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Foundations of Programming, Python
Assignment 05

Introduction

On this module the goal was to implement the use of list, dictionaries into an user menu.
I continue to divide each routine into individual ones to later incorporate it into the bigger codes, however I struggle making it all work. I am not satisfied with the code as it is but I think I need to dedicate time to understand it better.

What we are learning

Learning more about listing and dictionaries provides options to create versatility on the code. Exploring the material and the labs helped understanding the possibility of use when coding.

Defining the template for Spider and starting to implement organization into the code makes easy to not only read the code but also helps on splitting the assignment into simple parts.

Approach to the assignment

Previously, I have split the tasks into individual parts to make it less overwhelming, that seemed to help me work and make progress. This particular assignment seemed simpler however I had difficulty implementing what I was hoping to do specially for the "deleting" script

Troubles making it work

I struggle with this assignment. When looping through the lstTbl I printed the items, and look at the values store on the dictionary running several ideas and try to implement it but just did not work

Concepts and Applications

I believe practice is a "must" on coding like anything else. Being new at coding, even though the concepts seem simple, the application is something that I hope will come easier.

The code

Considering the main body of the code was given I thought implementing the small parts required would have been easier for me, however I could not get the code to work when deleting the item.

GitHub

LInk to the repository with the assignemnt and document are located under:

https://github.com/elidot/Assignment_05/upload/master

```
"""
Title     : <CDInventory.py
Description: Use of dictionaries, functionality to load and delete data
Change log : Eliana Arias-Dotson,
Created on Sat Feb 22 04:18:52 2020
Edited on Sun Feb 23 04:10:03 2020
Edited on Mon Feb 24 11:24:03 2020
"""
#------------------------------------------#

# Declare variable

strChoice = '' # User input
lstTbl = []  # list of lists to hold data
dicRow = {} # list of data row
strFileName = 'CDInventory.txt'  # data storage file # this is a comma separated
objFile = None  # file object
headerRow = ['ID (Integer)','CD Title (String)', 'Artist Name (String)']

# Get user Input
print('\n\n')
print('The Magic CD Inventory\n')
while True:
   # 1. Display menu allowing the user to choose:
   print('[l] load Inventory from file\n[a] Add CD\n[i] Display Current Inventory')
   print('[d] delete CD from Inventory\n[s] Save Inventory to file\n[x] exit')
   strChoice = input('l, a, i, d, s or x: ').lower()  # convert choice to lower case at time of
input
   print()

   if strChoice == 'x':
      #Exit the program if the user chooses so
      print('\nGood-bye')
      break
   if strChoice == 'l':
      # TODO Add the functionality of loading existing data
      objFile=open(strFileName,'r')
      for row in objFile:
         oldcd=row.strip('\n').split(',')
         dicRow = {'ID': int(oldcd[0]), 'Artist': oldcd[1], 'Title:':oldcd[2]}
         lstTbl.append(dicRow)
      objFile.close()
```

```
   elif strChoice == 'a':  # no elif necessary, as this code is only reached if strChoice is not 'exit'
      # 2. Add data to the table (2d-list) each time the user wants to add data
      intID = input('Enter an ID: ')
      strTitle = input('Enter the CD\'s Title: ')
      strArtist = input('Enter the Artist\'s Name: ')
      dicRow = {'ID': intID, 'artist': strTitle, 'title:':strArtist}
      lstTbl.append(dicRow)
   elif strChoice == 'i':
      # Display the current data to the user each time the user wants to display the data
      print('ID, CD Title, Artist')
      for row in lstTbl:
         print(*row.values(), sep = ', ')
 elif strChoice == 'd':
      # TODO Add functionality of deleting an entry
      print("Current Inventory")
      print('ID, CD Title, Artist')
      for row in lstTbl:
         print(*row.values(), sep = ', ')
      #Ask option on what to remove from Current inventory
      IdtoDel=''
      IdtoDel= int(input('Remove entry with this ID:'))
      EntrytoDel=0
      for cd in lstTbl:
         if IdtoDel in cd.values():
            lstTbl.remove(EntrytoDel)
            print("Entry has been removed")
   elif strChoice == 's':
      # Save the data to a text file CDInventory_Assig05.txt if the user chooses so
      objFile = open(strFileName, 'a')
      for row in lstTbl:
         strRow = ''
         for item in row.values():
            strRow += str(item) + ','
         strRow = strRow[:-1] + '\n'
```