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IT FDN 110 A Su 22

Assignment 8 (Module 8)

<https://github.com/andrewrmoy/Assignment_08>

CDInventory.py program using Object Oriented Programming to rewrite from scratch

Introduction

For this week’s assignment, we were tasked to again work on the CDInventory program. This time, we were given an empty file only littered with pseudocode. We were asked to follow the prompts and already written property/method hints contained in the file and then combine it with the knowledge learned from the material this week and rewrite the CDInventory program from zero, while adding back some of the things we learned from previous CDInventory assignments like error handling and pickling data.

This week, we went over the basics of object-oriented programming, which is ironic because in our previous weeks of work, we were already working things like functions and classes in our labs and assignments without knowing the finer details. The most notable thing in the material this week that I feel was particularly important was learning what constructors were and when to initialize them in object (class) creation. Also, attributes or (properties), getters and the ways to make them ‘private’ would be important later down the line when working on the assignment itself.

Creating the Program

With all that knowledge and in combination with the basic error handling methods we were exposed to learn last week, I first prioritized the creation of the properties in the CD class. Given the hints of what to refer to them as (\_id, title, and artist), I privatized all three of them under the @property decorator, just making sure to have each of them return themselves. Because there were no hinted methods, I just created a callable addCD method for my main program to call on down the line when getting the three require arguments for our getCD function. Finally, I added the constructor and put my three already present properties in. Next, for the FileIO class, there were no properties hinted at but two methods: saving and loading the inventory. Because of that, I went back into our previous assignment and pulled the pickle function we used to dump the preinitialized list into the text file. For loading the inventory, I did mostly similar work but changed from dump (save) to loading using pickle. With the loaded data, I then added all of it into our ever-present list of CDs and re-added some basic error handling exceptions.

For the input/output (IO) class, that was by far the easiest portion of the assignment, because I could honestly just use all our old assignment code used to create and display the basic menu and intake input choices. Afterwards, the same thing applied to adding the main body of the script which called on all our classes to fit the class functions together properly.

Summary:

Aside from deciphering of the code required for intializing the CD and FileIO class properly and then rereading through all the lab and module material to reinforce my knowledge, the assignment was very straightforward.



