Programming Project / C++ - Vehicle Buying/Selling System -

Student 1: Razvan Goidaci
Student 2: Dragos Bondar

I. Task Description

Student 1 (Razvan Goidaci) is responsible for managing the vehicle inventory:

- Adding, deleting, modifying vehicles (e.g., list price, availability status)

- Viewing submitted purchase inquiries

Student 2 (Dragos Bondar) is responsible for interacting with the vehicle listings:

- Adding, modifying (e.g., their offered price for a vehicle), deleting vehicles in/from a personal wishlist

- Creating a purchase inquiry when ready to proceed with vehicles in the wishlist

II. Data Structures Used by the Team

The following classes will be used:

- `Vehicle`: `string vin` (Vehicle Identification Number), `string make`, `string model`, `int year`, `double listPrice`, `bool isAvailable` (e.g., true for available, false for sold)

- `Date`: `int day`, `int month`, `int year`

- `PurchaseInquiry`: `string[] inquiredVehicleVINs`, `Date inquiryDate`

III. File Structure

The following files will be used:

inventory.txt

A file where details about the stock vehicles will be stored in the form:

```
<number of vehicles>
<vehicle1_vin> <vehicle1_make> <vehicle1_model> <vehicle1_year> <vehicle1_listPrice> <ve
<vehicle2_vin> <vehicle2_make> <vehicle2_model> <vehicle2_year> <vehicle2_listPrice> <ve
...
```

inquiries.txt

A file where details about placed purchase inquiries will be stored:

```
<inquiry1_date (e.g., DD MM YYYY)>
<inquiry1_vehicle_vin_list (e.g., VIN1 VIN2 VIN3)>
<inquiry2_date (e.g., DD MM YYYY)>
<inquiry2_vehicle_vin_list (e.g., VIN4 VIN5)>
```

wishlist.txt

A file where Student 2 will store their wishlist details:

```
<vehicle1_vin> <vehicle1_offered_price>
<vehicle2_vin> <vehicle2_offered_price>
...
```

IV. Interacting with Executables

Application 1 (Inventory Management - Razvan Goidaci) will offer the following options:

- `./app_1.exe view_inventory`
  To view all available vehicles in the inventory

- `./app_1.exe add_vehicle <vin> <make> <model> <year> <listPrice> <isAvailable (1/0)>`
  To add a vehicle to the inventory

- `./app_1.exe delete_vehicle <vin>`
  To delete a vehicle from the inventory

- `./app_1.exe modify_vehicle <listPrice | isAvailable> <vin> <new_value>`
  To modify either the list price or availability status of a vehicle

- `./app_1.exe view_inquiries`
  To view placed purchase inquiries

Application 2 (Buyer Interaction - Dragos Bondar) will offer the following options:

- `./app_2.exe view_wishlist`
  To view the current wishlist

- `./app_2.exe add_to_wishlist <vin> <offered_price>`
  To add a vehicle to the wishlist with an offered price

- `./app_2.exe modify_offer <vin> <new_offered_price>`
  To modify the offered price for an existing vehicle in the wishlist

- `./app_2.exe remove_from_wishlist <vin>`
  To remove a vehicle from the wishlist

- `./app_2.exe submit_inquiry`
  To place a purchase inquiry based on the current wishlist