

Knowledge Document

GitHub Link

https://github.com/Abracollabra/Assignment_05.git

Introduction

For the demonstration script this week, we expanded the functionality of the CD Inventory program from last week, adding the options to load the data from a corresponding text file, and deleting an entry. GitHub was introduced, and we are loading our script and Knowledge Document there for review by other students.

Separation of concerns was introduced, and we got some practice doing that in a lab. We also got an introduction to structured error handling and worked more with dictionaries.

Script Creation Highlights

Continuing to test all the tiny changes in the script as I went, a mode that that kicked into high gear last week, really paid off.

I got practice visually comparing two different scripts, as I analyzed the changes I'd implemented to the starter code against the model scripts from which I borrowed code for the functionality I was trying to add.

In the clinch, talking through my process out loud actually helped me to stay organized and focused on a logical sequence of tasks. My silly checklist for the assignment requirements was also useful.

```
In [29]: runfile('/Users/robertmcclellan/Documents/Coding!/UW_PCE/Mod_05/Assignment05/CDInventory.py', wdir='/Users/robertmcclellan/Documents/Coding!/UW_PCE/Mod_05/Assignment05')
```

The Magic CD Inventory

```
[l] Load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] Delete CD from Inventory
[s] Save Inventory to file
[x] eXit
```

l, a, i, d, s or x: a

```
Enter an ID: 1
Enter the CD's Title: The Live Album
Enter the Artist's Name: Rockstars
```

```
[l] Load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] Delete CD from Inventory
[s] Save Inventory to file
[x] eXit
```

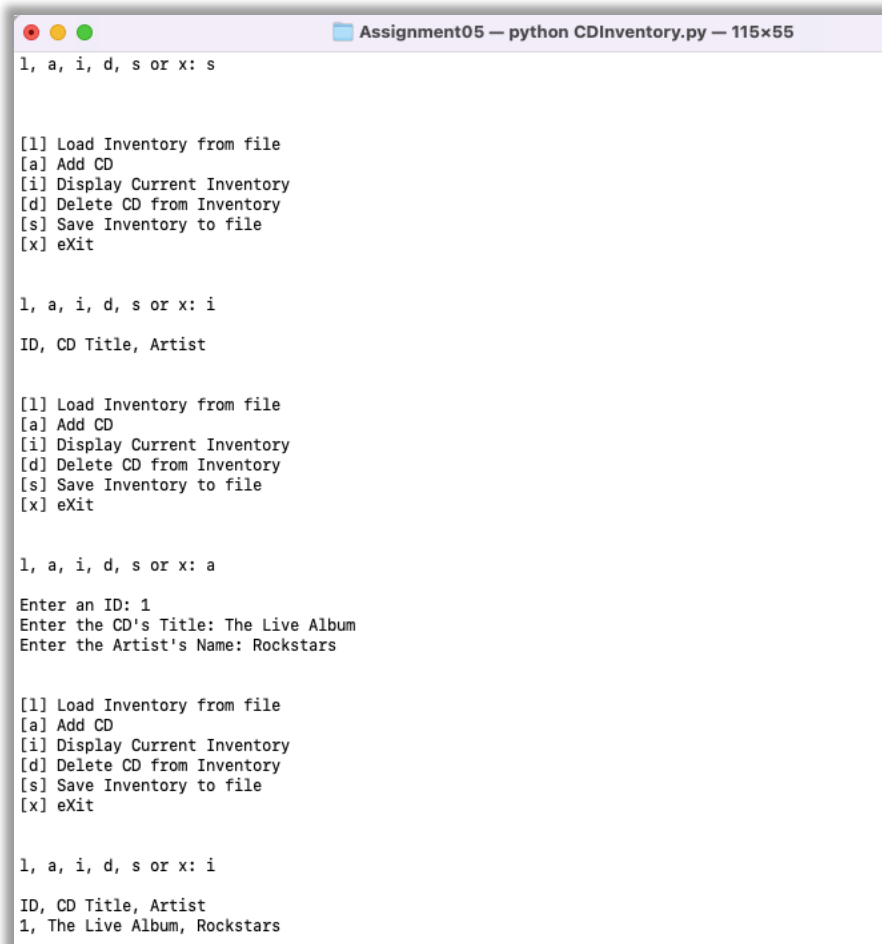
l, a, i, d, s or x: i

```
ID, CD Title, Artist
1, The Live Album, Rockstars
```

```
[l] Load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] Delete CD from Inventory
[s] Save Inventory to file
[x] eXit
```

l, a, i, d, s or x:

Figure 1 - CDInventory.py Running in Spyder



```
Assignment05 — python CDInventory.py — 115x55
l, a, i, d, s or x: s

[l] Load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] Delete CD from Inventory
[s] Save Inventory to file
[x] eXit

l, a, i, d, s or x: i

ID, CD Title, Artist

[l] Load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] Delete CD from Inventory
[s] Save Inventory to file
[x] eXit

l, a, i, d, s or x: a

Enter an ID: 1
Enter the CD's Title: The Live Album
Enter the Artist's Name: Rockstars

[l] Load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] Delete CD from Inventory
[s] Save Inventory to file
[x] eXit

l, a, i, d, s or x: i

ID, CD Title, Artist
1, The Live Album, Rockstars
```

Figure 2 - CDInventory.py Running in the Terminal Window

Notable Learning

Under the hood, it was made clear to me that seeking authoritative outside resources when I'm looking something up is vital. I've got enough confusion on my own that I don't need to add to it.

It was a little scary posting about the hangman game in Chapter 5, but as a white person, I decided that it was an important part of allyship and making a baby step in anti-racist work. It meant a lot to me that two classmates gave positive feedback. But the tech community isn't just code, it's people and culture too.

The textbook had a great analogy to help learn the concept of shared references. I'm actually looking forward to getting more practice with them.

When people say programming is about solving problems, I've usually thought of that in terms of big problems. But this mini-intro to the field has been a good reminder that those problems come in all sizes.

Notable Challenges

Because of the added complexity of this script, *20/20 Hindsight Me* would have tried to allot much more time for innovation in the creation phase. I would have really liked to have figured out how to deal with more edge cases.

Once again, I often found myself knowing that there was a method of handling a problem with the script that we'd been taught, but not knowing exactly where it was. So, looking it up was time consuming. Either knowing those things cold, or at least being more efficient in finding them would have saved time.

Not having my assignment started by class time, or more importantly, not having done a good chunk of work on the assignment in time for office hours is rough. I'd like to reorient my study schedule to allow for those improvements.

I'm still not super solid on the difference between methods and function in Python, so that has to happen. On the bright side, I think I can explain them with the help of a resource.

And I still need to learn how to save data to a file and load it back into memory without duplicating it.

Summary

I think the process of adding functionality that was generally available elsewhere to a program I already had familiarity with was helpful in my coding journey. It forced me to focus on how every line of code works in the program it's originally being written for, and whether that given line will work the same way in another program.