# Standards (code and otherwise)

- often talk about code standards, but many teams also use document standards, version control standards, bug reporting standards, process standards, etc
- goal is to reduce confusion, errors, omissions in coding, writing, etc by having a consistent way "things should be done"
- trade off is a reduction in flexibility, and possibly creativity, for the people involved

## **Creating standards**

- The more detailed the standards are, the more difficult it is to create them, learn them, and ensure they are being followed
- Stricter/more detailed standards may also create greater friction with the people who have to learn/follow them
- Looking for a sweet spot the ideal tradeoff between improved comprehension/reliability and overhead and friction possibly caused by standards
- Different people will have different opinions of where that "sweet spot" lies

## **Enforcing standards**

- Different groups have different processes and levels of formality about enforcing standards
- May simply be self-policing, everyone try to stick to them
- May be basic peer review get another team member to read over what you write and give you standards feedback
- May be much more formal inspection process, we'll get into formal inspections later in the term

#### Documenting standards

- The longer/more detailed the standards are, the more important it becomes to have them well documented
- Need good indices, search tools, cross referencing so people can find the relevant standards quickly
- Need good examples of each aspect of the standards, so people can see what does/does not conform to standards
- Need good way to introduce new team members to the standards (not just throw an 80-page document at them and say "follow this")

#### Example: Google's C++ style guide

Extremely comprehensive guide

google.github.io/styleguide/cppguide.html

- Similar style guides for variety of languages: google.github.io/styleguide/
- Wide ranging and detailed, but difficult to learn it all
- Teams/groups often form their own standards by picking and choosing key items from other existing guides