
CSCE574 – Robotics

Spring 2014 – Comments on Coding Style

Coding style will form an important part of the evaluation criteria for the projects in the course. This document is a short summary of the sorts of things your instructor will be looking for.

1. **Don't repeat yourself.** Source code in which the same information appears in multiple places can be difficult to understand and, therefore, to debug.
 - (a) If you find yourself repeatedly copying and pasting a block of code, you should probably write a function to abstract that block.
 - (b) If your code contains explicit "magic numbers" that are repeated or copied from the documentation, you should probably replace those explicit numbers with named constants.
2. **Write for your audience.** The "audience" for your source code includes, as a minimum (a) you and your group members, (b) your instructor, and (c) your compiler. Therefore, your goal should be to write code that is easy for humans to read and understand. Important steps toward achieving this goal include:
 - (a) Using names that accurately describe the data or code that they name.
 - (b) Writing comments for each function and section of code explaining its purpose and clarifying anything that's not obvious about how it works.
 - (c) Using a consistent style for indentation and spacing, including indentation of nested blocks.

Lastly, please don't fall into the trap of writing bad code with the intention of "fixing" it meet these general guidelines after it works. By doing that, you'll experience the pain that goes with these constraints but miss out on the benefits.