

Programming Project / C++ – Book Store Management & Interaction System –

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I. Task Description

Student 1 is responsible for managing the book store:

- Adding, deleting, modifying books (price, quantity)
- Viewing orders

Student 2 is responsible for interacting with the store:

- Adding, modifying, deleting books in/from a shopping cart
- Creating an order when purchasing the cart

II. Data Structures Used by the Team

The following classes will be used:

- Product: string barcode, string bookName, string author, int quantity, double price
- Date: int day, int month, int year
- Order: Product[] products, Date date

III. File Structure

The following files will be used:

stock.txt

A file where details about the stock products will be stored in the form: <number of products>

<product1 barcode> <product1 name> <product1 author> <product1 quantity> <product1 price> <product2 barcode> <product2 name> <product2 author> <product2 quantity> <product2 price> ...

orders.txt

A file where details about placed orders will be stored:

<order1 date>
<order1 product barcode list>
<order2 date>
<order2 product barcode list>
...

cart.txt

A file where Student 2 will store the shopping cart details: <product1 barcode> <product1 quantity>
<product2 barcode> <product2 quantity>
...

IV. Interacting with Executables

Application 1 will offer the following options:

./bookstore_admin.exe view_stock_products

To view all available products in stock

./bookstore_admin.exe add_product <barcode> <name>
<quantity> <price> To add a product to stock

./bookstore_admin.exe delete_product <barcode>
To delete a product from stock

./bookstore_admin.exe modify_product <price | quantity> <barcode>
<new_value> To modify either the quantity or price of a product

./bookstore_admin.exe view_orders
To view placed orders

Application 2 will offer the following options:

./bookstore_cart.exe view_cart

To view the shopping cart

./bookstore_cart.exe add_product <barcode> <quantity>
To add a product to the shopping cart

./bookstore_cart.exe modify_product <barcode> <new_quantity> To modify the quantity of an existing product in the cart

./bookstore_cart.exe delete_product <barcode>
To remove a product from the cart

`./bookstore_cart.exe purchase`

To place an order based on the shopping cart