

# **Programming Project / C++ - Store Management & Interaction System -**

Student 1: David Stefan Muntean

Student 2: Eduard Ionut-Marian Nebunu

# I. Task Description

Student 1 is responsible for managing the store:

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

Student 2 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

- Store: vector stock, vector orders

- Cart: vector cart\_products

- Product:

  - std::string barcode;

  - std::string name;

  - int quantity;

  - double price;

- Order:

  - std::vector products;

  - Date order\_date;

### III. File Structure

Stock.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>

Orders.txt

A file where details about placed orders will be stored:

<order1 date>

<order1 product barcode list>

<order2 date>

<order2 product barcode list>

Shopping\_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:

```
./app_1.exe view_stock_products
```

```
./app_1.exe add_product <barcode> <name> <quantity> <price>
```

```
./app_1.exe delete_product <barcode>
```

```
./app_1.exe modify_product <price | quantity> <barcode> <new_value>
```

```
./app_1.exe view_orders
```

Application 2 will offer the following options:

```
./app_2.exe view_cart
```

```
./app_2.exe add_product <barcode> <quantity>
```

```
./app_2.exe modify_product <barcode> <new_quantity>
```

```
./app_2.exe delete_product <barcode>
```

```
./app_2.exe purchase
```