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5/20/2024

IT FDN 110 B Sp 24: Foundations Of Programming: Python

Assignment 05: Dictionaries and Error Handling

Introduction

This module utilizes the previous module as the foundation and implements the usage of dictionaries as well as error handling.

Topic

This module was my first experience working with Dictionaries, as such it took me a bit to wrap my head around the data structure. The best way for me to rationalize it is that it's somewhat similar to how excel's "vlookup" works. In this sense, you can call a cell's value from a "key" associated to it. In this case, we assign values (first name, last name, course name) to the corresponding keys (first_name, last_name, course_name). I think I remember vaguely from an intro to Javascript course I took long ago in University that may have called it a "key-value" mapping data structure. In anycase, I implemented the Dictionary data structure for reading in the CSV file as well as for processing the data.

Error handling was also new to me. In the past, I would've used a convoluted system of if/elif/else to error detect, but this is a much more formal way of implementing Error handling. For the most part, learning the Error handling concepts was straight forward. The only part that still confuse me is the "print(e.__doc__) print(e.__str__())" as shown in the module notes:

```python
try:
    # Check that the input does not include numbers
    student_last_name = input("Enter the student's last name: ")
    if not student_last_name.isalpha():
        raise ValueError("The last name should not contain numbers.")
except ValueError as e:
    print(e)  # Prints the custom message
    print("-- Technical Error Message -- ")
    print(e.__doc__)
    print(e.__str__())
except Exception as e:
    print("There was a non-specific error!\n")
    print("Built-In Python error info: ")
    print(e, e.__doc__, type(e), sep='\n')
```

I didn't have a whole lot of time to dive into this module and explore the syntax of displaying these errors more as I have been intensely busy with work (and personal life)

This is also my first time working with Github. It was confusing at first to navigate the website, but after toying around with it for a bit, I was able to get comfortable with it. Due to the delay in my accomplishing this assignment, I unfortunately did not participate in posting my repository to the forum for others to review. This is unfortunate because peer feedback would've been an excellent resource to improve my coding etiquette.

Summary

Due to an intense work schedule this past week, I did not have as much as I would've liked to work through this module. I stayed up late to work through this module and I wish I had more time to work on this assignment; however, I didn't want to get too far behind on the course as Module 6 is due soon and I would like to move on for now with the "bare minimum" understanding of some of the concepts. Overall, Dictionaries were a new concept to me and took me a bit to "visualize" what the data structure was. Error handling was straight forward but there are some details that I will need to review in the future when time permits.