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Foundations Of Programming: Python

<https://github.com/Taccdimas/IntroToProg-Python-Mod08>

Assignment 08 – Classes

The purpose of this assignment is to create a script using custom classes.

Class pattern:

```
# -- Fields --  
# -- Constructor --  
#      -- Attributes --  
# -- Properties --  
# -- Methods --
```

Steps I took in performing Assignment 08:

1. I watched the module video
2. I read Chapter 8 of the book
3. I read a web article and watched few YouTube videos on the topic
4. I modified a script including the class Product.
5. GitHub Desktop was installed and used to post repository.

Running script:

```
Assignment08-Starter ×
C:\_PythonClass\Assignment08\venv\Scripts\python.exe C:/_Pytho

    Menu of Options
    1) Show current data
    2) Add product
    3) Save Data to File
    4) Exit Program

Which option would you like to perform? [1 to 4] - 1

table, 120
shelf, 110

    Menu of Options
    1) Show current data
    2) Add product
    3) Save Data to File
    4) Exit Program

Which option would you like to perform? [1 to 4] - 2

Input new product: lamp
Input price: 50

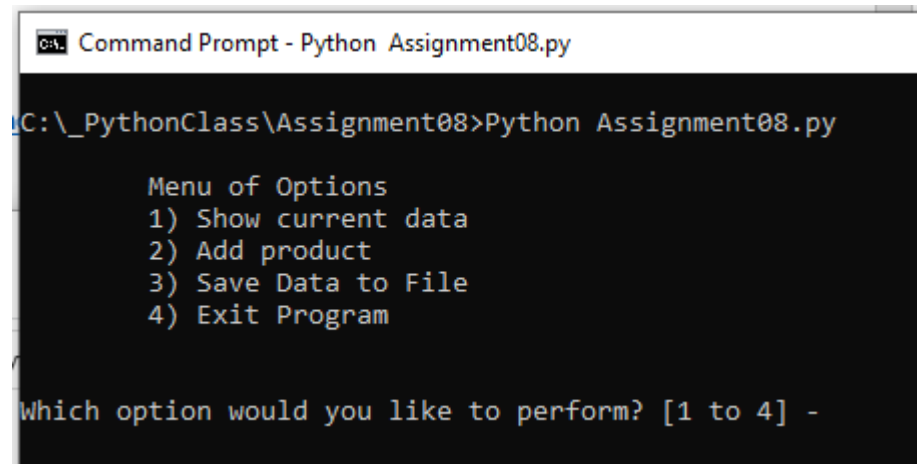
    Menu of Options
    1) Show current data
    2) Add product
    3) Save Data to File
    4) Exit Program

Which option would you like to perform? [1 to 4] - 4

Goodbye!

Process finished with exit code 0
```

Running from CMD:



```
Command Prompt - Python Assignment08.py

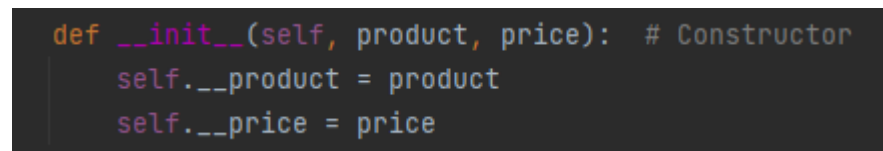
C:\_PythonClass\Assignment08>Python Assignment08.py

    Menu of Options
    1) Show current data
    2) Add product
    3) Save Data to File
    4) Exit Program

Which option would you like to perform? [1 to 4] -
```

Constructor:

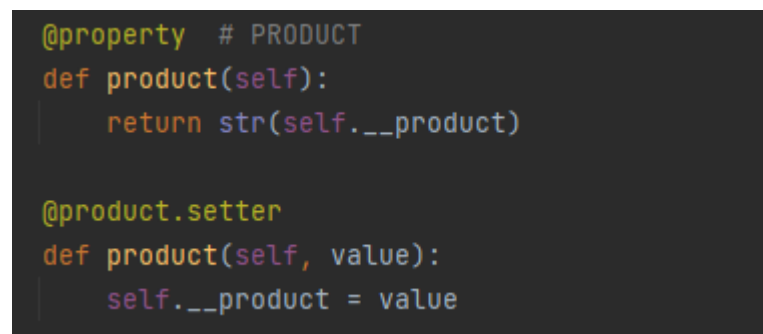
Constructor run automatically every time we create a new object from the class



```
def __init__(self, product, price): # Constructor
    self.__product = product
    self.__price = price
```

Properties:

These are functions to manage data



```
@property # PRODUCT
def product(self):
    return str(self.__product)

@product.setter
def product(self, value):
    self.__product = value
```

Menu for user:

```
while (True):  
    IO.output_menu() # Shows menu  
    choice_str = IO.input_menu_choice() # Get menu option  
    if choice_str == '1': # Show current data  
        IO.show_data(list_of_rows=lstOfProductObjects)  
    if choice_str == '2': # Add new product  
        k = IO.add_product()  
        lstOfProductObjects.append(k)  
    if choice_str == "3": # Save data to file  
        FileProcessor.save_data_to_file(file=strFileName, data=lstOfProductObjects)  
    elif choice_str == '4': # Exit Program  
        print("Goodbye!")  
        break # by exiting loop
```

Summary:

During the work on this assignment, I modified a scrip. It writes data to file and reads data from file. This script also demonstrated basic exceptions. Module8 video and notes were very helpful.