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Course: IT FDN 110A Foundation of Programming (Python)

Assignment: Module05

Data processing using Lists and Files

Introduction: based on the previous assignment to practice the usage of dictionary in the Python programming and how to apply it combining with .json file. Also learn to use the try/except to well manipulate the program control flow.

Step1: define all the Constants and Variables. Here I give the main variable an empty string initially. Which I use it to distinguish user input info or not (in case user select save or display before input their info).

Step2: the program to start to open the file and using load function from importing json. I add two try/except scenarios, one is when file is not existed and another is empty content file.

Step3: the same structure as Assignment04, but the program will flow entering a While loop when it read information from the file (if there's no file existed or empty file then program show error message then stop). Another try/except practice of the scenarios when user's selection is not 1~4 or user input is not a numeric integer. It has the proper If/else conditions arranged when user select 1~4.

Step4: I use *.append()* function to add the new input (form as a dictionary) into the lists.

Step5: This time I used the .dump function imported from json library to write the data into the .json file.

Step6: Using the "break" command to leave the program if user select Opt.4 to end the While loop.

Task Result: attached 3 figures to show my code runs successfully both on windows CMD and Spyder (the IDE I used). Also the .json file open in Notepad.

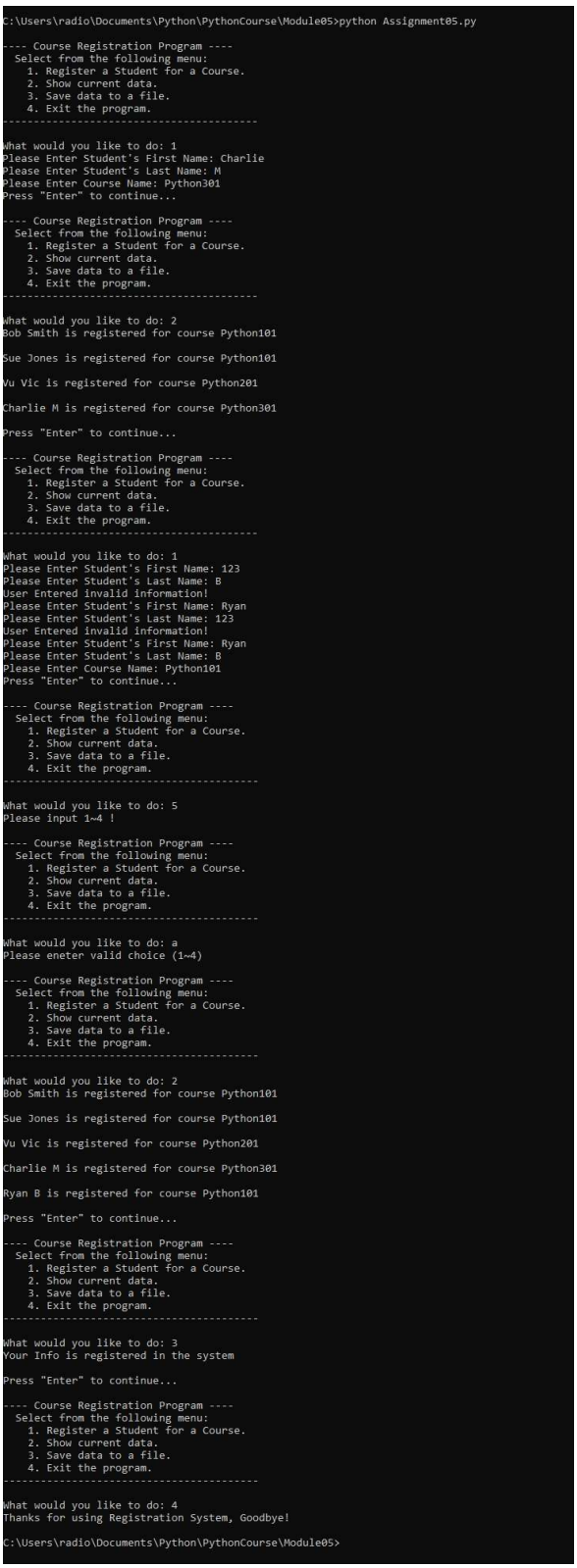

Figure1: running my coder under windows CMD

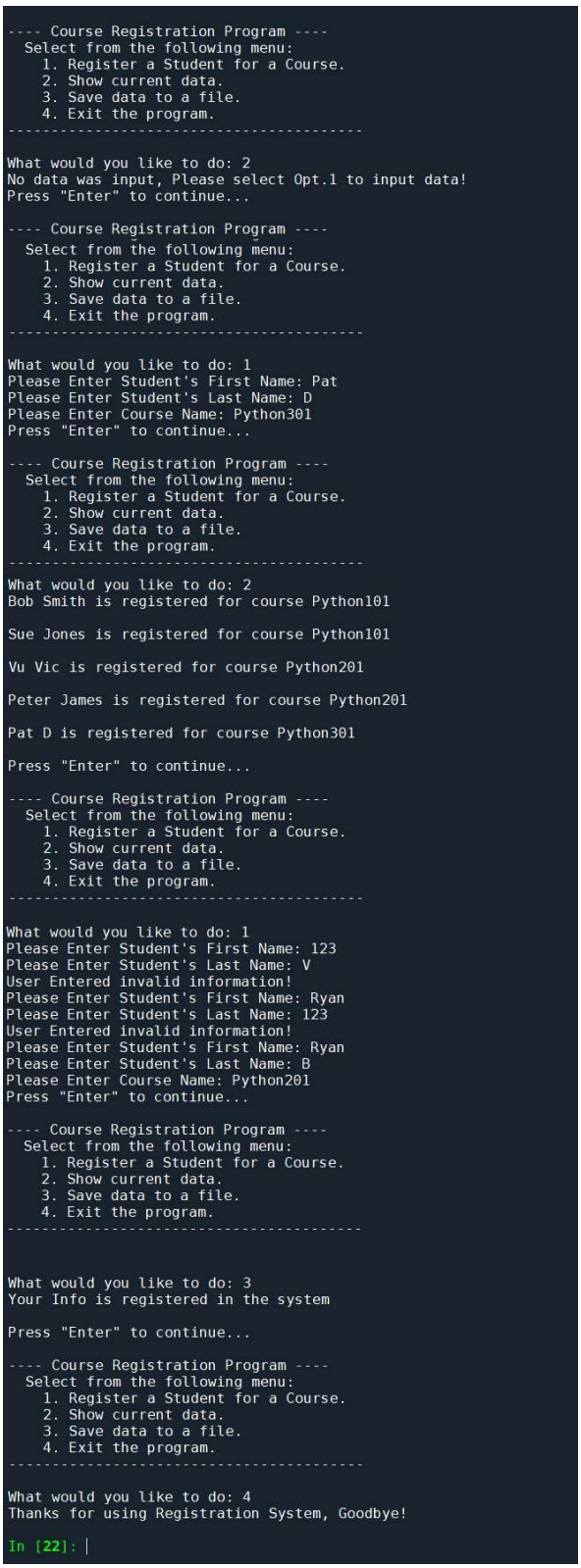

Figure2: running my code under Spyder

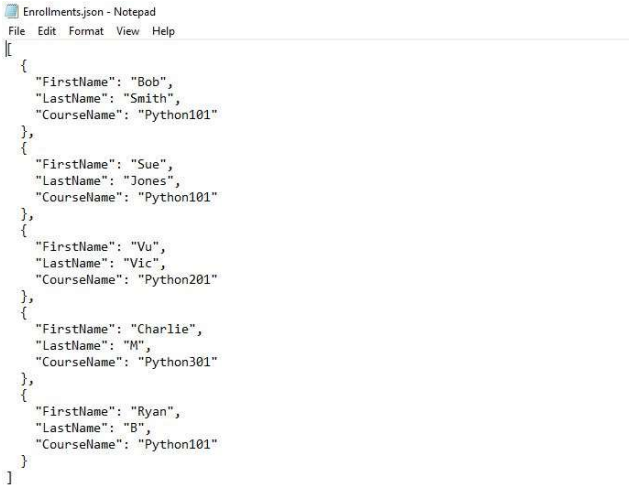

Figure3: export data in the Enrollments.csv file

Summary: learned the dictionary with Keys and Values structure and applied it to the .json file. Practice the Try/except function to manipulate to control the program flow which will be very useful/important to be used in the function/module in the future.

GitHub Link:

https://github.com/ShandyML/Intro2Prog-Python-Mod05