#ifndef INFORBOOK\_H

#define INFORBOOK\_H

#include<iostream>

using namespace std;

class InforBook

{

public:

InforBook();

InforBook(string, string, string, int );

virtual ~InforBook();

string getName(){ return m\_name;}

void setName(string name) {m\_name = name;}

string getAuthors(){ return m\_authors;}

void setAuthors( string authors) {m\_authors = authors;}

string getNameOfPublisher() {return m\_nameOfPublisher;}

void setNameOfPublisher(string nameOfPublisher) {m\_nameOfPublisher = nameOfPublisher;}

int getYearOfPublication() {return m\_yearOfPublication;}

void setYearOfPublication(int yearOfPublication) {m\_yearOfPublication = yearOfPublication;}

InforBook\* getNext() {return next;}

void setNext(InforBook\* val) {next = val;}

protected:

private:

string m\_name;

string m\_authors;

string m\_nameOfPublisher;

int m\_yearOfPublication;

InforBook\* next;

};

#endif // INFORBOOK\_H

#include "InforBook.h"

InforBook::InforBook()

{

m\_name = "";

m\_authors = "";

m\_nameOfPublisher = "";

m\_yearOfPublication = 0;

this->next = nullptr;

}

InforBook::InforBook(string name, string authors, string nameOfPublisher, int yearOfpubication)

{

m\_name = name;

m\_authors = authors;

m\_nameOfPublisher = nameOfPublisher;

m\_yearOfPublication = yearOfpubication;

this->next = nullptr;

}

InforBook::~InforBook()

{

//dtor

}

#ifndef BOOKSOFLIBRARY\_H

#define BOOKSOFLIBRARY\_H

#include"InforBook.h"

class BooksOfLibrary

{

public:

BooksOfLibrary();

virtual ~BooksOfLibrary();

void insertTail(InforBook\*);

void input1Book();

void numBookOfAuthor(string );

void booksOfOneYearAndOnePublisher(int, string);

void output();

protected:

private:

InforBook\* head;

InforBook\* tail;

};

#endif // BOOKSOFLIBRARY\_H

#include "BooksOfLibrary.h"

#include<iostream>

#include<string>

using namespace std;

BooksOfLibrary::BooksOfLibrary()

{

this->head = nullptr;

this->tail = nullptr;

}

BooksOfLibrary::~BooksOfLibrary()

{

//dtor

}

void BooksOfLibrary::insertTail(InforBook\* val)

{

if(this->head == nullptr)

{

this->head = this->tail = val;

}

else

{

this->tail->setNext(val);

this->tail = val;

}

}

void BooksOfLibrary::input1Book()

{

string name; cin.ignore();

cout << "\nNhap ten cua quyen sach: " ; getline(cin, name);

string authors;

cout << "\nNhap ten cac tac gia cua quyen sach (toi da 5 ten): "; getline(cin, authors);

string nameOfPublisher;

cout << "\nNhap ten nha xuat ban cua quyen sach: "; getline(cin, nameOfPublisher);

int yearOfPublication;

cout << "\nNhap nam xuat ban cua quyen sach: "; cin >> yearOfPublication;

cin.ignore();

InforBook\* b = new InforBook(name, authors, nameOfPublisher, yearOfPublication);

insertTail(b);

}

void BooksOfLibrary::numBookOfAuthor(string nameOfPublisher)

{

int cnt = 0;

InforBook \*p = this->head;

while(p != nullptr)

{

if(p->getAuthors().find(nameOfPublisher) != string::npos)

{

cnt++;

}

p = p->getNext();

}

cout <<"So luong sach cua tac gia " <<nameOfPublisher<< " la: " << cnt << endl;

}

void BooksOfLibrary::booksOfOneYearAndOnePublisher(int yearOfPublication, string nameOfPublisher)

{

cout << "\nTen cac quyen sach can tim: \n";

InforBook \*p = this->head;

while(p != nullptr)

{

if(p->getYearOfPublication() == yearOfPublication && p->getNameOfPublisher() == nameOfPublisher)

{

cout << p->getName() << endl;

}

p = p->getNext();

}

}

void BooksOfLibrary::output()

{

InforBook \*p = this->head;

while(p != nullptr)

{

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

cout << "\nTen sach: " << p->getName();

cout << "\nTen cac tac gia: " << p->getAuthors();

cout << "\nTen Nha Xuat Ban: " << p->getNameOfPublisher();

cout << "\nNam xuat ban: " << p->getYearOfPublication();

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

p = p->getNext();

}

}

#include <iostream>

#include "BooksOfLibrary.h"

using namespace std;

int main()

{

BooksOfLibrary \*l = new BooksOfLibrary();

int choice;

while(1)

{

system("cls");

cout << "\n\n\t\t========= Menu =========";

cout << "\n\t1. Them thong tin sach";

cout << "\n\t2. Xuat thong tin sach";

cout << "\n\t3. Tim so luong sach cua 1 tac gia";

cout << "\n\t4. Tim sach theo nam va nha xuat ban phat hanh";

cout << "\n\t0. Thoat";

cout << "\n\n\t\t========= End ==========";

cout << "\nNhap lua chon: "; cin >> choice;

if(choice < 0 || choice > 4)

{

cout << "\nLua chon khong hop le. Xin kiem tra lai !";

system("pause");

}

else if(choice == 1)

{

cout << "\nThem thong tin sach: ";

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

l->input1Book();

}

else if(choice == 2)

{

cout << "\nThong tin cac sach trong thu vien: ";

l->output();

system("pause");

}

else if(choice == 3)

{

string author; cin.ignore();

cout << "Nhap ten tac gia cua sach muon xem: "; getline(cin, author);

l->numBookOfAuthor(author);

system("pause");

}

else if(choice == 4)

{

int year;

cout << "\nNhap nam xuat ban: "; cin >> year;

string name;

cin.ignore();

cout << "\nNhap nha xuat ban: "; getline (cin,name);

l->booksOfOneYearAndOnePublisher(year, name);

system("pause");

}

else

{

break;

}

}

return 0;

}