

**NATIONAL INSTITUTE OF TECHNOLOGY,
TIRUCHIRAPALLI - 620015**



DEPARTMENT OF COMPUTER APPLICATIONS
BOOK SHOP MANAGEMENT SYSTEM

OOPs PROJECT

SUBMITTED BY :-

GOURAV KUMAR – 205119033

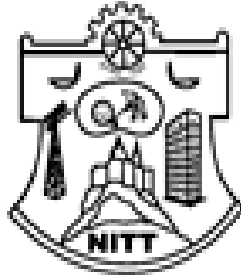
ANKUSH KUMAR – 205119017

Under the guidance of

Prof. Dr. P. CHITRA

Submit in fulfillment of the project in C++.

**NATIONAL INSTITUTE OF TECHNOLOGY,
TIRUCHIRAPPALLI-15**



CERTIFICATE

This is to certify that **Mr. Gourav Kumar** and **Mr. Ankush Kumar**, student of 2nd semester MCA (batch 2019-2022) of National Institute of Technology, Tiruchirappalli has successfully completed the project **Book Shop Management System** in C++ under the guidance of **Dr. P. Chitra**.

Signature

(Dr. P. Chitra)

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INTRODUCTION

Book Store Management System is the web application to automate all kinds of operations in the book shop. The purpose of this software is to manage the books in the book store.

Generally, it includes the Order Processing, Stock Management. We developed this software to maintains records of sales, purchase and inventory update. That means a shop which has the type system which provides the facility to the customers of the shop to purchase the books from the shop without any complexity.

This Book Shop Management System is used to overcome the entire problem which they are facing currently, and making manual system to computerized system. Purposed Book shop management system should help the customers query whether a book in a stock the user can query the availability of a book either by using the book title or by using the name of author. The objective and scope of my Project Book Shop Management System is to record the details various activities of user. It simplifies the task and reduce the paper work.

CODE

```
#include<fstream>

#include<conio.h>

#include<string.h>

#include<iomanip>

#include<iostream>

using namespace std;

class book
{
    char book_number[30];
    char book_name[50];
    char author_name[20];
    int num_copies;
public:
    //This function is used to get the details of the Books
    void get_book_details()
    {
        cout<<"\nENTER DETAILS ABOUT BOOK U WANT TO PURCHASE\n";
        cout<<"\nEnter The Book Number: ";
        cin>>book_number;
        cout<<"\nEnter The Name of The Book: ";
        cin.ignore();
        cin.getline(book_name,50);
        cout<<"\nEnter The Author's Name: ";
        cin.ignore();
        cin.getline(author_name,50);
        fflush(stdin);
```

```

        cout<<"\nEnter No. Of Copies : ";
        cin>>num_copies;
    }

void show_book()
{
    cout<<"\nBook Number: "<<book_number;
    cout<<"\nBook Name: "<<book_name;
    cout<<"\nAuthor's Name: "<<author_name;
    cout<<"\nCOPIES : "<<num_copies;
}

void modify_book()
{
    cout<<"\nBook number : "<<book_number;
    cout<<"\nModify Book Name : ";
    cin.ignore();
    cin.getline(book_name,50);
    cout<<"\nModify Author's Name: ";
    cin.ignore();
    cin.getline(author_name,50);
    fflush(stdin);
    cout<<"\nEnter No. Of Copies : ";
    cin>>num_copies;
}

char* getbooknumber()
{
    return book_number;
}

```

```

    }

    void report()

    {
        cout<<book_number<<setw(30)<<book_name<<setw(30)<<author_name<<setw(30)<<
num_copies<<endl;
    }
};

```

```

fstream fp;

book bk;    //creating an object of class book

void write_book()
{
    system("cls");
    int more_or_main;
    fp.open("book.dat",ios::out|ios::app);
    do
    {
        bk.get_book_details();
        fp.write((char*)&bk,sizeof(book));
        cout<<"\nPress 1 want to add more books.";
        cout<<"\nPress 2 want to return to main menu.\n";
        cout<<"Enter: ";
        cin>>more_or_main;
    }while(more_or_main == 1);
    fp.close();
}

```

```
//this function is used to display a book details
```

```
void display_a_book(char n[])
{
    system("cls");
    cout<<"\nBOOK DETAILS\n";
    int check=0;
    fp.open("book.dat",ios::in);
    while(fp.read((char*)&bk,sizeof(book)))
    {
        if(strcmpi(bk.getbooknumber(),n)==0)
        {
            bk.show_book();
            check=1;
        }
    }
    fp.close();
    if(check==0)
        cout<<"\n\nBook does not exist";
    getch();
}
```

```
//function is used to update about the book details
```

```
void modify_book()
{
    system("cls");
    char n[20];
    int found=0;
```



```

        cout<<"\n\n\tMODIFY BOOK";

        cout<<"\n\n\tEnter The book number: ";

        cin>>n;

        fp.open("book.dat",ios::in|ios::out);

        while(fp.read((char*)&bk,sizeof(book)) && found==0)
        {

            if(strcmpi(bk.getbooknumber(),n)==0)
            {

                bk.show_book();

                cout<<"\nEnter The New Details of book"<<endl;

                bk.modify_book();

                int pos= 1*sizeof(bk);

                fp.seekp(pos,ios::cur);

                fp.write((char*)&bk,sizeof(book));

                cout<<"\n\n\t Record Updated Successfully...";

                found=1;

            }

        }

        fp.close();

        if(found==0)

            cout<<"\n\n Record Not Found ";

        getch();

    }

//function is used to delete a book when someone buys a book
void delete_book()

```

```

{
    system("cls");
    char n[20];
    int flag=0;
    cout<<"\n\n\n\tDELETE BOOK";
    cout<<"\n\nEnter The Book's number You Want To Delete: ";
    cin>>n;
    fp.open("book.dat",ios::in|ios::out);
    fstream fp2;
    fp2.open("Temp.dat",ios::out);
    fp.seekg(0,ios::beg);
    while(fp.read((char*)&bk,sizeof(book)))
    {
        if(strcmpi(bk.getbooknumber(),n)!=0)
        {
            fp2.write((char*)&bk,sizeof(book));
        }
        else
            flag=1;
    }
    fp2.close();
    fp.close();
    remove("book.dat");
    rename("Temp.dat","book.dat");
    if(flag==1)
        cout<<"\n\n\tRecord Deleted ..";
    else

```

```

        cout<<"\n\nRecord not found";

    getch();
}

//display all books in the inventory
void display_allb()
{
    system("cls");
    fp.open("book.dat",ios::in);
    if(!fp)
    {
        cout<<"ERROR!!! FILE COULD NOT BE OPEN ";
        getch();
        return;
    }

    cout<<"\n\n\t\tBook LIST\n\n";

    cout<<"=====
=====\\n";

    cout<<"Book Number"<<setw(20)<<"Book
Name"<<setw(25)<<"Author"<<setw(25)<<"Copies"<<endl;

    cout<<"=====
=====\\n";

    while(fp.read((char*)&bk,sizeof(book)))
    {
        bk.report();
    }

    fp.close();
}

```

[illegible]

```
    cout<<"\n\t\tOption: ";
    cin>>option;
    switch(option)
    {
        case 1: system("cls");
                write_book();
                break;

        case 2: display_allb();
                break;
        case 3: char num[20];
                system("cls");
                cout<<"\n\n\tPlease Enter The book No. ";
                cin>>num;
                display_a_book(num);
                break;

        case 4:   modify_book();
                break;
        case 5:   delete_book();
                break;
        case 6: exit(0);
                break;
        default: cout<<"\a";
    }
}
}
```

Screenshot

Code

```
Book shop.cpp
1  #include<fstream>
2  #include<conio.h>
3  #include<string.h>
4  #include<iomanip>
5  #include<iostream>
6
7  using namespace std;
8
9  class book
10 {
11     char book_number[30];
12     char book_name[50];
13     char author_name[20];
14     int num_copies;
15
16 public:
17     void get_book_details()
18     {
19         cout<<"\nENTER DETAILS ABOUT BOOK U WANT TO PURCHASE\n";
20         cout<<"\nEnter The Book Number: ";
21         cin>>book_number;
22         cout<<"\nEnter The Name of The Book: ";
23         cin.ignore();
24         cin.getline(book_name,50);
25         cout<<"\nEnter The Author's Name: ";
26         cin.ignore();
27         cin.getline(author_name,50);
28         fflush(stdin);
29         cout<<"\nEnter No. Of Copies : ";
30         cin>>num_copies;
31     }
32
33     void show_book()
34     {
35         cout<<"\nBook Number: "<<book_number;
36         cout<<"\nBook Name: "<<book_name;
37         cout<<"\nAuthor's Name: "<<author_name;
38         cout<<"\nCOPIES : "<<num_copies;
39     }
40
41     void modify_book()
42     {
43         cout<<"\nBook number : "<<book_number;
44         cout<<"\nModify Book Name : ";
45         cin.ignore();
46         cin.getline(book_name,50);
47         cout<<"\nModify Author's Name: ";
```

Compiler Resources Compile Log Debug Find Results Close

rt Compilation - Compilation Time: 1.31s

Front page

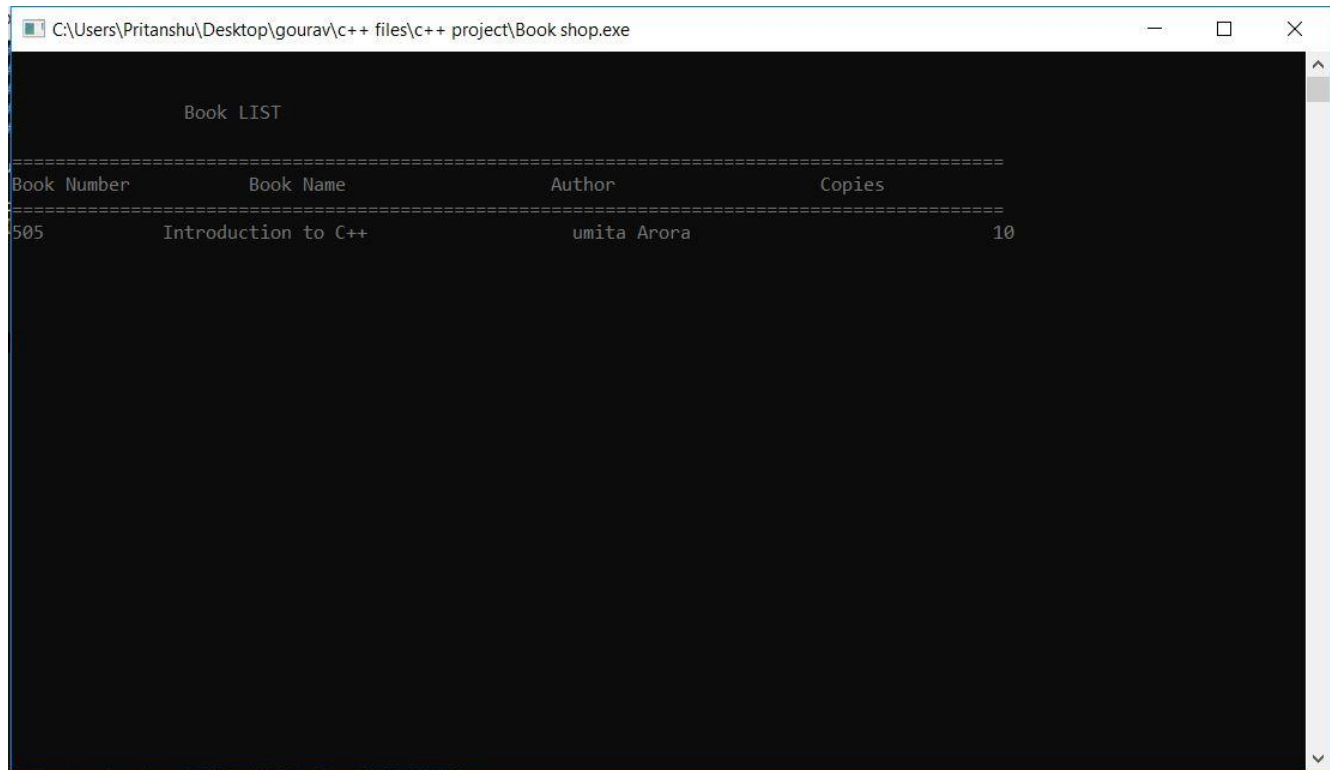
[illegible]

For Buying Books

```
C:\Users\Pritanshu\Desktop\gourav\c++ files\c++ project\Book shop.exe
```

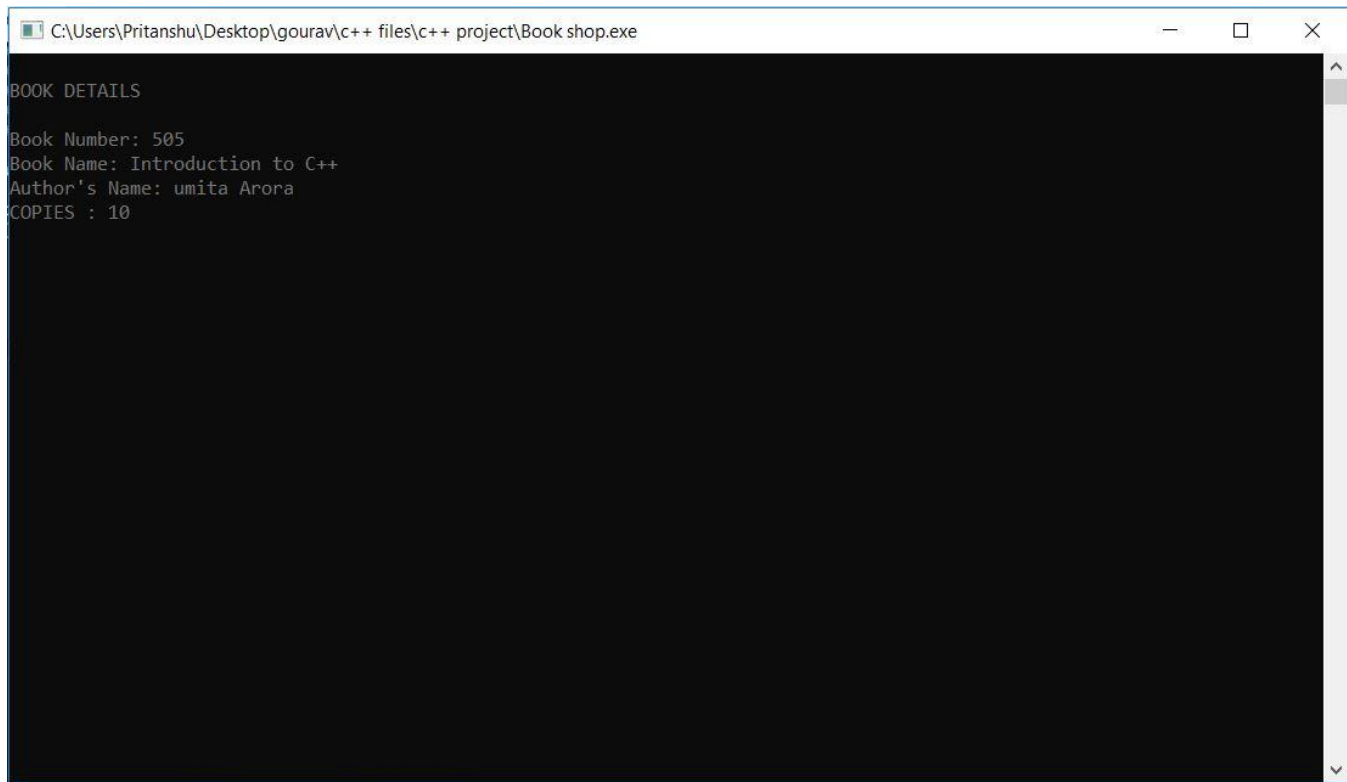
```
#ENTER DETAILS ABOUT BOOK U WANT TO PURCHASE  
#  
Enter The Book Number: 505  
U Enter The Name of The Book: Introduction to C++  
C  
Enter The Author's Name: Sumita Arora  
Enter No. Of Copies : 10  
Press 1 want to add more books.  
Press 2 want to return to main menu.  
Enter:
```

To Show all books



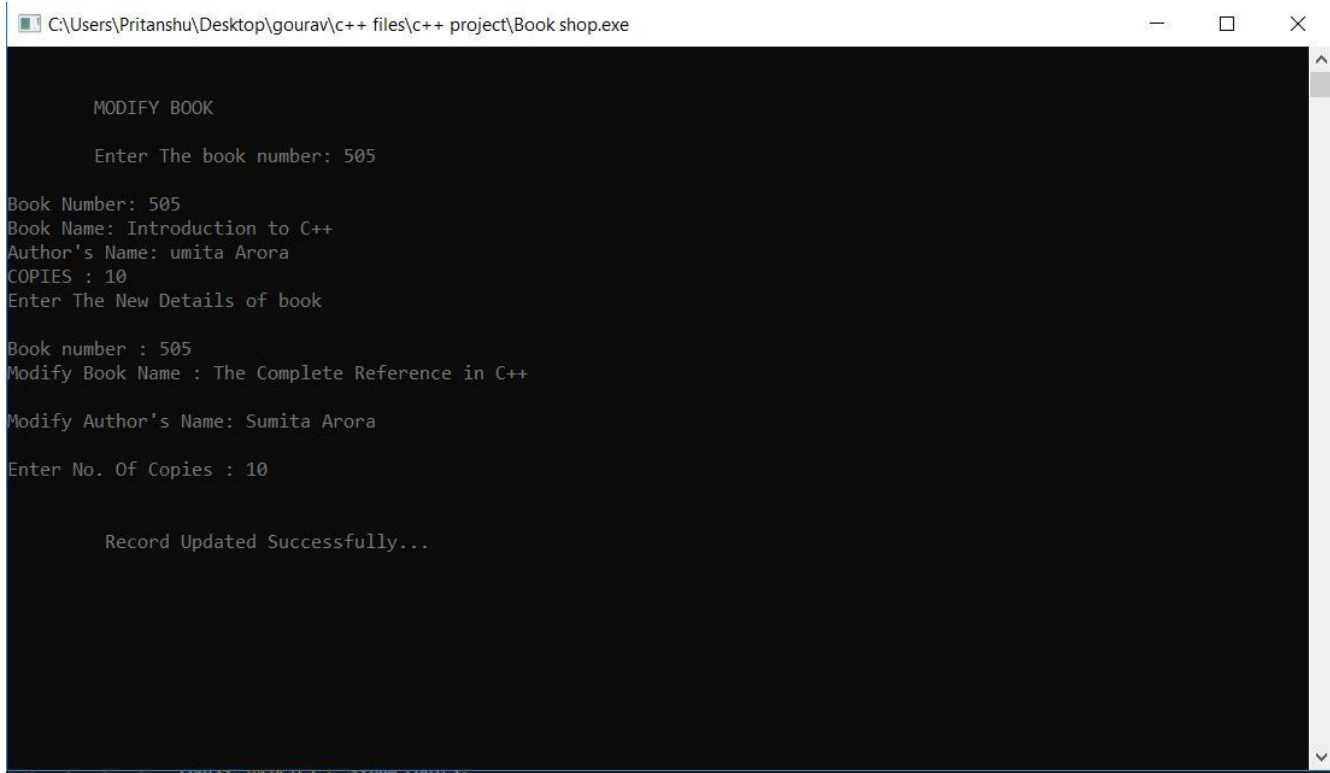
```
Book LIST
=====
Book Number      Book Name      Author      Copies
=====
505      Introduction to C++      umita Arora      10
```

Check Availability



```
BOOK DETAILS
Book Number: 505
Book Name: Introduction to C++
Author's Name: umita Arora
COPIES : 10
```


Modifications



```
MODIFY BOOK

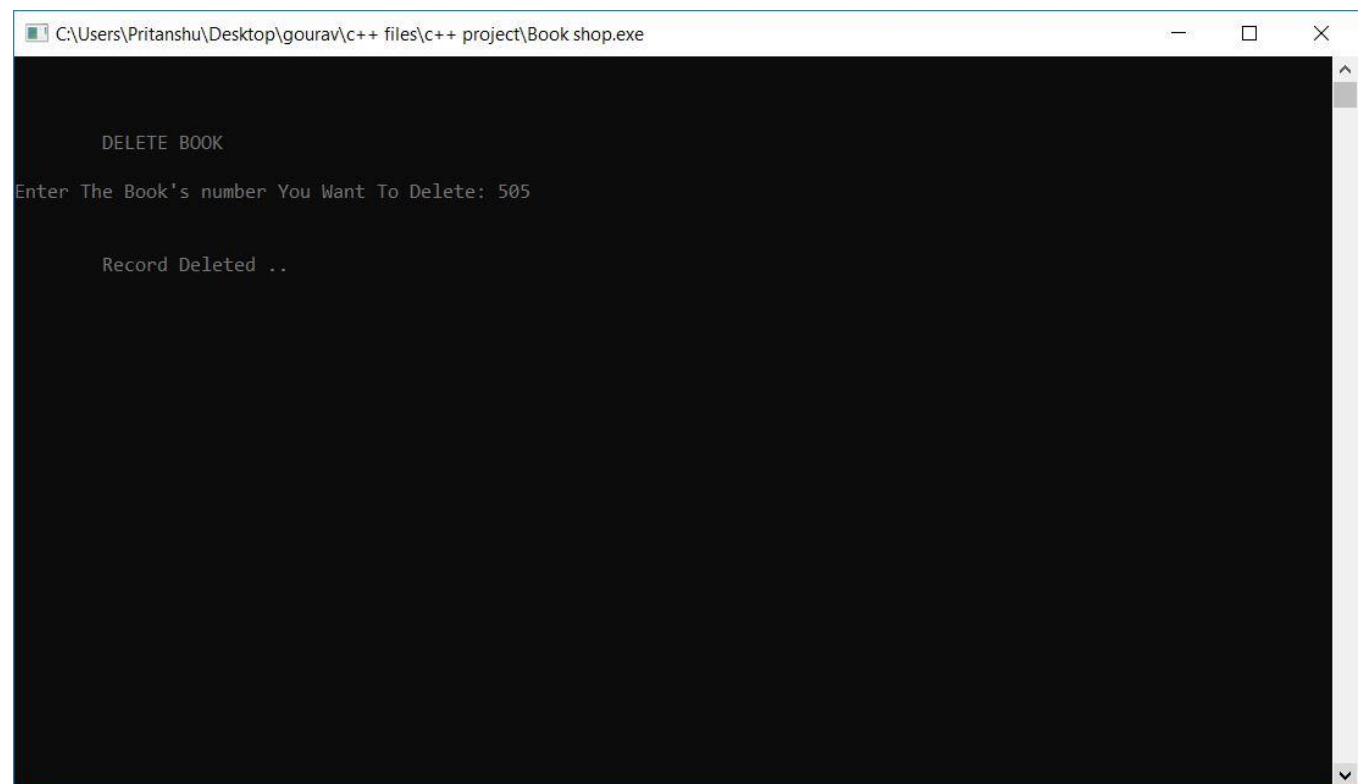
Enter The book number: 505

Book Number: 505
Book Name: Introduction to C++
Author's Name: umita Arora
COPIES : 10
Enter The New Details of book

Book number : 505
Modify Book Name : The Complete Reference in C++
Modify Author's Name: Sumita Arora
Enter No. Of Copies : 10

Record Updated Successfully...
```

Delete Record of the book



```
DELETE BOOK

Enter The Book's number You Want To Delete: 505

Record Deleted ..
```

References and Bibliography

1. Object Oriented Programming with C++, E. Balagurusamy.
2. The Complete reference for C++.