SIT771 Object-Oriented Development

Credit Task 9.1: Another Language

Focus

Make the most of this task by focusing on the following:

- Process

  Apply object-oriented programming principles in a new language, showcasing adaptability and collaborative coding proficiency, and demonstrating the universality of programming concepts across diverse platforms.
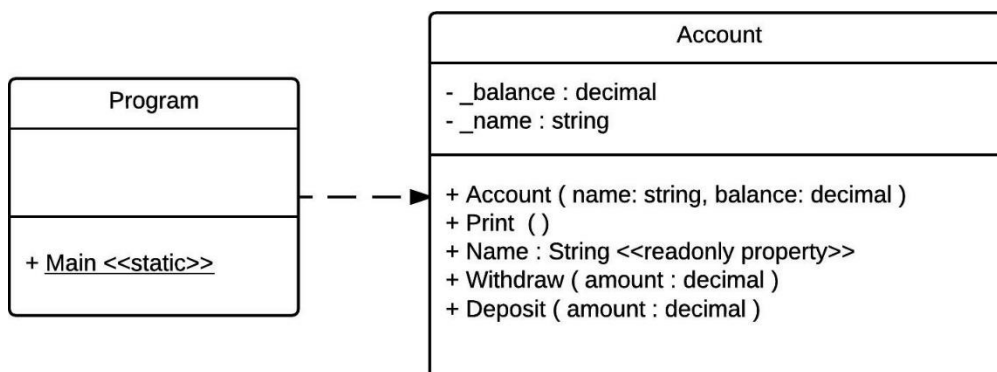
Overview

In this task, you will use what you have learnt about object oriented programming, and programming in general, to start exploring another programming language. In this case, you will re-implement the basics of the Account class from the Pass Tasks using the python programming language in Google Colab. The purpose of this task is to see that the concepts are all very similar and that you can use online notebooks to use resources, develop programs, and share your work with your collaborators when needed.

Submission Details

When you finish this task, you need to upload all of your python code in a single file along with a screenshot of it running in Google Colab.

Instructions

Use Google Colab (https://colab.research.google.com/) to implement the logic for the class Account from the pass tasks. Create a New Notebook when you open the Google Colab link. The general class relationship model is shown below.

Here is a good start:

```python
[10] class Account:

    def __init__(self, name, startingBalance):
        self.name = name
        self.balance = startingBalance

    def print_account (self):
        print("%s $%.2f" % (self.name, self.balance))

    #.............................................
    account_1 = Account("Fred", 100.0)
    account_1.print_account()

    account_2 = Account("Jane", 80.0)
    account_2.print_account()

    print()
    line = input("Select an option: ")
    num = int(line)

    if num == 0:
        account_2.print_account()
```

```
Fred $100.00
Jane $80.00

Select an option: 0
Jane $80.00
```

Note: In python, most things use snake_case, while classes use PascalCase.

Implement your Account class in python, then add some code to test out your new class. Include a small menu for the user to choose to either print, deposit, or withdraw from their account (no need to use an enumeration for this, keep it simple). In summary, complete the class code, add more menu options, and develop more tests in your code.

The Learn Python Programming Definitive Guide is a good start for learning to program with python.

Task Discussion

For this task, you need to discuss how concepts are transferable between languages:

- What new things did you need to learn to pick-up the new language?
- What things did you already know?