//SE 47 (Book)

#include<iostream>

#include<string.h>

using namespace std;

class books

{

private:

char author[100],title[100],publish[100];

float price;

float bill;

static float ta;

int stock;

public:

void endet();

void display();

int compare(char[],char[],char[],float,int);

books();

};

float books::ta=0.0;

int books::compare(char a[100],char t[100],char p[100], float pr,int s)

{

if(strcmp(a,author)==0&&strcmp(t,title)==0&&strcmp(p,publish)==0&&pr==price)

{

if(stock>=s)

{

cout<<"The book you are searching for has been found!"<<endl;

bill=pr\*s;

ta+=bill;

stock-=s;

cout<<"Bill amount= "<<ta<<endl;

cout<<"Stock position= "<<stock<<endl;

return 0;

}

else

{

cout<<"Number of copies you require are not available"<<endl;

return 0;

}

}

else

return 1;

}

void books::endet()

{

cout<<"Enter the name of the author:"<<endl;

ws(cin);

cin.getline(author,100);

cout<<"Enter the title of the book:"<<endl;

ws(cin);

cin.getline(title,100);

cout<<"Enter the publisher:"<<endl;

ws(cin);

cin.getline(publish,100);

cout<<"Enter the price of the book:"<<endl;

cin>>price;

cout<<"Enter the number of copies of the book present in the stock:"<<endl;

cin>>stock;

}

void books::display()

{

cout<<"Title\t\tAuthor\t\tPublisher\t\tPrice\t\tStock Position"<<endl;

cout<<title<<"\t\t"<<author<<"\t\t"<<publish<<"\t\t"<<price<<"\t\t"<<stock<<endl;

}

books::books()

{

price=0.0;

stock=0;

bill=0.0;

}

int main()

{

cout<<"Welcome to the bookshop!"<<endl;

int num=0,ch,i,flag=0,j;

char con='y';

char st[100],sa[100],sp[100];

float spr;

int nc;

char c='y';

books ob1;

cout<<"Enter the number of books in your inventory:"<<endl;

cin>>num;

books ob[num];

do

{

cout<<"1-Enter details of bookshop\n2-Display inventory\n3-Search for a book"<<endl;

cout<<"Enter choice"<<endl;

cin>>ch;

switch(ch)

{

case 1:

for(i=0;i<num;i++)

ob[i].endet();

flag=1;

break;

case 2:

if(flag==0)

ob1.display();

else

{

for(i=0;i<num;i++)

ob[i].display();

}

break;

case 3:

if(num==0)

cout<<"Sorry! You cannot search for a book as there are no books in your inventory"<<endl;

else

while(c=='y'||c=='Y')

{

cout<<"Enter author:"<<endl;

ws(cin);

cin.getline(sa,100);

cout<<"Enter title:"<<endl;

cin.getline(st,100);

cout<<"Enter publisher:"<<endl;

ws(cin);

cin.getline(sp,100);

cout<<"Enter price:"<<endl;

cin>>spr;

cout<<"Enter number of copies you wish to purchase:"<<endl;

cin>>nc;

for(i=0;i<num;i++)

{

j=ob[i].compare(sa,st,sp,spr,nc);

if(j==0)

break;

else if(j==1&&i==num-1)

cout<<"Book not present in inventory"<<endl;

}

cout<<"Do you wish to purchase more books? Y or N"<<endl;

cin>>c;

}

break;

default:

cout<<"Wrong choice"<<endl;

}

cout<<"Do you wish to continue? Y or N"<<endl;

cin>>con;

}while(con=='y'||con=='Y');

return 0;

}

Welcome to the bookshop!

Enter the number of books in your inventory:

2

1-Enter details of bookshop

2-Display inventory

3-Search for a book

Enter choice

1

Enter the name of the author:

J.G

Enter the title of the book:

c++

Enter the publisher:

M.K

Enter the price of the book:

300

Enter the number of copies of the book present in the stock:

5

Enter the name of the author:

Ajay M.

Enter the title of the book:

Java

Enter the publisher:

A.K.P

Enter the price of the book:

400

Enter the number of copies of the book present in the stock:

8

Do you wish to continue? Y or N

y

1-Enter details of bookshop

2-Display inventory

3-Search for a book

Enter choice

2

Title Author Publisher Price Stock Position

c++ J.G M.K 300 5

Title Author Publisher Price Stock Position

Java Ajay M. A.K.P 400 8

Do you wish to continue? Y or N

y

1-Enter details of bookshop

2-Display inventory

3-Search for a book

Enter choice

3

Enter author:

Ajay M.

Enter title:

Java

Enter publisher:

A.K.P

Enter price:

400

Enter number of copies you wish to purchase:

2

The book you are searching for has been found!

Bill amount= 800

Stock position= 6

Do you wish to purchase more books? Y or N

n

Do you wish to continue? Y or N

n