C4GC: Contributing

Help us make the next decade better!

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Introduction

- C4GC = Core C++'s C++ Core Guidelines Corner
- The C++ Core Guidelines are opinionated - write better code!

We need your help!

Summary

- Getting Started
- Watch out for…!
- Open Issue and Pull Request
- Brace for disappointment
- Case Studies: Accepted

Getting Started

- You don't have to read the entire C++ Core Guidelines to help!
- Find what you want to fix (typo, inconsistency, or mistake) or add (fill in a missing guideline or a new guideline)
- Read `CONTIBUTING.md`

Watch out for…!

- The guidelines have a coding standard
- Format of guidelines
- Explain what to do, not just what <u>not</u> to do
- Be respectful! The goal is to make a great document together, and improve C++ development. Leave the ego at home.
  - This is hard to do. If you have any tips, talk to me!

Open Issue and/or Pull Request (1/2)

- Be patient! These are volunteers!
- Fixing a typo - just open a Pull Request
  - If you've never done this before on GitHub, it's not trivial, but not hard either
- Open an Issue to discuss what you want to add
- Reach an agreement on what should be added

Open Issue and/or Pull Request (2/2)

- Create a Pull Request with those changes
- The Travis CI will run tests. Fix any errors!
  - All code must compile
  - All words must be in the dictionary (including class and variable names)
  - Error:

    C.148 adding Reason and Example   ✗ b6132db

  - Good:

    Fixed the errors detected by Travis CI and @jwakely   ✓ cdf2e7e
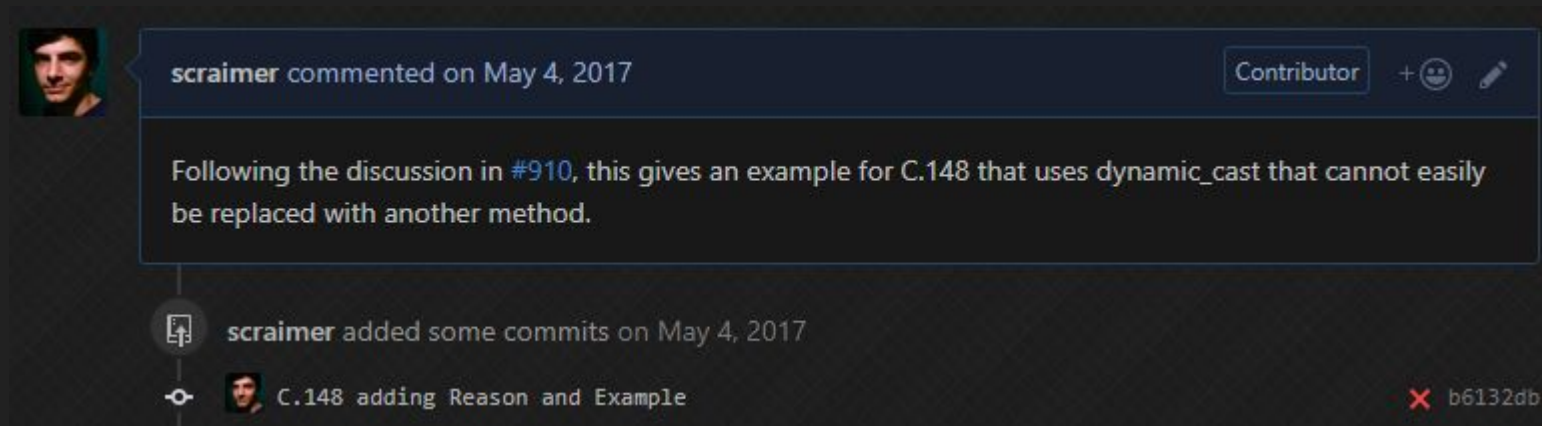
- It will either get merged, or reviewed for changes

Case Study: Accepted Change

- C.148: Use dynamic_cast to a pointer type when failure to find the required class is considered a valid alternative
- Opened Issue #910 to discuss removal - I was wrong!
- Opened Issue #917 to add "Reason" and "Example"

Some more discussion...

Finally, merged!

Summary

- We need your help!
- Be respectful and patient
- Post PRs and open Issues to start a discussion
- Some ideas became part of the standard!

end

Appendix: Links

C++ Core Guidelines on Github:

https://github.com/isocpp/CppCoreGuidelines/

CONTRIBUTING.md:

https://github.com/isocpp/CppCoreGuidelines/blob/master/CONTRIBUTING.md

Case Study: Rejected Change

- Per.11: Move computation from run time to compile time
- Opened Issue [#936](#) to fill it out

scraimer commented on May 25, 2017 · edited ▾   Contributor +☺ ✏

I've got a first draft for Per.11.
If anyone could spare some time to take a look and comment before I create a PR, it would be appreciated.

Here's the suggested changes
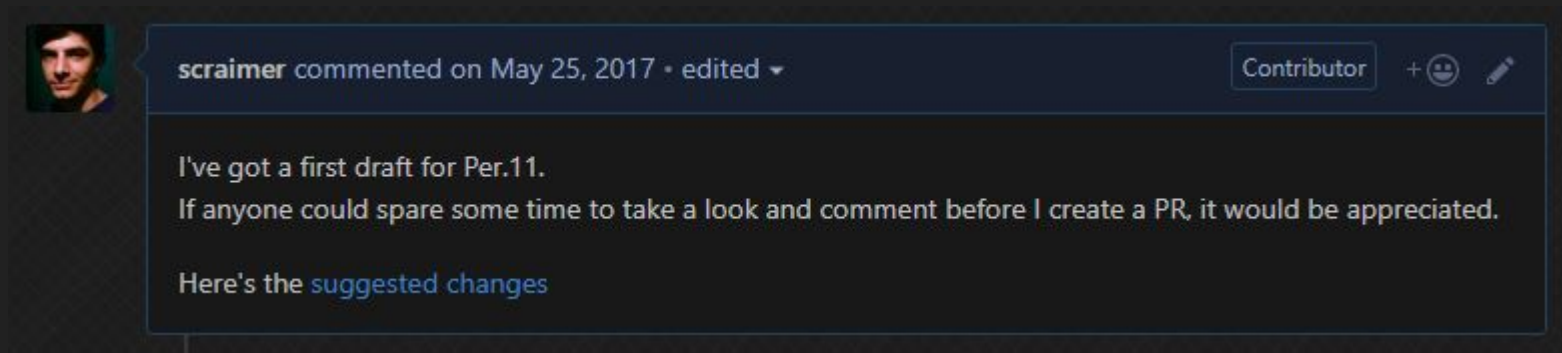
- Waited a day or so, no response
    - I was so impatient! Ugh.

Not an easy thing to review!

Case Study: Rejected Change

- Opened Pull Request [#940](#) to merge changes
  - Got a couple of responses, but not merge (accept) or reject.
- Nearly a month later, got a response:

AndrewPardoe commented on Jun 19, 2017   Contributor + 😊

Per our editor's discussion, saying "Write code that does **all** its computation during compile time" is a bit too radical. There are times where some cycles spent in execution are well worth the tradeoff in compile time and debugging complexity.

We appreciate the direction you've taken in starting this item. Bjarne would like to take a stab at writing this one up himself. Thank you, **@scraimer**!

👤 🖼️ **AndrewPardoe** assigned **BjarneStroustrup** on Jun 19, 2017

So I waited some more, to see what will happen.
Within six months, I got something:

Neat!

Who's going to see it?

- There are 1751 watchers
    - Only about 50 of them comment regularly
    - Only 199 committers!
- Reviewed most often by Andrew Pardoe and Jonathan Wakely
    - More dropped names: Herb Sutter, Gabriel Dos Rios, Titus Winters
- Assign to Bjarne Stroustrup (!)