**Demo Project 1**

**Code:**

#include<iostream>

#include<string.h>

#include<stdlib.h>

using namespace std;

class book  {

private:

    char \*author,\*title,\*publisher;

    float \*price;

    int \*stock;

public:

    book()  {

    author= new char[20];

    title=new char[20];

    publisher=new char[20];

    price= new float;

    stock=new int;

    }

    void feeddata();

    void editdata();

    void showdata();

    int search(char[],char[]);

    void buybook();

};

void book::feeddata()   {

    cin.ignore();

    cout<<"\nEnter Author Name: ";

    cin.getline(author,20);

    cout<<"Enter Title Name: ";

    cin.getline(title,20);

    cout<<"Enter Publisher Name: ";

    cin.getline(publisher,20);

    cout<<"Enter Price: ";

    cin>>\*price;

    cout<<"Enter Stock Position: ";

    cin>>\*stock;

}

void book::editdata()   {

    cout<<"\nEnter Author Name: ";

    cin.getline(author,20);

    cout<<"Enter Title Name: ";

    cin.getline(title,20);

    cout<<"Enter Publisher Name: ";

    cin.getline(publisher,20);

    cout<<"Enter Price: ";

    cin>>\*price;

    cout<<"Enter Stock Position: ";

    cin>>\*stock;

}

void book::showdata()   {

    cout<<"\nAuthor Name: "<<author;

    cout<<"\nTitle Name: "<<title;

    cout<<"\nPublisher Name: "<<publisher;

    cout<<"\nPrice: "<<\*price;

    cout<<"\nStock Position: "<<\*stock;

}

int book::search(char tbuy[20],char abuy[20] )  {

    if(strcmp(tbuy,title)==0 && strcmp(abuy,author)==0)

        return 1;

    else return 0;

}

void book::buybook()    {

    int count;

    cout<<"\nEnter Number Of Books to buy: ";

    cin>>count;

    if(count<=\*stock)   {

        \*stock=\*stock-count;

        cout<<"\nBooks Bought Sucessfully";

        cout<<"\nAmount: ₹"<<(\*price)\*count;

    }

    else

        cout<<"\nRequired Copies not in Stock";

}

int main()  {

    book \*B[20];

    int i=0,r,t,choice;

    char titlebuy[20],authorbuy[20];

    while(1)    {

        cout<<"\n\n======Chanakya's Mind Palace Book Store ======"

        <<"\n1. Data of New Book"

        <<"\n2. Purchase Book"

        <<"\n3. Search For Book"

        <<"\n4. Edit Details Of Book"

        <<"\n5. Exit"

        <<"\n\nEnter your Choice: ";

        cin>>choice;

        switch(choice)  {

            case 1: B[i] = new book;

                B[i]->feeddata();

                i++;    break;

            case 2: cin.ignore();

                cout<<"\nEnter Title Of Book: ";

                cin.getline(titlebuy,20);

                cout<<"Enter Author Of Book: ";

                cin.getline(authorbuy,20);

                for(t=0;t<i;t++)    {

                    if(B[t]->search(titlebuy,authorbuy))    {

                        B[t]->buybook();

                        break;

                    }

                }

                if(t==1)

                cout<<"\nThis Book is Not in Stock";

                break;

            case 3: cin.ignore();

                cout<<"\nEnter Title Of Book: ";

                cin.getline(titlebuy,20);

                cout<<"Enter Author Of Book: ";

                cin.getline(authorbuy,20);

                for(t=0;t<i;t++)    {

                    if(B[t]->search(titlebuy,authorbuy))    {

                        cout<<"\nBook Found Successfully";

                        B[t]->showdata();

                        break;

                    }

                }

                if(t==i)

                cout<<"\nThis Book is Not in Stock";

                break;

            case 4: cin.ignore();

                cout<<"\nEnter Title Of Book: ";

                cin.getline(titlebuy,20);

                cout<<"Enter Author Of Book: ";

                cin.getline(authorbuy,20);

                for(t=0;t<i;t++)    {

                    if(B[t]->search(titlebuy,authorbuy))    {

                        cout<<"\nBook Found Successfully";

                        B[t]->editdata();

                        break;

                    }

                }

                if(t==i)

                cout<<"\nThis Book is Not in Stock";

                break;

            case 5: exit(0);

            default: cout<<"\nInvalid Choice Entered";

        }

    }

    return 0;

}

**Output:**





