups Coffee Shop” then by pressing 1 user could get main menu where all 10 names of coffee and there prices are given and user can easily select from there. Once the coffee has been selected by the user he will ask for if he wants to add any topping if he wants he is asked to press 1 and if he has press 1 so he could select the topping and his bill will be generated accordingly and if user did not want any topping he have to press 2 so that then by pressing enter he could easily get only the bill of coffee. Bill will also have a cashier name and order and bill number.

In our program we have 1 abstract class called coffee. We have made it abstract by making a pure virtual function in it which is float cost and that function is redefined in classes such as Espresso, Latte, Cappuccino, Macchiato, Americano, Cortado, Irish, Frappe, Ristretto and Doppio. Class Coffee is publicly inherited in all the above mentioned classes. Our program has separate classes for different types of toppings which also has functions of costs which basically return costs. In main we have added all the login and password details. We have include our shop name to files and these coffees names and also the toppings which user has selected and the bill to files.

**CODE:**

#include "stdafx.h"

#include<iostream>

#include<conio.h>

#include<string>

#include<windows.h>

#include<fstream>

using namespace std;

fstream f;

class Coffee

{

public:

virtual float cost()=0;

virtual ~Coffee()

{ }

};

class Americano : public Coffee

{

public:

float cost()

{

return 567.5;

}

};

class Espresso : public Coffee

{

public:

float cost() {

return 834.0;

}

};

class Latte : public Coffee

{

public:

float cost()

{

return 612.5;

}

};

class Cuppuccino : public Coffee

{

public:

float cost()

{

return 440.0;

} };

class Macchiato : public Coffee

{

public:

float cost()

{

return 515.5;

}

}

lass Topping : public Coffee

{

protected:

Coffee\* decorator;

public:

Topping()

{

}

Topping(Coffee \*a) : decorator(a)

{

}

float cost()

{

return (this->decorator->cost());}

};

class Mocha : public Topping

{

public:

Mocha(Coffee\* a) : Topping(a)

{

}

float cost()

{

return 67.5+Topping::cost();

}

};

class Coca\_powder : public Topping

{

public:

Coca\_powder(Coffee\* a) : Topping(a)

{

}

float cost()

{

return 35.0+Topping::cost();

}

};

class Chocolate : public Topping

{

public:Chocolate(Coffee\* a) : Topping(a)

{

}

float cost()

{

return 53.0+Topping::cost();

}

};

class Chocolate\_chips : public Topping

{

public:

Chocolate\_chips(Coffee\* a) : Topping(a)

{

}

float cost()

{

return 57.0+Topping::cost();

}

}

class Order\_coffee

{

private:

int a,d;

int check;

Coffee\* c2;

int num;

Coffee\* c1;

Coffee\* c3;public:

Order\_coffee()

{

}

void display\_menue()

{

cout<<"\n\t\t\t\t\t\t ==================="<<endl;

cout<<"\t\t\t\t\t\t MAIN MENU "<<endl;

cout<<"\t\t\t\t\t\t ==================="<<endl;

cout<<"\t\t\t\t\t\t PLACE YOUR ORDER "<<endl;

cout<<"\t\t\t\t\t\t ==================="<<endl;

cout<<"1.\tAmericano\tRs. 567.5"<<endl;

cout<<"2.\tEspresso\tRs. 834.0"<<endl;

cout<<"3.\tLatte\t\tRs. 612.5"<<endl;

cout<<"4.\tCuppuccino\tRs. 440.0"<<endl;

cout<<"5.\tMocchiato\tRs. 515.5"<<endl;

}

void place\_order()

{

cout<<"Place your order (only one at a time): ";

cin>>num;

f.open("D:/Cute\_Cups.txt",ios::app);switch(num)

{

case 1:

c1=new Americano();

f<<"Coffee selected is Americano"<<endl;

c1->cost();

break;

case 2:

c1=new Espresso();

f<<"Coffee selected is Espresso"<<endl;

c1->cost();

break;

case 3:

c1=new Latte();

f<<"Coffee selected is Latte"<<endl;

c1->cost();

break;

case 4:

c1=new Cuppuccino();

f<<"Coffee selected is Cuppuccino"<<endl;

c1->cost();

break;

case 5:

c1=new Macchiato();

f<<"Coffee selected is Macchiato"<<endl;

c1->cost();

break;

f.close();

}

}float getcost()

{

return (c1->cost());

}

void display\_toppings()

{

cout<<"1.\tMocha\t\tRs. 67.5"<<endl;

cout<<"2.\tCoca Powder\tRs. 35.0"<<endl;

cout<<"3.\tChocolate\tRs. 53.0"<<endl;

cout<<"4.\tChocolate Chips\tRs. 57.0"<<endl; }

void add\_top()

{

e:

cout<<"Choose Topping : ";

cin>>a;

f.open("D:/Cute\_Cups.txt",ios::app);

switch(a)

{

case 1:

c2=new Mocha(c1);

f<<"Topping Selected is Mocha"<<endl;

c2->cost();break;

case 2:

c2=new Coca\_powder(c1);

f<<"Topping Selected is Coca Powder"<<endl;

c2->cost();

break;

case 3:

c2=new Chocolate(c1);

f<<"Topping Selected is Chocolate"<<endl;

c2->cost();

break;

case 4:

c2=new Chocolate\_chips(c1);

f<<"Topping Selected is Chocolate Chips"<<endl;

c2->cost();

break;

f.close();

}

cout<<"Will you like to add more toppings on your coffee"<<endl;

cout<<"If yes then press 1.\nIf no then press 2."<<endl;

cin>>d;

if(d==1)

{

c1=c2;

c2=c3;

goto e;

}

}

float get\_cost()

{return (c2->cost());

}

};

int \_tmain(int argc, \_TCHAR\* argv[])

{

float bill=12.2,x=0,x1=0;

z:

string user;

cout<<"\n\n\n\n\n\n\n\n\t\t\t\t\t\t----------------------------------------";

cout<<"\n\t\t\t\t\t\t\tEnter Login Id = ";

cin>>user;

cout<<"\t\t\t\t\t\t----------------------------------------";

if(user!="cutecups")

{

cout<<"\nDon't try to be smart.....Enter correct Id\n";

goto z;

}

d:

string password=zuaa1234";

string pass="";

char ch;

cout<<"\n\n\n\t\t\t\t\t\t\t---------------------";

cout<<"\n\t\t\t\t\t\t\t Enter Password";

cout<<"\n\t\t\t\t\t\t\t---------------------";

cout<<"\n\t\t\t\t\t (Your Password must be at least 8 characters long.";cout<<"\n\t\t\t\tWith atleast 1 lower case, 1 upper case,1 digit and 1

special character.)";

cout<<"\t\t\t\t\t\t----------------------------------------------------------------------

------------";

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

cout<<"\n\t\t\t\t\t\t\tEnter Your Password ";

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

p:

ch=getch();

cout<<"\*";

if(ch!=13)

{

pass=pass+ch;

goto p;

}

cout<<"\n\t\t\t\t\t\t-----------------------------------";

if(pass!=password)

{

cout<<"\nWrong Password.Try Again\n";

goto d;

}

else

{

cout<<"\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t---------------------";

cout<<"\n\n\t\t\t\t\t\t Access Granted. Welcome to our

system\n\n\n";

system("PAUSE");

system("CLS");

cout<<"\n\n\n\t\t\t\t\t ========== WELCOME TO CUTE CUPS COFFEE SHOP

=========="<<endl;

cout<<"\n\n\n\t====================================================

======================================================"<<endl;

int a;

cout<<"Press 1 for Main Menu"<<endl;

cin>>a;

if(a==1)

{

Order\_coffee oc1;

Order\_coffee oc2;

oc1.display\_menue();

oc1.place\_order();

int check;

int ab,bc;

oc1.display\_toppings();

cout<<"Will you like to add toppings on your coffee"<<endl;

cout<<"If yes then press 1.\nIf no then press 2."<<endl;

cin>>check;

if(check==1)

{

oc1.add\_top();

x=oc1.get\_cost();

}

else{x=oc1.getcost();}

start:

cout<<"Do you want to place another order"<<endl;

cout<<"If yes then press 1.\nIf no then press 2."<<endl;

cin>>ab;

if(ab==1)

{

oc2.place\_order();

cout<<"Will you like to add toppings on your coffee"<<endl;

cout<<"If yes then press 1.\nIf no then press 2."<<endl;

cin>>bc;

if(bc==1)

{

oc2.add\_top();

x1=oc2.get\_cost();

}

else

{x1=oc2.getcost();}

goto start;

}

else

cout<<"\n\t\t\t\t\t\t\tTHANK YOU FOR YOUR ORDER :) GENERATING BILL ";

for(int a=1;a<8;a++)

{ Sleep(500);cout << "...";

bill=x+x1; }

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

system("PAUSE");

system("cls");

cout << "\n\t\t\t\t\t\t\t

================================================"<<endl;

cout << "\t\t\t\t\t\t\t| CUTE CUPS COFFEE

SHOP |"<<endl;

cout << "\t\t\t\t\t\t\t

================================================"<<endl;

cout << endl;

cout << endl;

cout << "\t\t\t\t\t\t\t Bill No : CP512 Order :

NB1353"<<endl;

cout << endl;

cout << endl;

cout << "\t\t\t\t\t\t\t Cashier : ayesha"<<endl;

cout << endl;

cout<<"\t\t\t\t\t\t\t\t YOUR TOTAL BILL IS

Rs."<<bill<<endl;

cout << "\n\t\t\t\t\t\t\t

================================================"<<endl;

f.open("D:/Cute\_Cups.txt",ios::app);

f<< "\n\t\t\t\t\t\t\t

================================================"<<endl;

f<< "\t\t\t\t\t\t\t| CUTE CUPS COFFEE

SHOP |"<<endl;f<< "\t\t\t\t\t\t\t

================================================"<<endl;

f<< endl;

f<< endl;

f<< "\t\t\t\t\t\t\t Bill No : CP512 Order :

NB1353"<<endl;

f<< endl;

f<< endl;

f<< "\t\t\t\t\t\t\t Cashier : Arfa"<<endl;

f<< endl;

f<<"\t\t\t\t\t\t\t\t YOUR TOTAL BILL IS

Rs."<<bill<<endl;

f<< "\n\t\t\t\t\t\t\t

================================================"<<endl; } }

f.close();

system("pause");

return 0;

}