Assignment 06

# Introduction

This document describes my process through Assignment 06 for the Foundations of Programming (Python) course. The assignment involves updating the CD inventory menu list to use functions, classes, and parameters/arguments. One assumption for this program is the user already has a CDInventory.txt file created located in the same folder as the python script.

# Assignment 06 Process

In Spyder, I copied the script that Dirk created containing the script header, pseudocode, and base code. I updated the functions already created, such as writing to the file, and also created some functions, such as adding and deleting inventory. If the user adds a cd, then they will be prompted to enter an ID number, CD title, and an artist, which adds it to the CD Inventory list.

If the user selected to save data to the text file, I looped through each row in the list of dictionaries, only grabbing the values, converting to string when necessary, and writing to the file. I used two functions when the user selects adding to the inventory. In the first function, I prompted the user for the CD info, and used a try{}except{} statement to determine whether the user used a number for the ID. I then returned the ID, Title, and Artist, which will be used in the second function to import into a dictionary, and then append the dictionary to the list of dictionaries.

# Assignment 06 Results

Below are screenshots of the results when running the script through both Spyder and the terminal.Text

Description automatically generated

Figure : Results of the script when run through Spyder

# Graphical user interface, text Description automatically generated

Figure : Results of the script when run through the Terminal

# Summary

In this assignment, I learned about various concepts like functions, classes, and parameters. The assignment went well; at first I was confused because the whole code I added onto from Dirk was a lot to digest and I was uncertain where to even begin. When Laura mentioned during the Friday office hours that it is best to start at line 112 in the script and work on down, that clarified a lot of what was going on. If it’s possible, it might be easier to share advice on the assignment at the end of Wednesday’s class; it’s difficult for students to attend the Friday office hours if they live in CST or on the eastern coast, which is 2+ hours ahead of Washington.

I had a little trouble writing to the file. In a previous assignment, I learned it is best to only open and close the file in the least amount of time, to avoid file corruption. When I was writing to the file, I set the open function as ‘w’ instead of ‘a’ and put this open code right in the **for()** loop, so every time a new row from the table was grabbed, it was continuously overwriting the file. I solved this by putting the open code outside the **for()** loop.

**Note:** formatting of Python code throughout this document is done using [saravjishut](https://saravjishut.org/syntax) syntax highlighter [external reference]