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IT FDN 110 B Foundations of Programming Python
Assignment 08

Assignment 8

Introduction

This assignment was about creating an CD inventory program that introduces object-oriented programming. The program creates software objects to represent individual CDs. The assignment had a starter code with pseudo code written by someone else. I created the CD class in the code, and then adapted parts of code that I had written for other assignments for other parts of the code.

Learning

For this assignment, I read a book chapter, read a document on my computer and watched a video. The key things I learned about were software objects, classes, constructors, fields, attributes and methods.

The assignment also involved watching a video that teaches about Git and Github.

Some of the steps involved in creating the code included:
- Starting with the starter code
- Re-using code I had written for Assignment07 that were needed in the new program and modifying it to work with the CD objects instead of the list of dictionaries previously used.
- Writing code to create and use the CD class. Before starting on this step, I created a simplified version of the CD program without user input to test different ways of writing the CD class.
- Creating the FileIO class and adding static methods save_inventory and load_inventory.
- Removing the delete functionality that was being carried over in some of the reused Assignment07 code.
- Cleaning up the code to remove TODOs and other unnecessary lines.
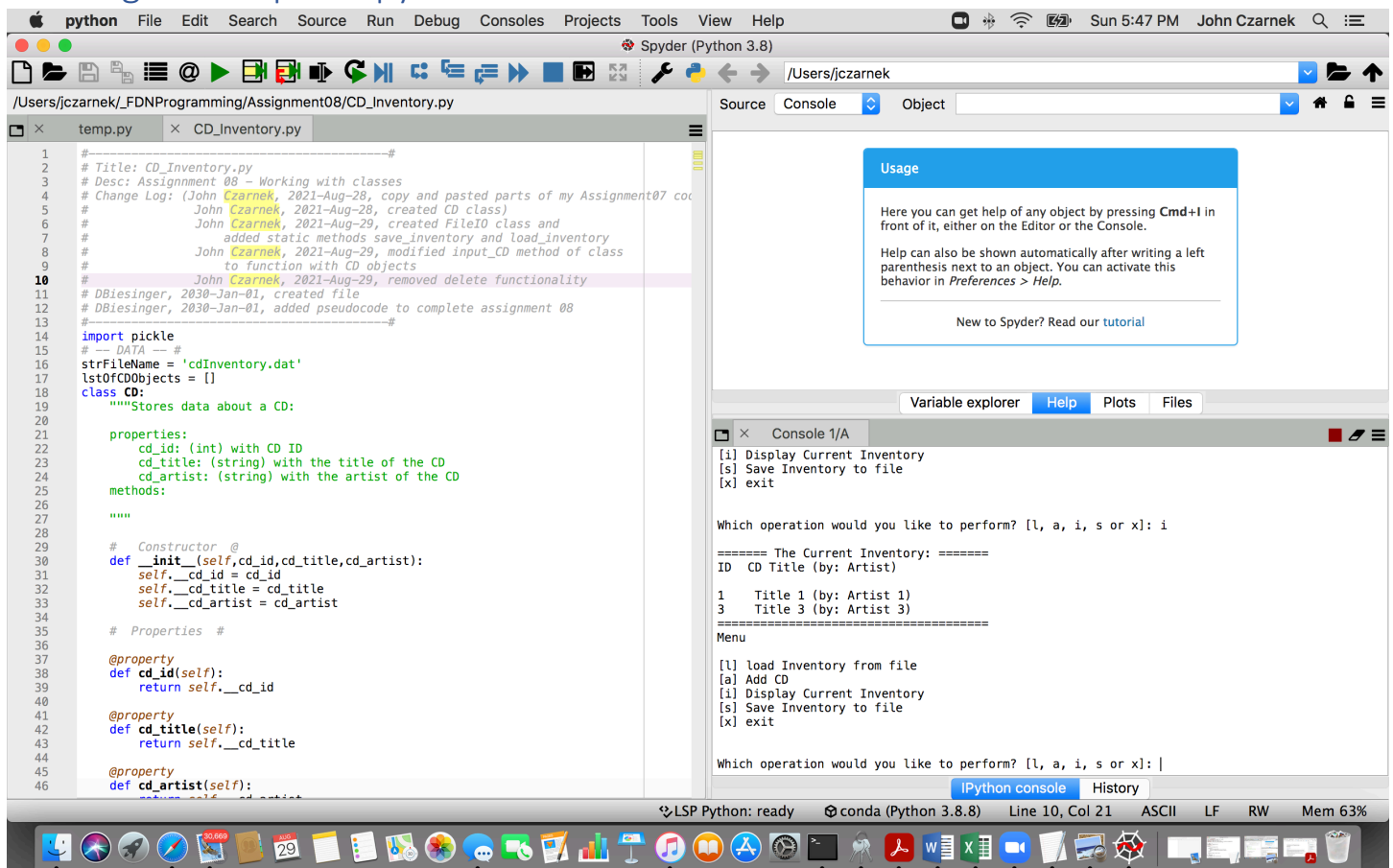
Running the Script in Spyder

Figure 1- Script running in Spyder

Running the Script from a Terminal Window

```
[(base) Susis-MBP:Assignment08 jczarnek$ python3 CDInventory.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]: i

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

1       Title 1 (by: Artist 1)
=======================================
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: 1
What is the CD's title? Title 1
What is the Artist's name? Artist 1
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]: i

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

1       Title 1 (by: Artist 1)
1       Title 1 (by: Artist 1)
=======================================
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) Susis-MBP:Assignment08 jczarnek$ ▌
```

Figure 2 - Script in Terminal Window

Github Repository

Summary

I spent a great deal of time studying OOP and classes this week and still don't really understand it. I was able to get the code to work by trial and error, but I don't really understand if I am doing it correctly. In particular, I don't still don't understand the difference between attributes and properties, especially since my code seems to work fine if I comment out the property lines of the class code.