IT FDN 100A

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Assignment 5

I initially started the assignment by watching the required YouTube videos and studying the information on lists, tuples, and dictionaries on various websites. Then, after analyzing the assignment, I opened the starter code and attempted to enter the information. I initially had some difficulty as the assignment requirements were a bit confusing to understand. As I was starting the work, I noticed that I was not using all of the definitions provided on the data # notes. I started the assignment by starting the code adding my name and date in the change log. Afterwards, I reviewed the processing notes before starting the assignment.

I started the assignment by creating a Todo.txt with the with open command adding values to the dicRow and lstTable. One of biggest issues I ran into when running the code was that I would the data that was written on Todo text would be constantly deleted as the code was reading it as if I was creating a new text file every time. I noticed that mode=”w+” was causing this so I changed it to mode=”a+” which initially fixed the issue. I then ran into a different issue where the initial data would be duplicated over and over. I could not fix this until I finished the code and attempt to use mode=”r+” and noticed that it worked. Once I finished step 1, I was about to start step 2 but it seems that it was already completed so I did not change it any further.

For step 3, I just printed the current list table to show the user the current data but found that it did not read all the data in the text so I changed the code to a with open and started the code with seek(0) to start the code from the start then used readlines() to read the data. When I got to step 4, I noticed that I had a difficult time deciding how to create the proper way to add any value based on the user input. I initially attempted to use the with a nested open command but it led to issues with data either being overwritten or duplicated. I then tried for loop to add data but I found that the for loop code would end up not adding the code into the txt properly. After some research, I realized that I was over thinking the situation and just needed to append() the lstTable since it was out of the while loop but still remembered the data being stored until the program was closed.

Once I finished step 4, I started on step 5 and found that removing specific items were much more difficult due to an unquantifiable number of possible user inputs. Based on that, I decided to get around that issue by asking a specific question to the user, requesting them to type in the ID number of the dictionary they wanted to remove. I initially tried to create the code using various methods described on stack overflow. I tried to create a for loop with the del command to delete a certain dictionary depending on the user input but found that it did not work properly and I ran into issues value errors as the for loop statements did not work with the list table as I expected. I decided to continue exploring different ways to delete values and found that it was difficult until I decided to try a simple del with a try except for error handling and found that the code worked and would allow for any value concurrent to the number of dictionaries would allow for removal of those listed dictionaries.

I finally finished the assignment by allowing the code to save any data added or by adding a with open and using the mode=”w+” to save the data in the text file.

The following code below:

Module 5 assignment for Home Inventory code:

objFileName = "C:/\_PythonClass/Todo.txt"  
strData = ""  
dicRow = {"Task": "Clean House", "Priority": "low"}  
lstTable = [dicRow]  
with open(objFileName, mode="r+") as todo:  
 todo.write(str(dicRow))  
  
# Step 1 - Load data from a file  
 # When the program starts, load each "row" of data   
 # in "ToDo.txt" into a python Dictionary.  
 # Add the each dictionary "row" to a python list "table"  
  
# Step 2 - Display a menu of choices to the user  
while(True):  
 print("""  
 Menu of Options  
 1) Show current data  
 2) Add a new item.  
 3) Remove an existing item.  
 4) Save Data to File  
 5) Exit Program  
 """)  
 strChoice = str(input("Which option would you like to perform? [1 to 4] - \n"))  
 print()#adding a new line  
  
 # Step 3 -Show the current items in the table  
 if (strChoice.strip() == '1'):  
 with open(objFileName, mode="r") as todo:  
 todo.seek(0)  
 print(todo.readline())  
 continue  
 # Step 4 - Add a new item to the list/Table  
 elif(strChoice.strip() == '2'):  
 add\_task = input("What is the task?\n")  
 add\_priority = input("What is the priority?\n")  
 new\_dic\_row = {"Task": add\_task, "Priority": add\_priority}  
 lstTable.append(new\_dic\_row)  
 continue  
 # Step 5 - Remove a new item to the list/Table  
 elif(strChoice == '3'):  
 try:  
 print(list(lstTable))  
 n = int(input("Input list number to remove starting at 0\n"))  
 del lstTable[n]  
 except:  
 pass  
 continue  
 # Step 6 - Save tasks to the ToDo.txt file  
 elif(strChoice == '4'):  
 with open(objFileName, mode="w+") as todo:  
 todo.write(str(lstTable))  
 continue  
 elif (strChoice == '5'):  
 break #and Exit the program