

CSC207H CODE REVIEW CHECKLIST

This document contains a code review checklist. These are a subset of the items found on checklists posted on the web; they also happen to be the kinds of things that TAs look for in every course that involves coding.

All criticism must be constructive. Don't be rude; don't insult; don't be sarcastic. The point isn't to complain, it is to improve the code.

Style

- ☐ Are the variable, method, class, and package names named according to the standard Java rules?
- ☐ Are variable, method, and class names descriptive and meaningful?
- ☐ Are class names noun phrases?
- ☐ Are method names verb phrases?
- ☐ Are abbreviations avoided in instance and static variable names and in method names?
- ☐ Has the Eclipse Format command been used?
- ☐ Are chunks of code separated by blank lines to make them easy to identify?

Documentation

- ☐ Does every class, method, and instance variable — whether private or not! — have a Javadoc comment (starting with `/**`) that is written in clear language?
- ☐ Do methods have `@param` and `@return` tags?
- ☐ Can you write a call on each method based on *only* its Javadoc information? (If not, it needs to be rewritten.)
- ☐ Does the documentation match the code? (If not, which is incorrect?)
- ☐ Are there subsections of code that you don't understand? (If so, there needs to be more internal commenting, or refactoring to make the code cleaner.)
- ☐ Are comments written for other experienced programmers?
- ☐ Are there too many internal comments?

Design

- ☐ Are classes and functions small and focus on doing only one thing?
- ☐ Is there duplicate code?
- ☐ Are all instance variables `private`?
- ☐ Are boolean expressions clean and easy to read? (And don't compare to `true` or `false`?)
- ☐ Are any method bodies (from the opening brace to the closing one) longer than about 20 lines?
- ☐ Are there test cases for each `public` method?
- ☐ Are any getter methods giving unnecessary access to mutable instance or static data? (For example, a method that returns a `List` instance variable allows anyone to modify that list.)
- ☐ Are there methods that are not used?
- ☐ Is there a simpler, clearer design?