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FDN101
Assignment 08

Introducing to Python Programming

Introduction

Module/Assignment_08 starts to introduce the applications of Object Oriented Programming(OOP). In this module we used classes not only to organize functions/methods, but also to create attributes/properties for objects. The ideas of Static Methods and Private Methods were also discussed.

Topic_1 – * to unpack Tuple

We cannot use tuple directly for assigning arguements. In assignment08 '*' was used to unpack Tuple.

```
    # let user add data to the inventory
    elif strChoice == 'a':
        Vals = IO.usersdata()
        CDOjb = CD(*Vals)
        CD.Ojb_data(CDOjb)

        IO.show_inventory(lstOfCDObjects)
        continue  # start loop back at top.
```

List 1 * to unpack Tuple inputs in Assignment08

Topic_2 – Assignment 8

```
In [169]: runfile('/Users/HAO/_FDNProgramming/Mod_08/Assignment08/CD_Inventory.py',
wdir='/Users/HAO/_FDNProgramming/Mod_08/Assignment08')
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[s] Save Inventory to file
[x] exit


Which operation would you like to perform? [l, a, i, s or x]: a


Enter ID: 111

Enter Title: AAA

Enter Artist: BBB
======= The Current Inventory: =======
ID  CD Title (by: Artist)

111  AAA (by: BBB )
======================================
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[s] Save Inventory to file
[x] exit


Which operation would you like to perform? [l, a, i, s or x]: S

======= The Current Inventory: =======
ID  CD Title (by: Artist)

111  AAA (by: BBB )
======================================

Save this inventory to file? [y/n] y
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[s] Save Inventory to file
[x] exit


Which operation would you like to perform? [l, a, i, s or x]: x
```

Figure 1 screenshot – running assignment8 script in Spyder

```
(base) Liangs-MBP:Assignment08 HAO$ python CD_Inventory.py
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, s or x]: l

WARNING: If you continue, all unsaved data will be lost and the Inventory re-loa
ded from file.
type 'yes' to continue and reload from file. otherwise reload will be canceled
canceling... Inventory data NOT reloaded. Press [ENTER] to continue to the menu.
======= The Current Inventory: =======
ID      CD Title (by: Artist)

111      AAA (by: BBB )
======================================
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, s or x]: a

Enter ID: 222
Enter Title: CCC
Enter Artist: DDD
======= The Current Inventory: =======
ID      CD Title (by: Artist)

111      AAA (by: BBB )
222      CCC (by: DDD )
======================================
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, s or x]: S

======= The Current Inventory: =======
ID      CD Title (by: Artist)

111      AAA (by: BBB )
222      CCC (by: DDD )
======================================
Save this inventory to file? [y/n] Y
Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, s or x]: X

(base) Liangs-MBP:Assignment08 HAO$
```

Figure 2 Screenshot – running assignment8 script in Terminal

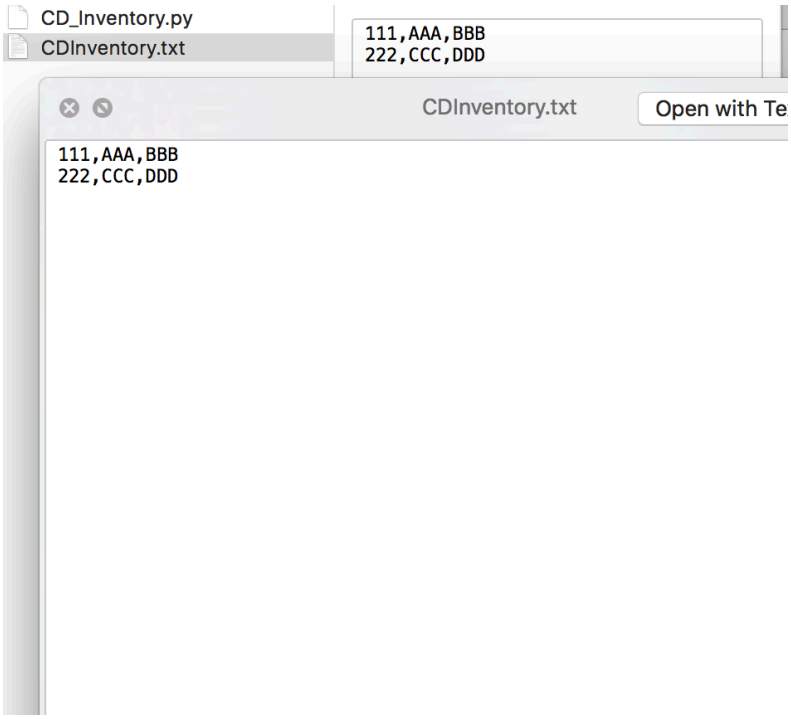

Figure 3 Screenshot – text file after running the code

GitHub

https://github.com/seahao/Assignment_08

Summary

To further use classes and work with OOP, it is important to understand OOP's basic components of Field, Constructor, Properties, and Methods. Also, "self", Decorators, and Type Hints are keys to format good classes.