

Lab 7: Jeremy Howell, Nhi Pham

Publication.h

```
#ifndef PUBLICATION_PUBLICATION_H
#define PUBLICATION_PUBLICATION_H
#include <iostream>
#include <string>
using namespace std;

class Publication {
public:
    //Declare two functions getData and putData
    Publication();
    Publication(string ti, float pri);
    void getData();
    void putData() const;
private:
    //Declare title and price
    std::string title;
    float price;
};
#endif //PUBLICATION_PUBLICATION_H
```

Publication.cpp

```
#include "Publication.h"
#include <iostream>

using namespace std;
Publication::Publication()
{
    title = "N/A";
    price = 0;
};
Publication::Publication(string ti, float pri) {
    title = ti;
    price = pri;
}
//Define the function getData to get title and price
void Publication::getData() {
    cout << "Enter the title: " << endl;
    getline(cin >> ws, title);
    cout << "Enter the price: " << endl;
    cin >> price;
};
//Define the function putData to get title and price
void Publication::putData() const {
    cout << "The title is: " << title << endl;
    cout << "The price is: $" << price << endl;
}
```

Sales.h

```
#ifndef PUBLICATION_SALE_H
#define PUBLICATION_SALE_H
#include <iostream>
using namespace std;

class Sale {
public:
    Sale();
    //Declare functions getData and putData
    void getData();
    void putData();
private:
    //Declare an array to store sales for three months
    float saleArray[3];
};
#endif //PUBLICATION_SALE_H
```

Sales.cpp

```
#include "Sales.h"
#include <iostream>
using namespace std;

Sale::Sale() {
    for (int i = 0; i < 3; i++) {
        saleArray[i] = 0;
    }
}

void Sale::getData() {
    for (int i = 0; i < 3; i++) {
        cout << "Enter sale amount: " << endl;
        cin >> saleArray[i];
    }
}

void Sale::putData() {
    cout << "Three months of sales are: " << endl;
    for (int i = 0; i < 3; i++) {
        cout << '$' << saleArray[i] << endl;
    }
}
```

Book.h

```
//Class Book is created from classes Publication and Sales

#ifndef PUBLICATION_BOOK_H
```

```

#define PUBLICATION_BOOK_H
#include "Publication.h"
#include "Sales.h"
class Book: public Publication, public Sale {
private:
    int pageCount;
public:
    Book();
    void getData();
    void putData();
};
#endif //PUBLICATION_BOOK_H

```

Book.cpp

```

#include "Publication.h"
#include "Sales.h"
#include "Book.h"

Book::Book() {
    Publication();
    Sale();
    pageCount = 0;
}

void Book::getData() {
    Publication::getData();
    Sale::getData();
    cout << "Enter page count of the book: " << endl;
    cin >> pageCount;
}

void Book::putData() {
    Publication::putData();
    Sale::putData();
    cout << "Page count of the book is: " << pageCount << endl;
    cout << endl;
}

```

Digital.h

```

#ifndef PUBLICATION_DIGITAL_H
#define PUBLICATION_DIGITAL_H
#include "Publication.h"
#include "Sales.h"

class Digital : public Publication, public Sale {
private:
    int storageCap;
public:
    Digital();
    void getData();
    void putData();
}

```

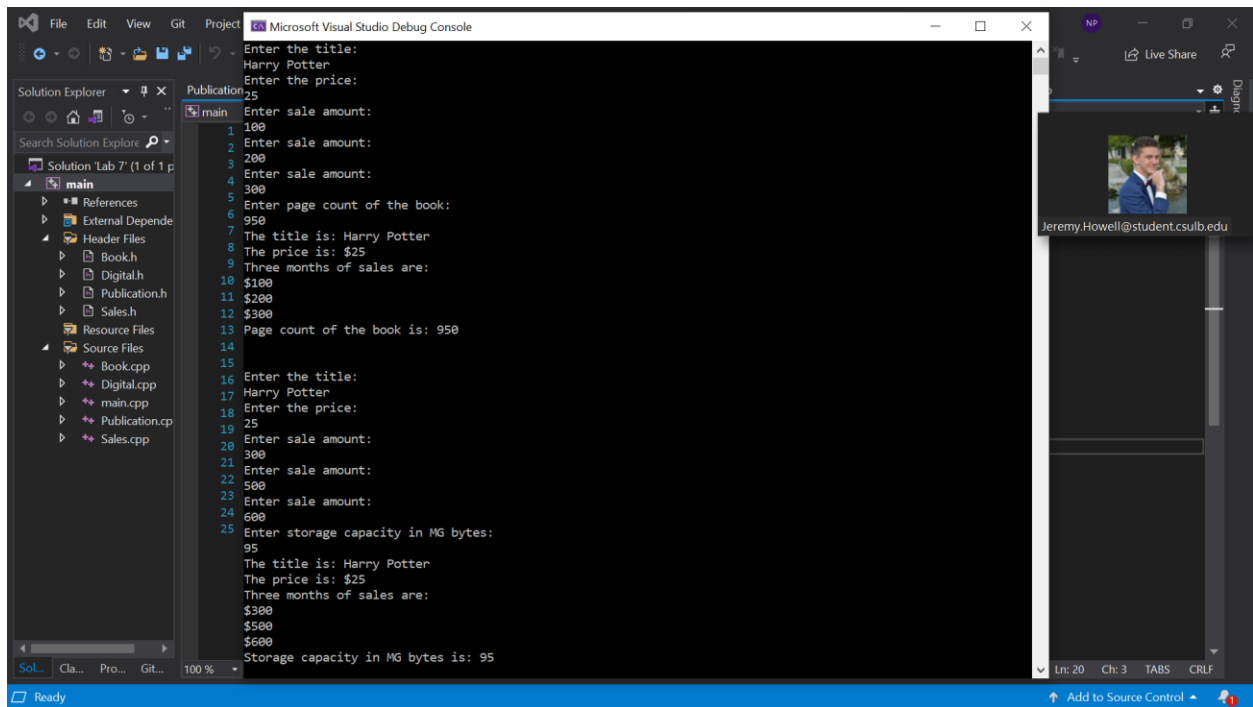
```
};  
#endif //PUBLICATION_DIGITAL_H
```

Digital.cpp

```
#include "Digital.h"  
#include "Publication.h"  
#include "Sales.h"  
#include <iostream>  
  
Digital::Digital() {  
    Publication();  
    Sale();  
    storageCap = 0;  
}  
  
void Digital::getData() {  
    Publication::getData();  
    Sale::getData();  
    cout << "Enter storage capacity in MG bytes: " << endl;  
    cin >> storageCap;  
}  
  
void Digital::putData() {  
    Publication::putData();  
    Sale::putData();  
    cout << "Storage capacity in MG bytes is: " << storageCap << endl;  
    cout << endl;  
}
```

Main.cpp

```
#include "Sales.h"  
#include "Publication.h"  
#include "Book.h"  
#include "Digital.h"  
#include <iostream>  
#include <string>  
  
using namespace std;  
  
int main() {  
    Book book;  
    Digital digital;  
    book.getData();  
    book.putData();  
    cout << endl;  
  
    digital.getData();  
    digital.putData();  
    cout << endl;  
    return 0;  
}
```



Demonstrated at 11:26 am on 9/30/2021