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IT FDN 110A

Assignment 5

Dictionary/List

# Introduction

This week, the main topics were lists, tuples, and strings. Storing data is important and by using lists and tuples, data can be easily stored and sorted. Tuples can store different types of data unlike strings which only holds characters. Lists are similar to tuples but are more flexible with being easier to manage the data and built in functions to edit lists.

# Assignment

In this assignment, I needed to create a program that creates a to do lists. But in this assignment, the program will need to use a dictionary object to store the data and then write the data into a txt file in a list object.

## Choice 1

Option 1 is to show the current data in the list. To accomplish this, I used a for loop to look at each row of the list and then print the row.

## Choice 2

Option 2 is to add a new item to the list. I used input functions to gather data from the user and then used a dictionary to format the data. To add the data into a running list, I used a .append function to add the recently inputted data into the running list. This will add the data to the end of the list.

## Choice 3

Option 3 is to remove the recent row of the list. I used a .pop function which removes the last row of the list.

## Choice 4

Option 4 is to save the data into a txt file. I first opened the txt file and used a similar code to choice 1 where I printed the data out. But in the section, I used .write function to write the data into the txt file. Also, since the list needs to be in str format, I included str() to convert the list into a str in order to write the data.

Text

Description automatically generated

Figure 1: saving data into txt file

## Choice 5

Option 5 is to end the code and to do this, I used a break command.

# Issues

I was having issues with first section of the code where I needed to open the text file and read and process the data in it. In order to read the data, I needed to included a ‘r’ after the txt file name. But if the txt file does not exist, it will give an error. To try to fix this, I used a ‘w’ after the txt file name to create a new file if it doesn’t already exist, but this just overwrites the txt and erases whatever data it has. I do not have a solution for this.

Text

Description automatically generated

Figure 2: reading a non existing txt file issue

Graphical user interface

Description automatically generated

Figure 3: code with text file

# Summary

In this assignment, I got to use multiple functions we learned from past weeks. Some functions used in the program are while loops, for loop, and if loops. This assignment uses list as the primary way to store the user inputs. By using lists, the user can easily input data and easily view the data. In addition, the user can save the data into a txt file similar to the previous assignment.