

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

I. Task Description

Andrei Herlo is responsible for managing the store:

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

Molete Denis is responsible for interacting with the store:

- Adding, modifying, deleting products 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 name, 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:

- **stoc.txt**
A file where details about the stock products will be stored in the form:
|number of products|
|product1 barcode| |product1 name| |product1 quantity| |product1 price|
|product2 barcode| |product2 name| |product2 quantity| |product2 price|
...
- **comenzi.txt**
A file where details about placed orders will be stored:
|order1 date|
|order1 product barcode list|
|order2 date|
|order2 product barcode list|
...
- **cos_cumparaturi.txt**
A file where Molete Denis 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:

- `./app_1.exe view_stock_products`
To view all available products in stock
- `./app_1.exe add_product <barcode> <name> <quantity> <price>`
To add a product to stock
- `./app_1.exe delete_product <barcode>`
To delete a product from stock
- `./app_1.exe modify_product <price | quantity> <barcode> <new_value>`
To modify either the quantity or price of a product
- `./app_1.exe view_orders`
To view placed orders

Application 2 will offer the following options:

- `./app_2.exe view_cart`
To view the shopping cart
- `./app_2.exe add_product <barcode> <quantity>`
To add a product to the shopping cart
- `./app_2.exe modify_product <barcode> <new_quantity>`
To modify the quantity of an existing product in the cart
- `./app_2.exe delete_product <barcode>`
To remove a product from the cart
- `./app_2.exe purchase`
To place an order based on the shopping cart