

Lab Report 06

Problem

Create a program that outputs the how crisp and delicious a type of apple is.

Proposed Solution

Create two classes, the first one used to store the types of apples, the weight of the apples, and the price per apple. The first class also sets a default value of a crisp and delicious apple. The second class will be where the user inputs and taken and where the first class will output thing

Tests and Results

```
<terminated> Lab06 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Oct 25, 2022, 7:38:42 PM ~ 7:39:08 PM) [pid: 22920]
Welcome to Apple Tester!!!
Creating a first Apple!
Default values of the first apple object:
Type: Gala
Weight: 0.5 kg
Price: $0.88

Creating the second apple object!
Enter the type of the second apple object:
Red Delicious
Enter the weight of the second apple object:
0.45
Enter the price of the second apple object:
1.23
Values of the second apple object:
Type: Red Delicious
Weight: 0.45 kg
Price: $1.23

Creating the third apple object!
Enter the type of the third apple object:
iPad
Invalid value for type!
Enter the weight of the third apple object:
-145
Invalid value for weight!
Enter the price of the third apple object:
-12.50
Invalid value for price!
Printing the third apple's value which should not have changes from the default values
Retrieving the third apple object's type: Gala
Retrieving the third apple object's weight: 0.5 kg
Retrieving the third apple object's price: $0.88

<terminated> Lab06 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Oct 25, 2022, 7:44:28 PM ~ 7:45:07 PM) [pid: 11640]
Welcome to Apple Tester!!!
Creating a first Apple!
Default values of the first apple object:
Type: Gala
Weight: 0.5 kg
Price: $0.88

Creating the second apple object!
Enter the type of the second apple object:
Granny Smith
Enter the weight of the second apple object:
0.8
Enter the price of the second apple object:
1.11
Values of the second apple object:
Type: Granny Smith
Weight: 0.8 kg
Price: $1.11

Creating the third apple object!
Enter the type of the third apple object:
Gala
Enter the weight of the third apple object:
0.9
Enter the price of the third apple object:
1.24
Printing the third apple's value which should not have changes from the default values
Retrieving the third apple object's type: Gala
Retrieving the third apple object's weight: 0.9 kg
Retrieving the third apple object's price: $1.24
```

```
<terminated> Lab06 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Oct 25, 2022, 7:47:06 PM ~ 7:47:43 PM) [pid: 26712]
Welcome to Apple Tester!!!
Creating a first Apple!
Default values of the first apple object:
Type: Gala
Weight: 0.5 kg
Price: $0.88

Creating the second apple object!
Enter the type of the second apple object:
Golden Delicious
Invalid value for type!
Enter the weight of the second apple object:
100000.0
Invalid value for weight!
Enter the price of the second apple object:
-2.2
Invalid value for price!
Values of the second apple object:
Type: Gala
Weight: 0.5 kg
Price: $0.88

Creating the third apple object!
Enter the type of the third apple object:
Gala
Enter the weight of the third apple object:
0.14
Enter the price of the third apple object:
40
Printing the third apple's value which should not have changes from the default values
Retrieving the third apple object's type: Gala
Retrieving the third apple object's weight: 0.14 kg
Retrieving the third apple object's price: $0.5
```

Problems Encountered

I noticed the issue only after I turned it in. I realized that the getType is storing the information given and then making the user only use that apple.

Conclusions and Discussion

This lab allowed us to learn how to essentially link two classes and use get and set.

Additional Questions

1. What is the purpose of an accessor?

Accessors return the value of a private variable.

2. What is the purpose of a mutator?.

Mutators reset the value of a private variable.