BOOK STORE MANGEMENT

#include<fstream.h>

#include<stdio.h>

#include<string.h>

#include<conio.h>

#include<process.h>

#include<iomanip.h>

class book

{

  char book\_number[30];

  char book\_name[50];

  char author\_name[20];

  int num\_copies;

  public:

  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;

void write\_book()

{

  clrscr();

  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 to add more books.";

    cout<<"\nPress 2 to return to main menu.\n";

    cout<<"Enter: ";

    cin>>more\_or\_main;

  }while(more\_or\_main == 1);

  fp.close();

}

void display\_a\_book(char n[])

{

  clrscr();

  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();

}

void modify\_book()

{

  clrscr();

  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();

}

void delete\_book()

{

  clrscr();

  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);

  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();

}

void display\_allb()

{

  clrscr();

          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();

  getch();

}

void intro()

{

     clrscr();

  cout<<"\t\t\t\t\*\t\*";

  cout<<"\t\t\t\t\*\*\t\*\*";

   cout<<"\t\t\t\t\*\*\*\t\*\*\*";

   cout<<"\t\t\t\t\*\*\*\*\t\*\*\*\*";

   cout<<"\t\t\t\t\*\*\*\*\*\t\*\*\*\*\*";

    cout<<"\t\t\t\t\*\*\*\*\*\*\t\*\*\*\*\*\*";

   cout<<"\t\t\t\t\*\*\*\*\*\*\*\t\*\*\*\*\*\*\*";

   cout<<"\t\t\t\t\*\*\*\*\*\*\*\t\*\*\*\*\*\*\*";

   cout<<"\t\t\t\t\*\*\*\*\*\*\t\*\*\*\*\*\*";

   cout<<"\t\t\t\t\*\*\*\*\*\t\*\*\*\*\*";

   cout<<"\t\t\t\t\*\*\*\*\t\*\*\*\*";

   cout<<"\t\t\t\t\*\*\*\t\*\*\*";

   cout<<"\t\t\t\t\*\*\t\*\*";

   cout<<"\t\t\t\t\*\t\*";

}

int main()

{

          int option = 0;

          for(;;)

          {

               intro();

            cout<<"\t\t@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@";

                cout<<"\n\t\tPress 1 to TO BUY";

                cout<<"\n\t\tPress 2 to SHOW ALL BOOKS";

                cout<<"\n\t\tPress 3 to CHECK AVAILABILITY";

                cout<<"\n\t\tPress 4 to MODIFY BOOKS";

                cout<<"\n\t\tPress 5 to DELETE BOOKS";

                cout<<"\n\t\tPress 6 to Exit";

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

  cout<<"\n\t\tOption: ";

  cin>>option;

  switch(option)

{

    case 1:  clrscr();

                                         write\_book();

                                                   break;

                               case 2: display\_allb();

                                 break;

                    case 3:

                              char num[20];

      clrscr();

                              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";

          }

          }

}