Deborah C
22-11-20
IT FDN 110 B
Assignment 06

Knowledge Document

GitHub Link

https://github.com/Abracollabra/Assignment_06

Introduction

This week's assignment involved taking a working script modeled after our previous CD Inventory assignments and turning a big chunk of its code into functions. Some functions were already written into the script at the outset, so we had a handful of models to follow. This was also our first weeks writing docstrings for our functions.

Because functions were the stars of the show, other topics, such as global versus local variables, and arguments also played significant roles.

Script Creation Highlights

Actually, the biggest deal in my work on this assignment probably has to be the fact that I printed it out on five pieces of paper, which I highlighted with colored pencils and laid across my desk during a lot of the time I worked it. I'm super visual and being able to reference the whole program at once on the desk while I was figuring things out on the screen was key.

I rearranged my workflow this week to be able to start on the script several days earlier than usual. Having more time throughout the week to figure it out led to somewhat less of a weekend crucible.

This week I made a new work tool. I'm sure there's already a programming phrase for it, but since I don't know that yet, I borrowed a phrase from the construction industry - a punch list. Basically, just a spreadsheet that outlines what's not working with the code and other things that I want to fix or improve. Probably its biggest benefit is that it keeps me from jumping from one repair or improvement task that pops up to the next and instead lets me put all but the most urgent tasks on the punch list.

The assignment requirement checklist I created last week was useful in helping me stay methodical at the end.

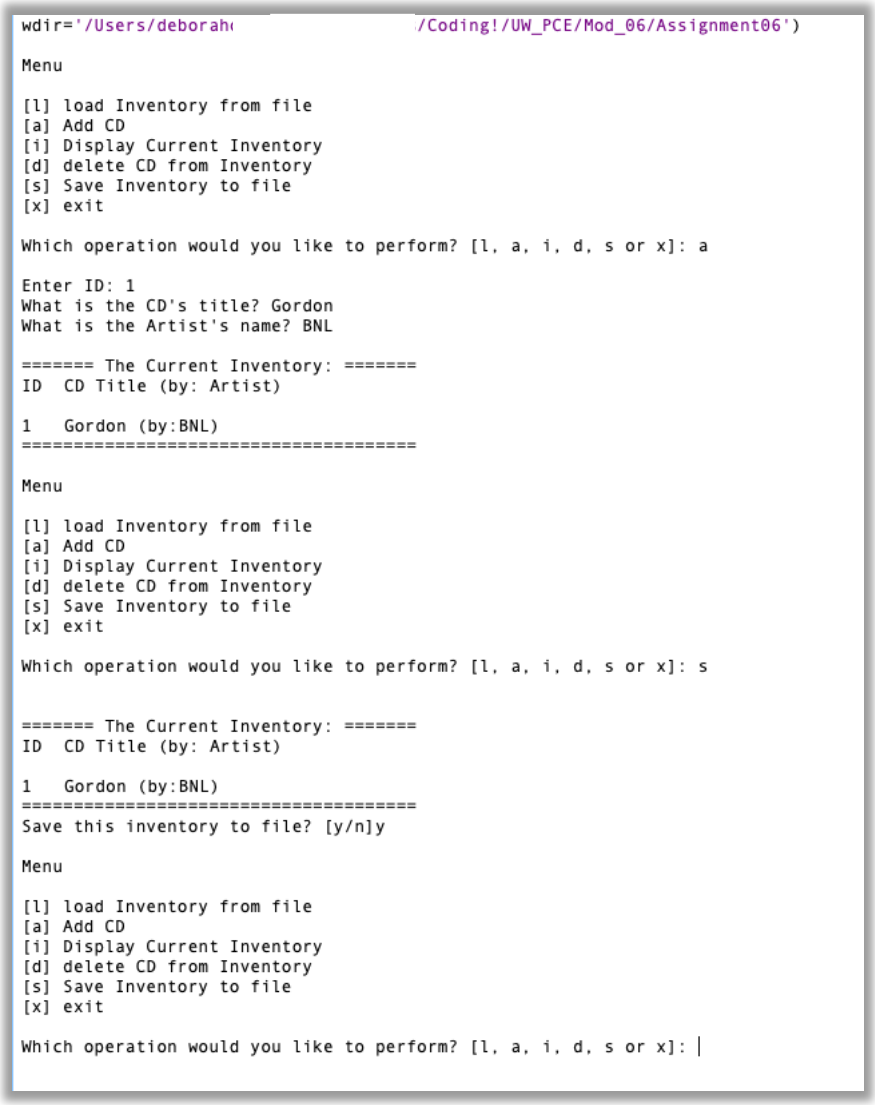

Figure 1 - CDInventory.py Running in Spyder

```
(base) deborah        @Deborahs-MacBook-Pro Assignment06 % python CDInventory.py

Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, d, s or x]: l

WARNING: If you continue, all unsaved data will be lost and the Inventory re-loaded from file.
type 'yes' to continue and reload from file. otherwise reload will be canceled. yes

Loaded.


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

1       Gordon (by:BNL)
======================================

Menu

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

Which operation would you like to perform? [l, a, i, d, s or x]:
```

Figure 2 - CDInventory.py Running in the Terminal Window

Notable Learning

I'd say my biggest learning this week was less about specific Python concepts and more about workflow. Big picture, most of the effort I spent just familiarizing myself with the script and organizing my thoughts around it paid off. And talking to other classmates about how we were each were thinking about various challenges was very good too. I'm a collaborative person by nature, and

It's a relief and somewhat hopeful that as I spend more time problem solving, dealing with mistakes or misunderstandings with a script I'm working on gets easier and faster over time.

This week my focus on error messages shot up. I realized that the sooner I became friends with them, the easier my life will be. And I might as well learn what the error messages for the simple programs we're doing now mean, so I can build up to more complex messages.

And it's encouraging that even when I'm in the thick of it, I generally really like the intricate problem-solving nature of working on code.

Notable Challenges

The biggest challenge this week was the combination of the scope and complexity of the assignment. Though starting in a lot sooner than usual made it notably easier to learn from the process of doing the assignment, it was still like drinking from a firehose.

My earlier-than-usual start on the script also involved making changes to it that I didn't document or mentally track, with the mistaken notion that they were minor and straightforward. And of course, by the time that I got on board with the advice Dirk gave in office hours to make very small changes and test after each one, it was already the best course of action to start over with a fresh starter script. As noted here, I'd already thought frequent testing and small incremental changes *was* my MO, but now I've got religion. =p

As I write this, I'm already working on adjusting to what I can pretty well anticipate will be my dramatically limited participation in my family's Thanksgiving gatherings due to how long my class work takes. But on the bright side, I guess this is a little mini laboratory of figuring out through experience what it takes for me to learn various different types of concepts and procedures.

Summary

It was helpful to start with some elements of a script that were already working and that I knew were well written. And I enjoyed starting to think about the most efficient way to imagine the flow of the program, even if I'm at a baby level with that.

And this week's assignment showed that it's important to move forward carefully when I don't fully know how various elements of the program behave under all conditions.