Welcome back from holiday. I will be back in class on Wednesday. Please be kind and courteous to your supply teachers while you work to complete the following expectations.

1. Python Style Guide Questions  
   Read the following Document: https://www.python.org/dev/peps/pep-0008/  
   Answer the questions below  
   Upload your responses to your repository
2. Tic Tac Toe Assignment (From Before the Break)  
   Reference on the GitHub Repository is “Modules D: Python”/”TicTacToe Assignment”

Please share ideas with your group members  
Be prepared to demo your game on Wednesday

Style Guide Questions

1. What is the purpose of a programming language style guide like PEP 08?

To be readability and consist

1. Provide some examples of when it would be ok to be inconsistent with the PEP 08 style guide.

When applying the guideline would make the code less readable, even for someone who is used to reading code that follows this PEP.

To be consistent with surrounding code that also breaks it (maybe for historic reasons) -- although this is also an opportunity to clean up someone else's mess (in true XP style).

Because the code in question predates the introduction of the guideline and there is no other reason to be modifying that code.

When the code needs to remain compatible with older versions of Python that don't support the feature recommended by the style guide.

1. Summarize proper indentation style. Explain some examples of good and bad indentation style.

Use 4 spaces per indentation level.

Continuation lines should align wrapped elements either vertically using Python's implicit line joining inside parentheses, brackets and braces, or using a hanging indent [7]. When using a hanging indent the following should be considered; there should be no arguments on the first line and further indentation should be used to clearly distinguish itself as a continuation line.

A code should be put all together for example

if (this\_is\_one\_thing

and that\_is\_another\_thing):

do\_something()

and not like this since it take up space and is not clear

my\_list = [

1, 2, 3,

4, 5, 6,

]

1. What should be used for whitespace, tabs or spaces?

Spaces are the preferred indentation method.

Tabs should be used solely to remain consistent with code that is already indented with tabs.

Python 3 disallows mixing the use of tabs and spaces for indentation.

1. Why does PEP 08 recommend limiting line length to a maximum of 79 characters?

Limiting the required editor window width makes it possible to have several files open side-by-side, and works well when using code review tools that present the two versions in adjacent columns.

1. What does PEP 08 have to say about ‘single string’ quotes and “double string” quotes? How would you quote a string with an apostrophe like don’t?

In Python, single-quoted strings and double-quoted strings are the same. This PEP does not make a recommendation for this. Pick a rule and stick to it. When a string contains single or double quote characters, however, use the other one to avoid backslashes in the string. It improves readability.

1. Summarize proper use of “whitespace”. Explain some examples of good and bad whitespace style.

Whitespace is the space between code. Proper whitespace ensures that all the space is used willing.

The example below had unneeded space between the characters

Yes: spam(ham[1], {eggs: 2})

No: spam( ham[ 1 ], { eggs: 2 } )

1. What is the recommended use of a “block comment”. Provide an example of a block comment and explain how a block comment is different from a “inline comment”

Block comments generally apply to some (or all) code that follows them, and are indented to the same level as that code. Each line of a block comment starts with a # and a single space (unless it is indented text inside the comment).

Paragraphs inside a block comment are separated by a line containing a single #.

Use inline comments sparingly.

An inline comment is a comment on the same line as a statement. Inline comments should be separated by at least two spaces from the statement. They should start with a # and a single space.

Inline comments are unnecessary and in fact distracting if they state the obvious. Don't do this:

Bottom text

#

1. Summarize proper use of “inline comments”. Explain some examples of good and bad inline comment style.

Use inline comments sparingly.

An inline comment is a comment on the same line as a statement. Inline comments should be separated by at least two spaces from the statement. They should start with a # and a single space.

Inline comments are unnecessary and in fact distracting if they state the obvious. Don't do this:

1. Which naming styles have you seen used on example code provided in class so far?

b (single lowercase letter)

B (single uppercase letter)

Lowercase

UPPERCASE

StudlyCaps

1. What is the recommended naming style for types and variables? Provide an example of a variable definition using this style.

Use the function naming rules: lowercase with words separated by underscores as necessary to improve readability.

Use one leading underscore only for non-public methods and instance variables.

To avoid name clashes with subclasses, use two leading underscores to invoke Python's name mangling rules.

Python mangles these names with the class name: if class Foo has an attribute named \_\_a, it cannot be accessed by Foo.\_\_a. (An insistent user could still gain access by calling Foo.\_Foo\_\_a.) Generally, double leading underscores should be used only to avoid name conflicts with attributes in classes designed to be subclassed.

1. What is the recommended naming style for function names? Provide an example of a function definition using this style.

Function names should be lowercase, with words separated by underscores as necessary to improve readability.

mixedCase is allowed only in contexts where that's already the prevailing style (e.g. threading.py), to retain backwards compatibility.

1. What is the recommended naming style for constants? Provide an example of a constant definition using this style.

Constants are usually defined on a module level and written in all capital letters with underscores separating words. Examples include MAX\_OVERFLOW and TOTAL.

Tic Tac Toe Assignment

* Work on completing as much of the “Tic Tac Toe” game as you can for Wednesday’s class
* Make sure that your code is formatted according to the above style guide recommendations.
* You may get ideas from other group members.
* You will demo and play your game code on Wednesday.