

# Prof Bill's Java Coding Guidelines

*Last update: Apr 2015*

Your code must be organized, readable and easy to understand. Guidelines, not rules.

1. **Think, then code.** So important! Sketch out your plan on the back of a napkin, write some pseudo-code, draw UML, whatever, *before* you sit down in front of the tube.

2. **One** public class or interface per file - This is a Java convention.

3. Write **Javadoc** comments for each class and method - Javadoc is a standard. In Netbeans, start your comment with `/**` and hit enter... NetBeans will start a template for you.

4. Make **class variables** private or protected - This is a common object-oriented paradigm. Access to class variables is often provided by accessor (set) and mutator (get) methods.

5. Use **camel notation** for class, method, and variable names. This is a Java convention. Camel notation starts new words with an upper case letter. For example:

```
professorPayRaise.
```

6. **Capitalize** class, interface and package names. This is a Java convention. For example: `MonsterTruck.`

7. Use all **UPPER CASE** for constants, separating words with an underscore. This is a Java convention. For example: `DEATH_RAY_VOLTAGE.`

8. Use a consistent style for **spacing, indentation, and curly braces**. This makes your code more readable. The default on your IDE (like NetBeans) is probably fine.

9. Use **inline comments** to explain difficult sections of your code. This makes your work more readable and easier to understand.

10. Always use **curly braces** `{...}` around your code in if statements, else statements, for loops, and while loops... even if it's only one line of code.

This Wikipedia page is OK: [http://en.wikipedia.org/wiki/Coding\\_conventions](http://en.wikipedia.org/wiki/Coding_conventions)  
Search for Java. And the links at the bottom of the page are interesting as well.