Java Programming Style Guide

**Naming Conventions:**

* Names representing packages should be in all lower case.
* All class and interface identifiers will use mixed case. The first letter of each word in the name will be uppercase, including the first letter of the name. All other letters will be in lowercase, except in the case of an acronym, which will be all upper case.
* Variable names must be in mixed case starting with lower case.
* Names representing constants (final variables) must be all uppercase using underscore to separate words.
* Names representing methods must be verbs and written in mixed case starting with lower case.

getName(), computeTotalWidth()

* Private class variables should have underscore suffix.

class Person

{

private String name\_;

...

}

* The name of the object is implicit, and should be avoided in a method name.

line.getLength(); *// NOT: line.getLineLength();*

* Abbreviations in names should be avoided.

**Formatting:**

* All indenting is done with spaces, not tabs. All indents are four spaces.
* Matching braces always line up vertically in the same column as their construct.
* All if, while and for statements must use braces even if they control just one statement.
* All method names should be immediately followed by a left parenthesis.
* Unary operators should be immediately preceded or followed by their operand.
* All casts should be written with no spaces.
* The keywords if, while, for, switch, and catch must be followed by a space.

if(hungry) // NO!

if (hungry) // YES!

* Avoid making lines longer than 120 characters. If your code starts to get indented way to the right, consider breaking your code into more methods.

**Comments**

* Javadoc comments should have the following form:

*/\*\**

*\* Return lateral location of the specified position.*

*\* If the position is unset, NaN is returned.*

*\**

*\* @requires X*

*\* @modifies Y*

*\* @effects Z*

*\*/*

A readable form is important because this type of documentation is typically read more often *inside* the code than it is as processed text.

Note in particular:

* The opening /\*\* on a separate line
* Subsequent \* is aligned with the first one
* Space after each \*
* Empty line between description and parameter section.
* Alignment of parameter descriptions.
* Punctuation behind each parameter description.
* No blank line bewteen the documentation block and the method/class.

Javadoc of class members can be specified on a single line as follows:

/\*\* Number of connections to this database \*/

private int nConnections\_;

* There should be a space after the comment identifier.

// This is a comment *NOT: //This is a comment*

/\*\* *NOT: /\*\**

\* This is a javadoc  *\*This is a javadoc*

\* comment  *\*comment*

\*/  *\*/*

* Use // for all non-JavaDoc comments, including multi-line comments.