

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

### **Students:**

Store Manager (App 1): Horia Bociat

Cart & Purchase (App 2): Alex Cîra

## **I. Task Description**

### **Student 1 (Store Manager):**

1. Adding products to stock
2. Deleting products from stock
3. Modifying product price or quantity
4. Viewing placed orders

### **Student 2 (Cart & Purchase):**

1. Adding products to shopping cart
2. Modifying quantities in the cart
3. Deleting products from the cart
4. Creating an order by purchasing the cart

## **II. Data Structures 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

#### 1. stoc.txt

**Stores stock product details:**

<number of products>

<barcode> <name> <quantity> <price>

...

#### 2. comenzi.txt

**Stores placed orders:**

<order1 date (dd mm yyyy)>

<barcode1> <barcode2> ...

<order2 date>

<barcode1> <barcode2> ...

#### 3. cos\_cumparaturi.txt

**Stores shopping cart contents:**

<barcode> <quantity>

<barcode> <quantity>

...

### IV. Executable Usage

#### Application 1 (Store Management)

*app1.exe view\_stock\_products*

***View all products in stock***

*app1.exe add\_product <barcode> <name> <quantity> <price>*

***Add a new product***

*app1.exe delete\_product <barcode>*

***Delete a product by barcode***

*app1.exe modify\_product <price|quantity> <barcode> <new\_value>*

**Modify price or quantity**

*app1.exe view\_orders*

**View all orders**

**Application 2 (Shopping Cart & Purchase)**

*app2.exe view\_cart*

**View cart contents**

*app2.exe add\_product <barcode> <quantity>*

**Add item to cart**

*app2.exe modify\_product <barcode> <new\_quantity>*

**Change cart quantity**

*app2.exe delete\_product <barcode>*

**Remove item from cart**

*app2.exe purchase*

**Place an order and clear the cart**