

C++ Club UK Meeting 114

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2020-10-15

September 2020 mailing

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Select papers

- P2216R0 `std::format` improvements
- P2218R0 More flexible `optional::value_or()`
- P2219R0 Executors Issues Needing Resolution

Bjarne Stroustrup on “dead bodies of type theorists”

Reddit

I can't produce a link off the top of my head, but I remember Bjarne Stroustrup saying (on a few occasions, in a talk or a panel) that “non-type template parameters were introduced in C++ over the dead bodies of some type theorists” (quote from memory). This surprises me since types depending on values is a fundamental concept in Martin-Löf type theory which is older than C++. Does anyone have any knowledge on what feedback Bjarne Stroustrup received from type theorists?

Clang 11 released

- [Release Notes](#)
- [Reddit](#)
- [LLVM 11.0.0 Released - Here are some highlights for C/C++ developers](#)

New C++ features in GCC 10

RedHat :: Reddit

- Concepts
- Coroutines
- Unevaluated inline-assembly in constexpr functions
- Warning on deprecated comma expression in array subscript expressions
- Static structured bindings
- constexpr
- Deprecated volatile
- Conversions to arrays of unknown bound
- constexpr new and dynamic_cast
- The [[nodiscard]] attribute now supports an optional argument
- CTAD extensions
- Parenthesized initialization of aggregates
- **Modules are not yet supported, aiming for GCC 11**

Do you enforce Core Guidelines and/or use the Guidelines Support Library (GSL)?

Reddit

- C++ Core Guidelines
- Microsoft GSL
- GSL-Lite
- How to use the Core Guidelines checker in Visual Studio
- Reddit comment on VS2019 checker usage
- Thoughts on applying static analysis to a large code base (Reddit)
 - Thread on `[]` vs. `at()`, started by STL himself

- Videos
- Presentation materials (GitHub)

The Little Things: Speeding up C++ compilation

Article by Martin Hořeňovský

- [Reddit](#)
- [HackerNews](#)

Techniques

- Include less
- Forward declarations (*hmmm – GD*)
- Explicit outlining
- Hidden friends
- Link less
- Extern template
- **Modules** (*not mentioned... – GD*)

Tools

- [Include What You Use \(IWYU\)](#)
- [Ninja](#)
- [LLD](#)

`std::list::sort()` vs. `std::sort()`

Reddit

- Answer

Scott Meyers, *Effective STL*:

Item 44: Prefer member functions to algorithms with the same name.

COVID-19 Public Service Announcement



MIT CSAIL 

@MIT_CSAIL

Stay at 127.0.0.1
Wear a 255.0.0.0

8:52 PM · Oct 2, 2020 · TweetDeck

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