Jennifer Hernandez-Mora

June 6, 2024

Foundations of Python Programming

Github Assignment Repository: https://github.com/jenhzm

Assignment 7- Classes and Objects

Introduction

In this code, I continued to build on what I did in assignment 6, to ultimately display a student's

class registration information. I used a variety of previous The main addition to this assignment

is the inclusion of data classes.

Organizing Code Format

Upon opening the assignment 7 starter, I got a refresher on the previous work done for

assignment 6. In the last assignment, the use of classes was introduced and so this starter code

already had the IO and file processor class. In this assignment, data classes were added.

Drafting the Code

Person and student were meant to be added as part of the data classes in this assignment. Student

first and last names are meant to be in person class and course names in student class. The first

thing that I did, was the creation of the person class which included the use of "property" for the

first and last names. (Figure 1) These were the getter portions. The setters were created using our

variables with the added "setter" in the name. Thereafter I created the student class which builds on the person class.

```python
class Person:
    def __init__(self,first_name:str,last_name:str):
        self.first_name=first_name
        self.last_name=last_name

    @property
    def first_name(self)->str:
        """
        Returns the first_name as a title
        :return: The first name, properly formatted
        """
        return self._first_name.title()
```

Figure 1: Person class with the use of "@property"

As I was editing my code, I tested to make sure that it ran as well and since I was using a list of students instead of dictionaries mostly, I made sure that this was true for the code.

Summary

In the end, I was able to read existing files, get input from the user and append, display the data, and save data to the file. The way that I did this was by using classes and properties instead of dictionaries. I also took advantage of protected attributes. In the end, I was able to get a program that prompted the user to choose from a desired menu.