Prototype of E-Commerce Website for Selling Appliances (in C++)
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1. Abstract

In this project, we are implementing a prototype of an e-commerce site for selling household appliances, such as dishwashers, laundry machines, and clothes dryers. Each appliance contains the following fields: 1. ID, 2. Type, 3. Manufacturer, 4. Price, and 5. Pictures. A smart pointer class called "AppliancePtr" is implemented that dynamically loads instances of class Appliance when they are needed and stores them back on file when done with an appliance. This is a test version of the program that contains just 10 appliances denoted by unique IDs 0 through 9. Each of the ten instances is stored in a separate file. At any point in time, only three of the appliance instances are stored in memory; the remaining instances exist only in the ten files. Each appliance pointer handles exactly one appliance.

2. Usage Manual

1) This project was done using Windows OS. Open the project in CodeBlocks/ CLion / MS VS C++ IDE.

2) Build and Run the project.

3) Give a command from the list of commands.

4) Enter ID to edit the appliance price. Then, select 'p' to update the price. After updating the price, select 's' (save) to save the updated price to the file, else it won't be updated.
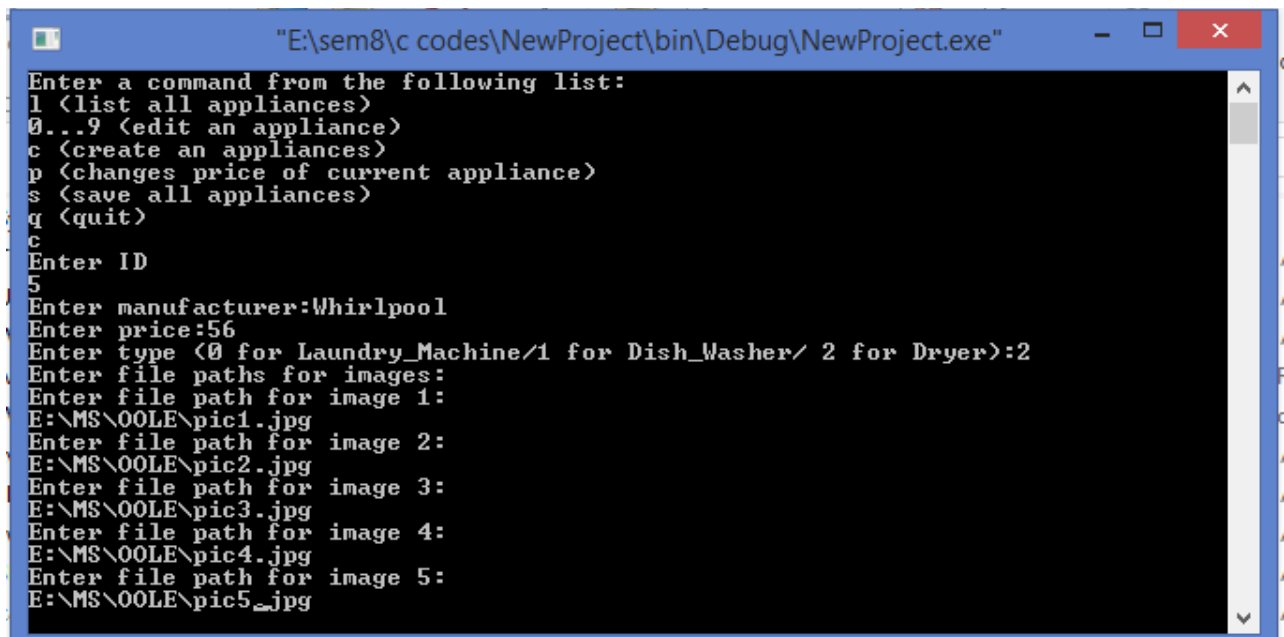
   E.g. (c -> '4' -> p -> s)

Note:
- If you don't select 's' after updating the price, the updated changes won't be reflected in the respective file, as per the specifications of the project.

3. Sample text file:

```
5
Whirlpool
7657
Dryer
E:\MS\OOLE\pic1.jpg
E:\MS\OOLE\pic2.jpg
E:\MS\OOLE\pic3.jpg
E:\MS\OOLE\pic4.jpg
E:\MS\OOLE\pic5.jpg
```
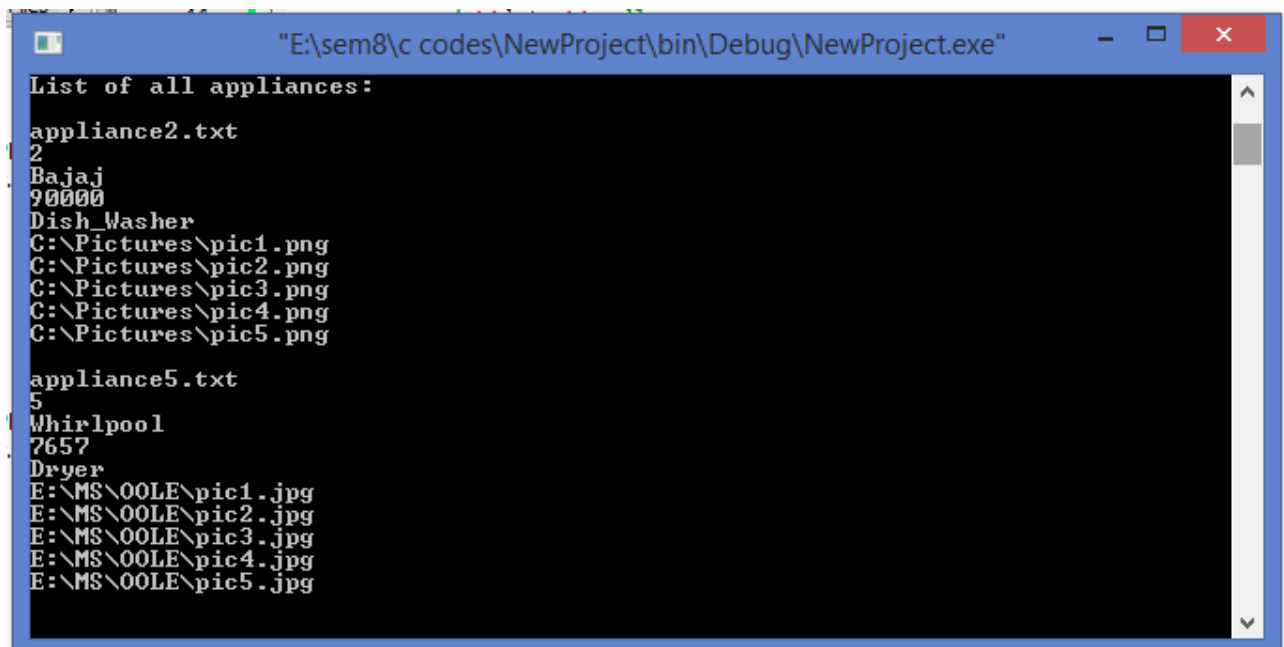
4. Output:

1. Creating an appliance:


```
"E:\sem8\c codes\NewProject\bin\Debug\NewProject.exe"

Enter a command from the following list:
l (list all appliances)
0...9 (edit an appliance)
c (create an appliances)
p (changes price of current appliance)
s (save all appliances)
q (quit)
c
Enter ID
5
Enter manufacturer:Whirlpool
Enter price:56
Enter type (0 for Laundry_Machine/1 for Dish_Washer/ 2 for Dryer):2
Enter file paths for images:
Enter file path for image 1:
E:\MS\OOLE\pic1.jpg
Enter file path for image 2:
E:\MS\OOLE\pic2.jpg
Enter file path for image 3:
E:\MS\OOLE\pic3.jpg
Enter file path for image 4:
E:\MS\OOLE\pic4.jpg
Enter file path for image 5:
E:\MS\OOLE\pic5.jpg
```
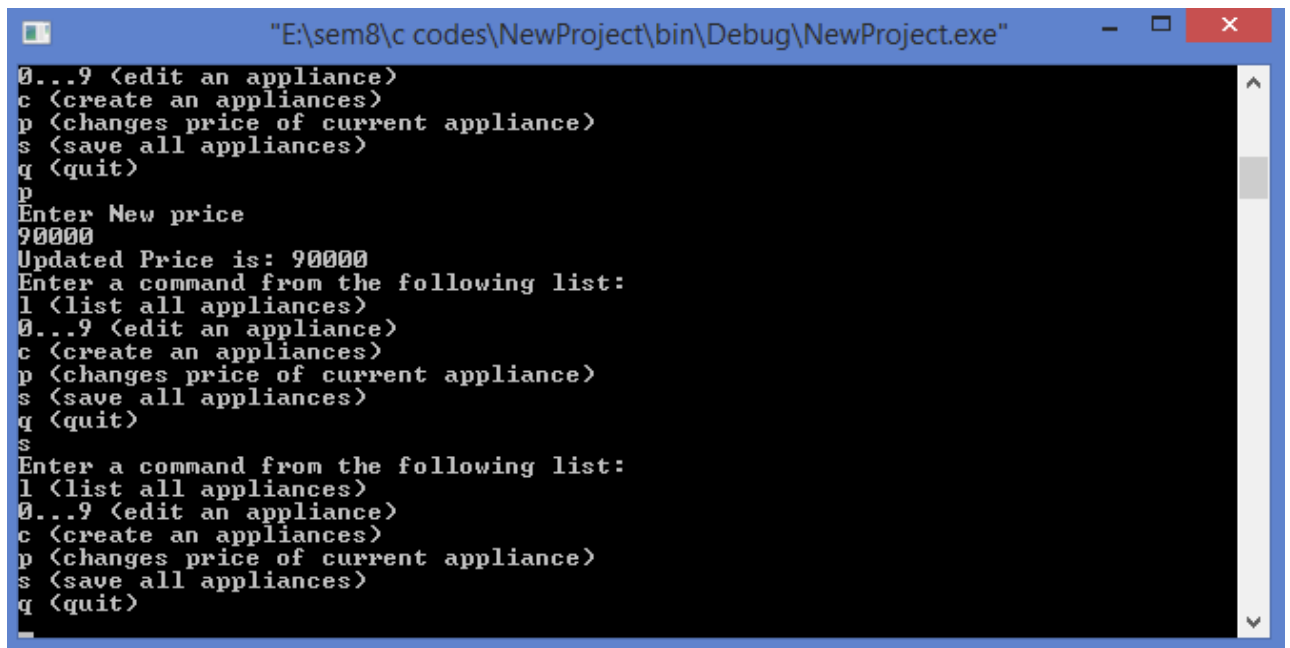
2. Listing appliances:


```
"E:\sem8\c codes\NewProject\bin\Debug\NewProject.exe"

List of all appliances:

appliance2.txt
2
Bajaj
90000
Dish_Washer
C:\Pictures\pic1.png
C:\Pictures\pic2.png
C:\Pictures\pic3.png
C:\Pictures\pic4.png
C:\Pictures\pic5.png

appliance5.txt
5
Whirlpool
7657
Dryer
E:\MS\OOLE\pic1.jpg
E:\MS\OOLE\pic2.jpg
E:\MS\OOLE\pic3.jpg
E:\MS\OOLE\pic4.jpg
E:\MS\OOLE\pic5.jpg
```

3. Editing the price of an appliance:

```
"E:\sem8\c codes\NewProject\bin\Debug\NewProject.exe"

0...9 (edit an appliance)
c (create an appliances)
p (changes price of current appliance)
s (save all appliances)
q (quit)
p
Enter New price
90000
Updated Price is: 90000
Enter a command from the following list:
l (list all appliances)
0...9 (edit an appliance)
c (create an appliances)
p (changes price of current appliance)
s (save all appliances)
q (quit)
s
Enter a command from the following list:
l (list all appliances)
0...9 (edit an appliance)
c (create an appliances)
p (changes price of current appliance)
s (save all appliances)
q (quit)
```