SI Session 10/12

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Activity: Template Review

Task

- Split up into groups (potentially groups of individuals)
- Each group will be assigned a topic from the following list:
    - for-in loops
    - Stand-alone if statements
    - If-else blocks
    - If-elif blocks
    - File IO read/write
    - File reading (using for-in loop)
    - While Loops

Write the TEMPLATE for your assigned topic. Be prepared to explain how it works to the class.

Activity: Conceptual Questions

Question 1:

What are our rules for creating variable names?

Question 2:

What are the two unique values that all logical expressions will evaluate to. What type are these two values?

Question 3:

Under what condition will we enter a while loop? Under what condition will we leave a while loop? When will this condition be checked?

Question 4

What type does the following return:

my_string.split(delimiter)

Question 4.5

Describe what the output of the above will be like.

Activity: Large File IO Boardwork

Task

- Write a program that reads in a file called student_info.txt
- This file has student full names, gpas, and majors separated by tabs
- Read in the info for each student, storing the info for each student as a list and storing these student lists within a larger list.
  - The end result will need to be a list of lists!
- After storing all the info, print out the info for each student in the format shown to the right.

student_info.txt

Cody Ptacek	4.00	Comp Sci
John Doe	4.00	English
Jane Doe	4.00	Math

Output

Name: Cody Ptacek, GPA: 4.00, Major: Comp Sci

Name: John Doe, GPA: 4.00, Major: English

Name: Jane Doe: GPA: 4.00, Major, Math

Activity: Two Smaller Boardworks

Task 1

- Write a function that continually prompts a user to donate money to the Order of the Phoenix until the user enters an amount greater than 200 galleons.,

Example:

Enter a number of galleons to donate to the Order of the Phoenix: **100**

Not enough!

Enter a number of galleons to donate to the Order of the Phoenix: **400**

Thank you for the money!

Task 2

- Write a program that takes a list of 100 words from the user and stores them in a list.
- Iterate through the list and replace all instances of the word 'the' (case insensitive) with 'duck'.

Activity: Three Mini Code Interpretations

```python
#Task 1
for i in range(10):
    i = i * 4
    if i % 3 == 0:
        print('3')
    else:
        print(i)
```

```python
#Task 2
my_book = 'Jane Eyre'
print(list(my_book))
print(my_book)
```

```python
#Task 3
my_pokemon = ['Tauros', 'Moltres', 'Dragonite']
print(str(my_pokemon))
```

Activity: Three Mini Code Interpretations

Code 1:

3
4
8
3
16
20
3
28
32
3

Task Two:

['J', 'a', 'n', 'e', ' ', 'E', 'y', 'r', 'e']

Jane Eyre

Task Three:

['Tauros', 'Moltres', 'Dragonite']

Activity: Session Review

Task

- Write down the template for one of the topics you weren't assigned.
  - Write them all if you can.
- Answer the following questions:
  - Are there any topics that you need to study more before your test? What will you do to study for this topic?