

CSc 1350: Introduction to Computer Science I for Majors

Preliminary Coding Conventions

We will follow these coding conventions and standards in this course. Additional conventions and standards will be introduced during the lectures.

1. Put full last name, first name, and course name in the Javadoc documentation along with other required details before the definition of each class in your project.
2. Strictly adhere to proper indentation within code blocks and avoid unnecessary use of `{}` and `()`.
3. Use descriptive names for variables, methods, explicit parameters using the camelcase convention. Also, class names should be nouns, in mixed case with the first letter of each word capitalized. If specific identifiers names are suggested in an assignment, they must be used.
4. Properly format output (including use of commas, colons, spaces, lowercase, uppercase letters, etc) as specified in the handouts. Never print anything unless there is a clear indication of what is being printed.
5. Avoid meaningless comments.
6. Make proper use of *print*, *println* and *printf*; Also, do not begin a print statement with the whitespace character: instead, end the preceding print statement with the whitespace.
7. When using decision statement, if possible, shorten the code by avoiding unnecessary tests. For example, do not use `<=` when `<` is the appropriate relational operator to use. Avoid the unnecessary use of *else*.

`x != y` is better than `(x < y) || (x > y)`

and,

<code>if (x == y)</code>		<code>if (x != y)</code>
...	is better than	...
<code>else</code>		<code>else</code>
...		...

8. Avoid the use of unnecessary half loops: that is, a loop whose body contains an *if* statement. If the *if* statement can be executed only once to achieve the same result, move it before or after the loop.
9. Avoid the use of *break*, *continue* and *exit* within loops.
10. Use a *for* rather than a *while* loop for iterative processes involving counter control.
11. Do not update the counter control variable of a *for* loop in the body of the loop. If you absolutely need to do so, replace the *for* loop with a semantically equivalent *while* loop.
12. Follow additional Java language coding style guidelines in Appendix L (p. 947) of the textbook.