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Foundations of Programming (Python)

Assignment06

Knowledge Document

# Introduction

First I loaded the Assignment06\_Starter.py and renamed it and put it in the new Assignment06 folder and renamed it as CDInventory.py, for the code see Appendix. Three basic parts to this assignment. Part 1, modify the script as required to organize the code, careful not to overlook adding the docstrings, and add my involvement to the header. Part 2, Data Processor and I/O, looks like it’s missing code to add a new row and delete a row. Part 3, File Processor, looks like it’s missing how to write data to the file.

# Part 1, Organizing the code

I need more practice doing this, it took me way too long to get in the groove of what I was doing. After I read through the whole starter file, I began to copy and paste code into a notepad that I knew had to be moved from the main loop into other functions (because of the TODO’s). Then I made a list of these four main sections of code:

1. “ask user for new ID”
2. “add item to the table”
3. “processing deleting data”
4. “processing saving data”

# Part 2, Data Processor, and I/O

I created a new I/O function called (new\_ID) and moved and added the code from 3.3.1 which asks a new user for new ID, CD Title and Artist. I put this into a new dictionary row made up of these inputs as keys and returned the dictionary. This then passed to the new Data Processor function called (add\_new\_ID) and moved and the code from 3.3.1 which asks a user for new ID, CD Title and Artist. I put this into a new dictionary row made up of these inputs as keys (remembered to turn the ID into an integer) and appended it to the inventory list (lstTbl).

I also moved and added the code from 3.5.2 into a new Data Processor function called (delete\_ID) which passes an integer (intIDDel) which is input from the user into the code and returns the inventory list after it checks if the ID is there and deletes the item or returns that it couldn’t find it.

# Part 3, File Processor

The file processor class is basically just reading and writing. The reading function I thought right away was missing a check to see if the file existed or not. I remembered this being a problem on Assignment 05 from Module 05 because then the code would not run in Anaconda (terminal) if the file didn’t exist. So I copied the code from there. Basically an if/else statement to check the file name exists (strFileName) and then print “doesn’t extist.” But doesn’t keep the if statement in the main while loop from proceeding to load the data (whether it exists or not).

For the writing function I moved the code from 3.6.2.1 as instructed. That was pretty straight forward. It was at this point that I realized I was missing docstrings for the functions, so I went back and added that documentation to all of my functions. While it’s easier to read the code without these, I can see why they’re important, specially for someone new reading someone else’s code. I just wish there was a wade to hide them while coding.

# Summary

I really had fun playing with this code because it was the first time that this was not so difficult but yet still challenging because the code was written already. Sometimes frustrating because not the terminology I would have liked to use in some cases, and missing spaces and spelling (like stArtist instead of strArtist) I had to fix. I can definitely see that as I develop my coding abilities, I will be doing this more often, cleaning up code and putting in documentation.

# Appendix

<https://github.com/exterminar/Assignment_06>

# Figures

A screenshot of a computer

Description automatically generated with medium confidence

Figure , Screenshot of my script running in Spyder working on my computer

Text

Description automatically generated

Figure , Screenshot of my script running in Terminal working on my computer