Bryce Shepherd

2020-Aug-11

IT FDN 110 B SU 20

Assignment 05

Title of Assignment

# Introduction

For this assignment we learned about dictionaries and working within someone’s prebuilt code. Here we have been able to streamline coding to allow us to store and use key info for us to identify these values are un-mutable but the values they carry are. This allows for us to define set parameters that our users are then able to modify/edit and we still have a single value to target off of.

## Topic 1

Taking what work has been done already and improving/completing them. I found that this was great for learning and seeing variations someone can handle the same tasks in multiple ways. I found myself comparing code from the previous lesson to the current lesson to make improvements.

## Topic 2

Setting dictionary values was interesting but not very difficult to understand. I was able to quickly latch on to the two different ways of generating the dictionary keys and values. I did run into an issue with one of the methods where it was taking my last entered value and adding it to another empty dictionary, only maintain the last entered value. I made a post on the Forum and got a great response from a classmate that addressed what I was doing. Changing to the other method, allowed me to build a list of dictionaries as intended.

## Topic 3

Finding the way to delete a row, took less time than I thought it would be using the [pop method](https://www.w3schools.com/python/python_ref_dictionary.asp)[[1]](#footnote-1). However, what I ran into an issue with was being able to take the value entered by a user to delete a given dictionary. I did some Google searching and found one method on [Stack Overflow](https://stackoverflow.com/questions/1156087/search-in-lists-of-lists-by-given-index)[[2]](#footnote-2). I attempted to implement parts of these responses to my code structure and was unsuccessful. I also attempted to use the built-in debugger to find where this was not working and found that in the IF statement, I was working with didn’t target the key value. It was going through all the steps and checking each of the dictionaries but not matching any values.

## Topic 4

Setting up GitHub, I found that I already had a GitHub account built for my work long ago. I have reused this profile and added the Mod\_05 assignment. This has already come in handy as I tried to make some updates to my code, to try a couple of the methods to delete a row that was brought up in the class session. I was still unsuccessful in trying to implement these other options and used the Mod\_05 code allowed me to recover my working file.

# Summary

Overall, this lesson was easier to grasp having worked extensively with lists in the past lessons has greatly helped in understanding this one. There are still rooms for improvement making a streamlined code base and building in error handling. I also need to be better about adding in pseudocode and the debugging menu has aided greatly in finding errors in my logic that would have been easily missed in the past.

# Appendix

Using [PlanetB’s](http://www.planetb.ca/syntax-highlight-word) (external reference) web-page[[3]](#footnote-3)

1. #------------------------------------------#
2. # Title: CDInventory.py
3. # Desc: Starter Script for Assignment 05
4. # Change Log: (Who, When, What)
5. # BShepherd, 2020-Aug-09, Created File
6. # BShepherd, 2020-Aug-10, Edited to address the TODO's
7. # BShepherd, 2020-Aug-11, Attempts to refine the delete function
8. #------------------------------------------#
10. # Declare variabls
12. strChoice = '' # User input
13. lstTbl = []  # list of lists to hold data
14. # TODO replace list of lists with list of dicts
15. dicRow = {}
16. strFileName = 'CDInventory.txt'  # data storage file
17. objFile = None  # file object
19. # Get user Input
20. **print**('The Magic CD Inventory\n')
21. **while** True:
22. # 1. Display menu allowing the user to choose:
23. **print**('[l] load Inventory from file\n[a] Add CD\n[i] Display Current Inventory')
24. **print**('[d] delete CD from Inventory\n[s] Save Inventory to file\n[x] exit')
25. strChoice = input('l, a, i, d, s or x: ').lower()  # convert choice to lower case at time of input
26. **print**()
28. **if** strChoice == 'x':
29. # 5. Exit the program if the user chooses so
30. **break**
31. **if** strChoice == 'l':
32. # TODO Add the functionality of loading existing data
33. objFile = open (strFileName, 'r')
34. **for** row **in** objFile:
35. dicRow = row.strip().split(',')
36. lstTbl.append(dicRow)
37. objFile.close()
38. **pass**
39. **elif** strChoice == 'a':  # no elif necessary, as this code is only reached if strChoice is not 'exit'
40. # 2. Add data to the table (2d-list) each time the user wants to add data
41. strID = input('Enter an ID: ')
42. strTitle = input('Enter the CD\'s Title: ')
43. strArtist = input('Enter the Artist\'s Name: ')
44. intID = int(strID)
45. dicRow = {'ID': intID, 'Title': strTitle, 'Artist': strArtist}
46. lstTbl.append(dicRow)
47. **elif** strChoice == 'i':
48. # 3. Display the current data to the user each time the user wants to display the data
49. **print**('ID, CD Title, Artist')
50. **for** row **in** lstTbl:
51. **print**(\*row, sep = ', ')
52. **elif** strChoice == 'd':
53. # TODO Add functionality of deleting an entry
54. # I was able to find a way to delete the rows entered by the user
55. # However, I was not able to find a way to select the actual ID value entered by the user to delete that entry
56. rowDel = int(input('Please type in an ID you wish to delete: '))
57. lstTbl.pop(rowDel-1)
58. **pass**
59. **elif** strChoice == 's':
60. # 4. Save the data to a text file CDInventory.txt if the user chooses so
61. objFile = open(strFileName, 'a')
62. **for** row **in** lstTbl:
63. strRow = ''
64. **for** item **in** row.values():
65. strRow += str(item) + ','
66. strRow = strRow[:-1] + '\n'
67. objFile.write(strRow)
68. objFile.close()
69. **else**:
70. **print**('Please choose either l, a, i, d, s or x!')

1. Retrieved 2020-Aug-09 [↑](#footnote-ref-1)
2. Retrieved 2020-Aug-09 [↑](#footnote-ref-2)
3. Retrieved 2020-Aug-12 [↑](#footnote-ref-3)