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2022-Mar-22

IT FDN 110 B Winter 2022: Foundations of Programming

Assignment07 Knowledge Document

Lesson learned in finishing assignment07

Introduction

Brief overview of some lessons learned through some experience I earned through finishing assignment07.

Experience gained 1:

I modified the script using try-except function. This loop is useful when you are not sure whether the code will go through or not. If it works, then it will execute all the code in the try loop. Otherwise, it will intentionally interrupt the program and throw the exception information in the except loop to avoid returning error and crash of program.

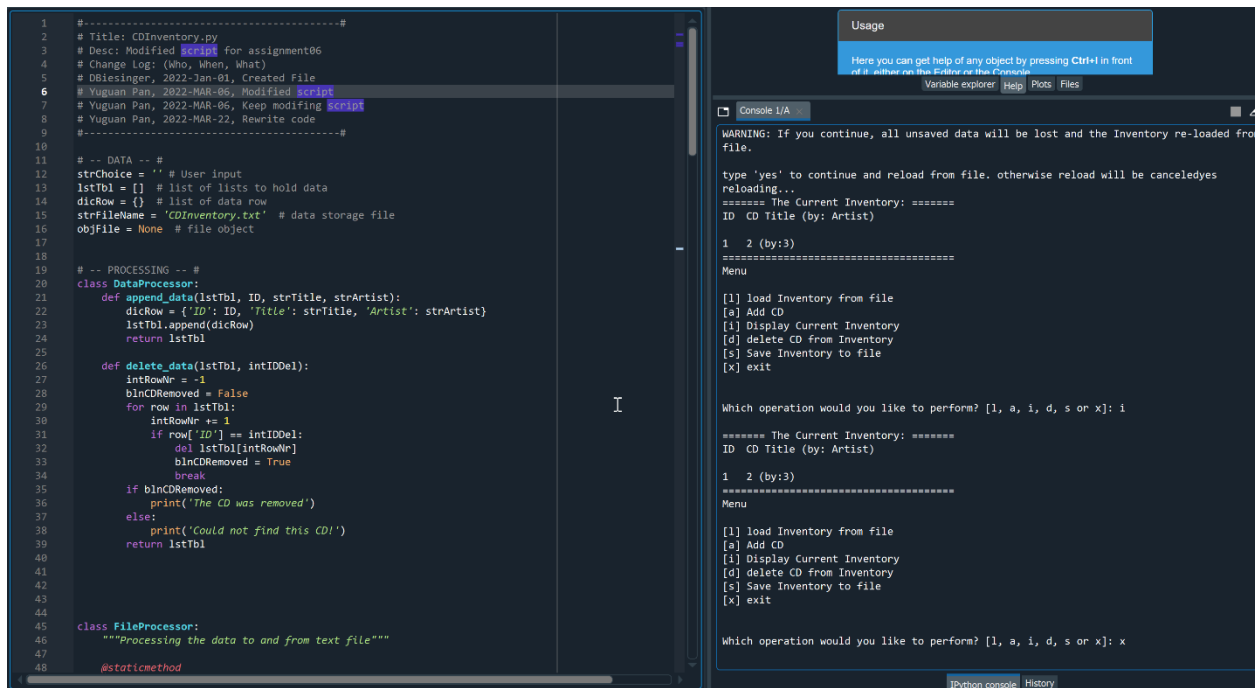
GitHub link:

[yuguangp/assignment07 \(github.com\)](https://github.com/yuguangp/assignment07)

Summary

When doing modifying based on someone else's work it is very easy to generate bugs since some of the original scripts may not fit the new ones I add in, and causing functional scripts become bugs. Thus instead of spending time on debug later, reading through and try to understand the original scripts before modifying could be a smarter way.

Appendix



```
1 #-----#
2 # Title: CDInventory.py
3 # Desc: Modified script for assignment06
4 # Change Log: (Who, When, What)
5 # DBiesinger, 2022-Jan-01, Created File
6 # Yuguan Pan, 2022-MAR-06, Modified script
7 # Yuguan Pan, 2022-MAR-06, Keep modifying script
8 # Yuguan Pan, 2022-MAR-22, Rewrite code
9 #-----#
10
11 # -- DATA -- #
12 strChoice = '' # User input
13 lstTbl = [] # list of lists to hold data
14 dicRow = {} # list of data row
15 strFileName = 'CDInventory.txt' # data storage file
16 objFile = None # file object
17
18 # -- PROCESSING -- #
19 class DataProcessor:
20     def append_data(lstTbl, ID, strTitle, strArtist):
21         dicRow = {'ID': ID, 'Title': strTitle, 'Artist': strArtist}
22         lstTbl.append(dicRow)
23         return lstTbl
24
25     def delete_data(lstTbl, intIDDel):
26         intRowNr = -1
27         blnCDRemoved = False
28         for row in lstTbl:
29             intRowNr += 1
30             if row['ID'] == intIDDel:
31                 del lstTbl[intRowNr]
32                 blnCDRemoved = True
33                 break
34             if blnCDRemoved:
35                 print('The CD was removed')
36             else:
37                 print('Could not find this CD!')
38         return lstTbl
39
40 class FileProcessor:
41     """Processing the data to and from text file"""
42
43     @staticmethod
```

Usage

Here you can get help of any object by pressing **Ctrl+I** in front of it. [edit it](#) [edit it](#) [run the code as the file](#)

Variable explorer | Help | Plots | Files

Console I/A

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

reloading...

===== The Current Inventory: =====

ID CD Title (by: Artist)

1 2 (by:3)

=====

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]: i

===== The Current Inventory: =====

ID CD Title (by: Artist)

1 2 (by:3)

=====

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]: x

Python console | History

Fig.1 Screenshot of script successfully running in Spyder

```
C:\WINDOWS\py.exe
Which operation would you like to perform? [l, a, i, d, s or x]: s
===== The Current Inventory: =====
ID      CD Title (by: Artist)
1        2 (by:3)
1        2 (by:3)
=====
Save this inventory to file? [y/n] y
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 canceledyes
reloading...
===== The Current Inventory: =====
ID      CD Title (by: Artist)
1        2 (by:3)
1        2 (by:3)
=====
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]: i
===== The Current Inventory: =====
ID      CD Title (by: Artist)
1        2 (by:3)
1        2 (by:3)
=====
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]: x
```

Fig.2 Screenshot of script successfully running in terminal window