Arlo Magpoc August 7, 2023 IT FDN 110 A Assignment 05

A Modified To Do List Program

Intro

For this module, we learned how to further manipulate data by way of lists, and create scripts that take information from dictionaries. The initial task for the user is to choose from a menu of options such as showing data they've entered, creating a new item which includes a task and a priority as data entires, removing an existing item from entered data, saving data, and exiting the program. Completed code is represented in the slides below.

```
/usr/local/bin/python5.8 /Users/Arlo/Documents/_PythonClass/AssignmentU5/AssigmentU5_Starter.py
File not found, will make a new one when you save it
    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
Which option would you like to perform? [1 to 5] - 2
Enter a specific Task and its Priority to your To-Do List
Enter your task please: Books
What is the priority of this task?: High
[{'Task': 'Books', 'Priority': 'High'}]
    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
Which option would you like to perform? [1 to 5] - 2
Enter a specific Task and its Priority to your To-Do List
Enter your task please: Hooping
What is the priority of this task?: Low
[{'Task': 'Books', 'Priority': 'High'}, {'Task': 'Hooping', 'Priority': 'Low'}]
```

Figure 1.1 User chooses option 2 and enters data

```
Which option would you like to perform? [1 to 5] - \it 1
Your task/tasks so far is/are:
**********
Books-|-High
{'Task': 'Books', 'Priority': 'High'}
***********
Hooping-|-Low
{'Task': 'Hooping', 'Priority': 'Low'}
***********
   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
Which option would you like to perform? [1 to 5] -
```

Figure 1.2 User chooses option 1 and displays data

```
Which option would you like to perform? [1 to 5] - 3

Remove an existing Task: hooping
hooping was not found
hooping has been removed

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

Which option would you like to perform? [1 to 5] -
```

Figure 1.3 User chooses option 3 and removes a task which is in this case, 'hooping'

```
Which option would you like to perform? [1 to 5] - 4

Would you like to save? ('y/n'): y

Your file was saved!

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
```

Figure 1.4 User chooses option 4 and data is saved

```
Would you like to save? ('y/n'): y
Your file was saved!

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

Which option would you like to perform? [1 to 5] - 5

Would you like to exit? ('y' or 'n'): y
Process finished with exit code 0
```

Figure 1.5 User chooses option 5 and program is closed

Mac Terminal

In the example below, I opened the plain text file ToDoList.txt and shows that the information was saved correctly using the provided code.



Figure 2.1 Displays user entered data that was saved after 'hooping' task was removed

Creating the Program

The objective of this program was to create a task prompt for a user to complete, and include a priority for that task. This program would also allow the user to remove a task that they no longer want to include, as well as save to a text file. We accomplished this by starting off from a code template, and adding code as we go along each appropriate steps.

Challenges

The biggest challenge of creating this program was the step by step process. Though we had a template provided with pre loaded code, I ran into challenges of incorporating the step by step processes necessary to effectively run this program. Honestly there were too many to count, as I meandered throughout this entire process, but the most consistently notable hurdles I faced were: debugging the 'for' and 'while' loops, understanding and applying appropriates syntaxes for str and lettable variables throughout, as well as understanding how the 'for' loop works inside of the if statement inside the while

loop. In particular for Step 6, when I initially had difficulty getting this to actually save because of a couple misplaced and misspelled variables.

Summary

The biggest lesson from this assignment for me, was really understanding the importance of correctly defined variables. I learned how to better make notes of the lines of code I've added, and applying the appropriate syntax for my variables and for/while loops. When writing a larger program moving forward, this assignment taught me the importance of a step by step debugging process that I have faced to this great extent, and should be expecting the same, if not more so moving forward.