Hybrid 2 - Holy Wars

Recommended due date: October 5th

(two weeks)

Welcome to the world of Computer Programming. Now is the time for you to arbitrarily choose sides in a few of its many holy wars. But before you do, always remember that there are no rules in life, except the ones enforced by the compiler.

Tab Versus Space

You've been indenting your code, but do you know exactly how the indenting was done? If not, you might find yourself getting hit by both sides of the Tab Versus Space holy war.

The pros and cons of tab or space are often misunderstood. The following link can help you get started on this mystic journey: http://wiki.c2.com/?TabsVersusSpaces.
(Note: I don't expect you to read it completely).
(Note: some of the comments are misguided (especially when it comes to alignment)).

The instructor will demo briefly in class how to change your tab/space settings in Notepad++, and how to visualize the tab and spaces.

Naming Variables

Soon enough, you will want to name a variable using more than one word. The Java standard library uses a convention called **camel case**, where each words starts with a capital letter for class names. For variable names, the first word is in lowercase, but all other words starts with a capital letter. For example:

```
myName
studentId
veryLongVariableName
MyClassName
```

A lot of C programmers are use to separating words with **underscores** instead. The C++ standard library uses this style for classes too. For example:

```
my_name
student_id
very_long_variable_name
my_class_name
```

The Java's compiler rules for naming variable can be found at
https://docs.oracle.com/javase/tutorial/java/nutsandbolts/variables.html.

The following discussion link can help you get a feel on why some people prefer one style over the other: http://wiki.c2.com/?UnderscoreVersusCapitalAndLowerCaseVariableNaming.
(Note: again, I don't expect you to read it completely).

Coding Guidelines

When you start working as a programmer, one of your first-day tasks should be to familiarize yourself with the coding guidelines of your employer. Keep in mind that not all companies nor teams have guidelines though.

Pass an eye over (i.e. skim) the following guidelines from renown companies:

- Google javaguide.html
- Microsoft coding-conventions.html

1 Questions: Tab VS Space

1.1 Your Choice [3 pts]

From the little experience you have, **which** between tab or space are you planning to use for the next little while, **and why**? If that wasn't obvious, there are no right or wrong answers here, as long as you argue logically.

1.2 Google's Choice [2 pts]

Does Google recommend tab or space in it's guidelines for indentation? Look at **Section 2.3.1 Whitespace characters** and **4.2 Block indentation** of their guidelines.

1.3 Microsoft's Choice [1 pts]

What about Microsoft? See the **Layout Conventions** section of their guidelines.

2 Questions: Naming Variables

2.1 Your Choice [2 pts]

The next time you code and are faced with naming a variable, **how will you go about it and why**? There are no right or wrong answers here, as long as you argue logically.

2.2 Google's Choice [2 pts]

What does Google say to its employees? See **Section 5.2.7 Local variable names** their guidelines.

What to submit

- Submit your answer directly in Blackboard as text or through a .txt attachment.
- Your arguments must be informed. For example, if you claim to prefer tabs because that saves you on keystrokes, you haven't understood the problem.
- I'm expecting one or two sentences maximum per answers.
- Your arguments can be subjective. For example, you can claim that you prefer lowerCamel-Case over underscore because it's easier for you to read that style.