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Foundation of Programming (Python)

Assignment\_06 – Knowledge Document

# Introduction

The task for this assignment was to modify the Assignment06\_Starter.py script to complete the TODO sections, which mainly revolved around replacing lines of code in the body of the script with functions under specific classes. We were instructed to also not overlook the need to define docstrings for the functions that we created. We then also needed to do the standard practice of: (1) Capturing screenshots of the code working in Spyder and Terminal (2) Upload the Assignment to GitHuB. for others to comment on as well as commenting on someone else’s work.

# Steps Followed

## Step 1: Open Assignment06\_starter.py and reviewed the pseudocode.

## Step 2: Started at the lines of the main loop and worked my way down to note the TODO areas

I initially got stuck on just the first task, which was to create functions for the [a] add CD option. What was challenging was splitting the code into: IO function vs Processing Function. I was able to reach out on the discussion boards and Songli was able to point out that assigning a variable to a function actually calls the function, which was very interesting for me to note.

## Step 3: Worked through the other TODOs to add functions.

The Other functions seemed to be straightforward compared to the [a] option. I noted a good number of the functions did not require Args or Returns to be able to function. One of the things I needed to remember to call functions was to follow the format: Class.function() I was getting errors in the beginning when I was trying to call the functions without first adding their class.

## Step 4: Replaced the lines of code in the main body of the doc with their equivalent functions.

## Step 5: Added docustrings to my functions and commented on my code to make it easier for others to follow along.

## Step 6: Capture Code working on Spyder

I noticed that the file would not open unless there was a text file in the same folder called CDInventory.txt.

Text

Description automatically generated

Figure Menu Loaded Upon Opening Program

I debated adding code to the script to create a file upon startup, but I noted that it wasn’t one of the requirements so opted not to pursue that option. I just included a txt file in the Assignment06 folder to accompany my submission.

Text

Description automatically generated

Figure Add CD option

Text

Description automatically generated

Figure Display current inventory

Text

Description automatically generated

Figure Delete Function

A screenshot of a computer

Description automatically generated with medium confidence

Figure Save Inventory to File

Text

Description automatically generated

Figure Exit

## Step 7: Capture Code Working on Terminal

Text

Description automatically generated

Figure Add CD option, note that there were already 2 CDs in the CDInventory.txt from Spyder demo

Text

Description automatically generated

Figure Display option

Text

Description automatically generated

Figure Delete option

Graphical user interface, text, application

Description automatically generated

Figure Save option

Text

Description automatically generated

Figure Exit

## Step 8: Noted erratic behavior of the delete function

I noticed that the delete function would not work after quick, successive executions (ie. Within milliseconds of each others) of the [a] option and then immediately proceeding to delete the same additions It was hard to reproduce the error consistently. I noted that I was not able to produce the same problem (delete function not working with the Assignment06\_starter.py.

## Step 11: Uploaded python script and assignment to Github

[syjuco/Assignment\_06: To fulfill requirements of University of Washington Foundations of Programming (Python) Course Assignment06 (github.com)](https://github.com/syjuco/Assignment_06)

# Summary

The most challenging parts of this assignment for me were trying to get the [a] function to work and erratic behavior of the delete function. I do have a better appreciation now though of the proper organization of the code and how this could save lines of code later on when repeatedly calling a combination of the same functions to create programs.