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Course: Foundations Of Programming: Python

<https://github.com/KevinAmaral2/IntroToProg-Python-Mod07>

Assignment 07 – Module 7

Introduction:

This is the seventh assignment for the Foundations Of Programming: Python Course at UW. In this document I will outline how I wrote the code for the Assignment07.py file.

Steps Performed:

In Vscode, I created a new file titled Assignment07.py and made the script header look similar to the template provided. I then followed the instructions in the Mod07-Assignment doc. To start I defined a series of constants and variables for the program. The variables defined included menu choice and students as a list.

For this assignment we utilized classes to establish the concept of separations of concerns. The classes set up were similar to module 6, with some additions. To accomplish this I separated out similar functions underneath those classes. For both the classes and functions, I was asked to include descriptive document strings to provide context to the reader of the code.

I then defined a series of functions underneath the classes defined based on the instructions provided. This included output error messages, output menu, input menu choice, input student data, read data from file, and write data to file. For each of the functions defined I utilized the static method decorator, which is used when the method inside a class belongs to the class rather than an instance of the class.

For this module, we were also asked to utilize constructors and to assign properties to classes, both new concepts. For the first and last name properties I utilized getters and setters to accomplish this.

We also used inheritance and the super function within Python to create a student class that inherits from the Person class, and then later is overridden.

Finally, we were then asked to post our file and this knowledge document to Github.

Summary:

In this assignment we became familiar with the concept of class properties, super function capabilities, getters and setters, and reinforced topics like methods and separation of concerns.