**COMPUTER SCIENCE**

**PROJECT FILE**

**ON**

**BOOK-SHOP**

j0285750

**PROJECT PREPARED BY:**

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**XII B**

**Session: 2019-2020**

**Ryan International School, Greater Noida**

**Board Roll Number:**

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**Acknowledgement**

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**Certificate**

**This is to certify that Shubh Garg of class twelve, Ryan International School, Greater Noida has successfully completed his project in computer practicals for the AISSCE as prescribed by CBSE in the year 2019-2020.**

**Signature of Internal Signature of External**

**Examiner Examiner**

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**HEADER FILES USED AND THEIR PURPOSE**

1. **FSTREAM.H** – for file handling, cin and cout
2. **PROCESS.H** – for exit() function
3. **CONIO.H** – for clrscr() and getch() functions
4. **STDIO.H** – for standard I/O operations
5. **STRING.H** – for string handling
6. **CTYPE.H** – for character handling

CODING

#include<fstream.h>

#include<conio.h>

#include<string.h>

#include<process.h>

#include<stdio.h>

#include<ctype.h>

class subject

{

public:

char s[5][40],sub[5][5][40];

subject()

{

strcpy(sub[0][0],"Physics NCERT-I");

strcpy(sub[0][1],"Physics NCERT-II");

strcpy(sub[0][2],"Pradeep Physics");

strcpy(sub[0][3],"H.C.Verma\t");

strcpy(sub[0][4],"Together With");

strcpy(sub[1][0],"Chemistry NCERT-I");

strcpy(sub[1][1],"Chemistry NCERT-II");

strcpy(sub[1][2],"Pradeep Chemistry");

strcpy(sub[1][3],"Together With");

strcpy(sub[1][4],"P.Bahaadur\t");

strcpy(sub[2][0],"Maths NCERT-I");

strcpy(sub[2][1],"Maths NCERT-II");

strcpy(sub[2][2],"Maths ND-I\t");

strcpy(sub[2][3],"Maths ND-II");

strcpy(sub[2][4],"R.D.Sharma\t");

strcpy(sub[3][0],"Flemingo Textbook");

strcpy(sub[3][1],"Vistas Textbook");

strcpy(sub[3][2],"Flemingo ND");

strcpy(sub[3][3],"Vistas ND\t");

strcpy(sub[3][4],"Golden Guide");

strcpy(sub[4][0],"Sumita Arora");

strcpy(sub[4][1],"Together With");

strcpy(sub[4][2],"Evergreen C++");

strcpy(sub[4][3],"RohitQuestionBank");

strcpy(sub[4][4],"Osborne\t");

strcpy(s[0],"Physics\t");

strcpy(s[1],"Chemistry\t");

strcpy(s[2],"Maths\t");

strcpy(s[3],"English\t");

strcpy(s[4],"Computer Science");

}

};

void show();

void show2();

class userlist

{

public:

int no;

char users[100][50];

};

class user

{

public:

int sbj[5][7],totp,totr;

char password[20];

void showpb()

{

cout<<"\n\n\n\n\n\n 'P' Purchase\n 'B' Back";

}

};

void uppercase(char \*);

void pur\_ret(char name[]);

void notification(user &);

void setdefault(user &);

void chkusrlst();

void chkbooklst();

void showuserlist();

int crtusr();

int showbooks();

int openacc();

void namecutter(char name[]);

int main()

{

textbackground(3);

textcolor(0);

chkusrlst();

chkbooklst();

mpage:

clrscr();

char ch;

cout<<"\n\n\t\t\tWelcome To SHUBH BOOKSHOP\n\n\n\n\n '1' See the ";

cout<<"lists of books\n '2' Create an account\n '3' Open an account";

cout<<"\n '4' See about no. of books purchased/returned\n";

cout<<" '5' See the list of accounts\n '6' Quit";show();

ch=getch();

switch(ch)

{

case '1': if(showbooks()==1)

{ goto mpage;

}

break;

case '2': crtusr();

goto mpage;

case '3': openacc();

goto mpage;

case '4': pur\_ret("BOOKLIST");

goto mpage;

case '5': showuserlist();

goto mpage;

case '6': return 0;

default : goto mpage;

}

getch();

return 0;

}

int crtusr()

{

clrscr();

char name[50],reply;

ifstream fi;

user u;userlist list;

fi.open("USERLIST");fi.read((char \*) &list,sizeof(list));fi.close();

if(list.no==99)

{ clrscr();cout<<"\n\tYou can't create any account.\n\t";

cout<<"Since the accoutn list is full,\n\tso you have to";

cout<<" delete an account";show2();getch();return 0;

}

cout<<"\n Enter your name(max 49 characters):\n ";

page2:

cin.getline(name,49);uppercase(name);

if(name[0]=='\0'||name[0]==' ')

{

clrscr();

cout<<"\n Please enter a valid name:";goto page2;

}

for(int i=0;name[i]!='\0';i++)

{

if(name[i]=='\\'||name[i]=='/'||name[i]==':'||name[i]=='\*'||name[i]=='?'||name[i]=='\"'||name[i]=='<'||name[i]=='>'||name[i]=='|')

{ clrscr();

cout<<"\n Please enter a valid name:";goto page2;

}

}

fi.open(name);

if(fi.good())

{

clrscr();

cout<<"\n The name you have entered is already present!";

cout<<"\n Please enter another:\n ";goto page2;

}

fi.close();

page: clrscr();

cout<<"\n Do you want to add a password? (y/n):";reply=getch();

if(reply=='Y'||reply=='y')

{ clrscr();

cout<<"\n Enter your password(max 19 characters):\n ";

cin.getline(u.password,19);

}

else if(reply=='N'||reply=='n')

{ strcpy(u.password,"########");

}

else{ goto page;}

setdefault(u);

ofstream fo(name);

fo.write((char \*) &u,sizeof(u));fo.close();

strcpy(list.users[list.no],name);list.no++;

fo.open("USERLIST");fo.write((char \*) &list,sizeof(list));fo.close();

clrscr();cout<<"\n\n\tCongratulations! ";

cout<<"You have created your account of name:\n\t'"<<name<<"'";

show2();getch();

return 0;

}

void setdefault(user &usr)

{

int i,j;

for(i=0;i<5;i++)

{

for(j=0;j<7;j++)

{

usr.sbj[i][j]=0;

}

}

usr.totp=0;usr.totr=0;

}

void chkusrlst()

{

ifstream usrlst;

usrlst.open("userlist");

if(!usrlst.good())

{

ofstream fo("userlist");

userlist list;

list.no=0;

fo.write((char \*) &list,sizeof(list));

fo.close();

}

usrlst.close();

}

void chkbooklst()

{

ifstream booklst;int i,j;

booklst.open("booklist");

if(!booklst.good())

{

ofstream fo("booklist");

user bklst;

for(i=0;i<5;i++)

{

for(j=0;j<5;j++)

{

bklst.sbj[i][j]=1000;

}

}

for(i=0;i<5;i++)

{

bklst.sbj[i][5]=0;bklst.sbj[i][6]=0;

}

bklst.totp=0;bklst.totr=0;

fo.write((char \*)&bklst,sizeof(bklst));

fo.close();

}

booklst.close();

}

int showbooks()

{

user guest;subject sb;char i,k,ch,ch1,ch2;int x,y,j;

page1: clrscr();

ifstream fi("Booklist");

fi.read((char \*) &guest,sizeof(guest));

fi.close();cout<<"\n\n\n\n\n\n\n";

for(x=0;x<5;x++)

{

cout<<" '"<<x+1<<"' "<<sb.s[x]<<"\n";

}

cout<<" 'B' Back";

show();ch=getch();

for(i='1',x=0;i<='5';i++,x++)

{

page2: clrscr();

if(ch==i)

{

cout<<"\n\n\n\t\t"<<sb.s[x]<<"\n\n\n\n";

for(j=0;j<5;j++)

{

cout<<" \'"<<j+1<<"\' "<<sb.sub[x][j]<<"\t";

cout<<guest.sbj[x][j]<<" remaining\n";

}

cout<<" 'B' Back";show();ch1=getch();

for(k='1',y=0;k<='5';k++,y++)

{

if(ch1==k)

{

page3: clrscr();

cout<<"\n\t\t\t\t"<<sb.sub[x][y];

guest.showpb();show();ch2=getch();

if(ch2=='P'||ch2=='p')

{

if(guest.sbj[x][y]>0)

{ guest.totp++;guest.sbj[x][5]++;guest.sbj[x][y]--;

notification(guest);

}

else

{

clrscr();

cout<<"\n\n\tYou can't purchase this book.\n\tMake ";

cout<<"sure that no. of copies of this book\n\tin ";

cout<<"this shop is greater than zero.";

show2();getch();goto page2;

}

}

else if(ch2=='B'||ch2=='b'){ goto page2;}

else{ goto page3;}

break;

}

}

if(ch1=='B'||ch1=='b'){ goto page1;}

else{ goto page2;}

}

}

if(ch=='B'||ch=='b'){ return 1;}

else{ goto page1;}

}

void notification(user &u)

{

clrscr();

ofstream f("BOOKLIST");

f.write((char \*) &u,sizeof(u));

f.close();

cout<<"\n\n\n\n\n\n\n\tThank you for your purchasing this book. ";

cout<<"Next time you must create\n\tan account so that you can ";

cout<<"purchase more than one book and also can\n\treturn books";

cout<<" purchased from this shop.\n\n\n\n\n";

cout<<"\tNow press any key to exit";

getch();

exit(0);

}

void show()

{

cout<<"\n\n\n\n\n\tPress any of the keys given above!";

}

void show2()

{

cout<<"\n\n\n\n\n\tPress any key to back!";

}

void pur\_ret(char name[])

{

clrscr();

user u;subject s;ifstream fi(name);int i;

fi.read((char \*) &u,sizeof(u));fi.close();

cout<<"\n\n\n\n Subject\t\tPurchased\tReturned\n\n\n";

for(i=0;i<5;i++)

{

cout<<" "<<i+1<<"."<<" "<<s.s[i]<<"\t"<<u.sbj[i][5];

cout<<"\t\t"<<u.sbj[i][6]<<"\n";

}

cout<<" 6. "<<"Total\t\t"<<u.totp<<"\t\t"<<u.totr;show2();getch();

}

int openacc()

{

user u,bklst;userlist list;

char name[50],passw[20],reply;ofstream fo;

page1:clrscr();

cout<<"\n Enter your account name:\n ";cin.getline(name,49);

uppercase(name);ifstream fi(name);

if(!fi.good())

{ pagename:

clrscr();cout<<"\n\n Wrong account name!\n Enter again?(y/n)\n ";

reply=getch();

if(reply=='y'||reply=='Y'){ goto page1;}

else if(reply=='n'||reply=='N'){ return 0;}

else{ goto pagename;}

}

fi.read((char \*) &u,sizeof(u));fi.close();

fi.open("USERLIST");fi.read((char \*) &list,sizeof(list));fi.close();

int flag=0;

for(int s=0;s<list.no;s++)

{

if(!strcmp(name,list.users[s])){ flag=1;break;}

}

if(flag==0)

{ strcpy(list.users[list.no],name);list.no++;

fo.open("USERLIST");

fo.write((char \*) &list,sizeof(list));fo.close();

}

if(!strcmp(u.password,"########")){ goto page3;}

page2: clrscr();cout<<"\n Enter your password:\n ";

cin.getline(passw,19);

if(strcmp(u.password,passw))

{ pagepass:

clrscr();cout<<"\n\n Wrong password!\n Enter again?(y/n)\n ";

reply=getch();

if(reply=='y'||reply=='Y'){ goto page2;}

else if(reply=='n'||reply=='N'){ return 0;}

else{ goto pagepass;}

}

page3: clrscr();fi.open("BOOKLIST");

fi.read((char \*) &bklst,sizeof(bklst));fi.close();

cout<<"\n\n\n\tWelcome "<<name;

cout<<"\n\n\n\n '1' Purchase/return books\n '2' No. of books";

cout<<" you are having\n '3' No. of books purchased/retutned ";

cout<<"by you\n '4' Add/modify password\n '5' Remove password\n ";

cout<<"'6' Delete your account\n 'B' Back";show();reply=getch();

if(reply=='1')

{

subject sb;char i,k,ch,ch1,ch2;int x,y,j;

page31: clrscr();

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

for(x=0;x<5;x++)

{

cout<<" '"<<x+1<<"' "<<sb.s[x]<<"\n";

}

cout<<" 'B' Back";

show();ch=getch();

for(i='1',x=0;i<='5';i++,x++)

{

page32: clrscr();

if(ch==i)

{

cout<<"\n\n\n\t\t"<<sb.s[x]<<"\n\n\n\n";

for(j=0;j<5;j++)

{

cout<<" \'"<<j+1<<"\' "<<sb.sub[x][j]<<"\t";

cout<<bklst.sbj[x][j]<<" remaining\n";

}

cout<<" 'B' Back";show();ch1=getch();

for(k='1',y=0;k<='5';k++,y++)

{

if(ch1==k)

{

page33: clrscr();

cout<<"\n\t\t\t\t"<<sb.sub[x][y];

u.showpb();cout<<"\n 'R' Return";show();ch2=getch();

if(ch2=='P'||ch2=='p')

{

if(bklst.sbj[x][y]>0)

{

u.totp++;bklst.totp++;u.sbj[x][5]++;bklst.sbj[x][5]++;

u.sbj[x][y]++;bklst.sbj[x][y]--;fo.open("BOOKLIST");

fo.write((char \*) &bklst,sizeof(bklst));fo.close();

fo.open(name);fo.write((char \*) &u,sizeof(u));fo.close();

clrscr();cout<<"\n\n\tOK! You have purchased this book";

}

else

{

clrscr();

cout<<"\n\n\tYou can't purchase this book.\n\tMake ";

cout<<"sure that no. of copies of this book\n\tin ";

cout<<"this shop is greater than zero.";

}

show2();getch();

goto page32;

}

else if(ch2=='r'||ch2=='R')

{

if(u.sbj[x][y]>0)

{

u.totr++;bklst.totr++;u.sbj[x][6]++;bklst.sbj[x][6]++;

u.sbj[x][y]--;bklst.sbj[x][y]++;fo.open("BOOKLIST");

fo.write((char \*) &bklst,sizeof(bklst));fo.close();

fo.open(name);fo.write((char \*) &u,sizeof(u));fo.close();

clrscr();cout<<"\n\n\tOK! You have returned this book";

}

else

{

clrscr();

cout<<"\n\n\tYou can't return this book.\n\tMake ";

cout<<"sure that no. of copies of this book\n\tyou";

cout<<" are having is greater than zero.";

}

show2();getch();

goto page32;

}

else if(ch2=='B'||ch2=='b'){ goto page32;}

else{ goto page33;}

}

}

if(ch1=='B'||ch1=='b'){ goto page31;}

else{ goto page32;}

}

}

if(ch=='B'||ch=='b'){ goto page3;}

else{ goto page31;}

}

else if(reply=='2')

{

clrscr();

int i,j;

for(i=0;i<5;i++)

{ subject sb;

cout<<"\n "<<sb.s[i]<<"\n";

for(j=0;j<5;j++)

{

cout<<" "<<j+1<<". "<<sb.sub[i][j]<<"\t"<<u.sbj[i][j];

cout<<" remaining\n";

}

}

show2();getch();goto page3;

}

else if(reply=='3')

{ pur\_ret(name);

goto page3;

}

else if(reply=='4')

{ clrscr();cout<<"\n Enter new password(max 19 characters):\n ";

cin.getline(passw,19);strcpy(u.password,passw);clrscr();

cout<<"\n\tPassword modified succesfully!";show2();getch();

fo.open(name);fo.write((char \*) &u,sizeof(u));fo.close();

goto page3;

}

else if(reply=='5')

{ page35: clrscr();cout<<"\n Remove password?(y/n):";reply=getch();

if(reply=='Y'||reply=='y')

{ strcpy(u.password,"########");fo.open(name);

fo.write((char \*) &u,sizeof(u));fo.close();clrscr();

cout<<"\n\tPassword removed successfully!";

show2();getch();goto page3;

}

else if(reply=='N'||reply=='n'){ goto page3;}

else{ goto page35;}

}

else if(reply=='6')

{ page36: clrscr();

cout<<"\n Do you want to delete your account?(y/n):";reply=getch();

if(reply=='Y'||reply=='y')

{ clrscr();remove(name);

cout<<"\n\tYour account is deleted successfully!";show2();getch();

namecutter(name);

return 0;

}

else if(reply=='N'||reply=='n'){ goto page3;}

else{goto page36;}

}

else if(reply=='b'||reply=='B')

{ page3b: clrscr();

cout<<"\n Do you want to exit from your account?(y/n):";

reply=getch();

if(reply=='Y'||reply=='y'){ return 0;}

else if(reply=='N'||reply=='n'){ goto page3;}

else{ goto page3b;}

}

else{ goto page3;}

}

void uppercase(char \*a)

{

for(int i=0;a[i]!='\0';i++)

{

a[i]=toupper(a[i]);

}

}

void showuserlist()

{

clrscr();int i;userlist list;ifstream fi("USERLIST");

fi.read((char \*) &list,sizeof(list));fi.close();

for(i=0;i<list.no;i++)

{

cout<<"\n "<<i+1<<". "<<list.users[i];

}

show2();getch();

}

void namecutter(char name[])

{

userlist u;char temp[50];int i;

ifstream fi("USERLIST");fi.read((char \*) &u,sizeof(u));fi.close();

for(i=0;i<u.no-1;i++)

{

if(strcmp(u.users[i],name)==0)

{

strcpy(temp,u.users[i]);

strcpy(u.users[i],u.users[i+1]);

strcpy(u.users[i+1],temp);

}

}

u.no--;ofstream fo("USERLIST");

fo.write((char \*) &u,sizeof(u));fo.close(); }

[**www.cbseportal.com**](http://www.cbseportal.com)

**BIBLIOGRAPHY**

**j0292020**

**COMPUTER SCIENCE IN C++ BY SUMITA ARORA**

[**www.google.com**](http://www.google.com)

**PREFACE**

The BOOK SHOP MANAGEMENT helps to minimize the use of paper and it is better to use software instead of paper because by using software we can get instant result, we can save a lot of papers. Managing paper is more difficult than to store things on computer. Also we can keep a record of everything together and sharing of data becomes easier.

This project has been prepared keeping in view the requirements of computerization of a BOOK SHOP MANAGEMANT. The project thus manage the book details automatically it does almost every work which is related to automatic management of book shop via new book details, updating of details, modification of details, viewing book records.

BOOK SHOP MANAGEMANT is developed as per seeing the increasing culture. Thus a new software has been proposed to reduce manually work, improving work efficiency, saving time and to provide greater flexibility and user friendliness.