

C++ Club UK Meeting 117

Gleb Dolgich

2020-11-26

Beman Dawes



Reddit

WG21 Index

<https://wg21.link/index.html>



Hana Dusíková 🍊
@hankadusikova

↑ 7 Replies, 5 Quotes



You probably don't know, but the most impactful person on the C++ standardisation process is [@m_ou_se](#), [wg21.link](#) is her work. And today she made for me [wg21.link/index.html](#) with clickable links ❤️

22/11/2020, 12:48 (Sunday)

Twitter Web App

Trip report: Autumn ISO C++ standards meeting (virtual)

- Herb Sutter

C++ programming language: How it became the invisible foundation for everything, and what's next

- TechRepublic

Remember the Vasa and Mary Rose



Richard Smith
@zygoloid

↑ 3 Replies, 3 Quotes



C++ doesn't need to remember the Vasa. C++ needs to remember the Mary Rose, which sank after 33 years of successful service, likely due to too many inappropriate and badly-fitting features (lower gunports, extra weight, ...) being added as part of a renovation.

30/11/2020, 08:30 (Yesterday)

Twitter Web App

C++ rules of initialization

- N. Josuttis
 - [Reddit](#)

The C++ 20 initialization flowchart

- [Reddit](#)
 - [GitHub](#)
 - [PNG](#)

Detecting Uninitialized Variables in C++ with the Clang Static Analyzer

- Acta Cybernetica
 - PDF
 - Reddit

The most evil C++ code

Reddit: What was the most evil C++ code you have seen in a production environment?

Error codes are far slower than exceptions

- Lords of Tech
 - Reddit

C#-like events in C++

Reddit

(Unrelated: [Variable name prefixes](#))

- [Code on Pastebin](#)
- [Signal-Slot library benchmarks](#)
- [Boost.Signals2](#)

Uses of immediately invoked function expressions (IIFE) in C++

- Erik Rigtorp
- Jonathan Müller

Overloading by Return Type in C++

Philip Trettner

- Reddit

```
1 struct to_string_t {  
2     std::string_view s;  
3  
4     // int from_string(std::string_view s);  
5     operator int() const;  
6     // bool from_string(std::string_view s);  
7     operator bool() const;  
8 };  
9  
10 int i = to_string_t{"7"};  
11 bool b = to_string_t{"true"};
```

The Defold game engine code style

Article

Code style

- C-like C++
- No classes (*huh? – GD*)
- No exceptions
- No STL
 - Custom containers
- Data ownership tracking
- C++98

(It's the end of 2020, by the way. – GD)

A Buffers Library for C++20

Colby Pike

vcpkg: Accelerate your team development environment with binary caching and manifests

Microsoft

- [Reddit](#)

Related

Why is it such an abysmal pain to use libraries in C++ compared to pretty much anything else?

Raymond Chen on structured bindings

- Structured binding may be the new hotness, but we'll always have `std::tie`
 - [Reddit](#)
- How to add C++ structured binding support to your own types
 - [Reddit](#)

dont_deduce

- artificial::mind
 - Reddit

C++11

```
1 template <class T> struct foo_t { using type = T; };  
2 template <class T> using foo = typename foo_t<T>::type;
```

C++20

```
1 template <typename T>  
2 auto operator+(  
3     vec3<T> const& a,  
4     std::convertible_to<T> auto const& b  
5 ) -> vec3<T>;
```

Calendar and Time-Zones in C++20: Time of Day

Rainer Grimm

FTL - A functional template library for containers processing in C++

- [GitHub](#)
 - [Reddit](#)

FTL is a C++17-based library that provides a more convenient API for collections processing. The API is heavily inspired by the Rust programming language.

```
1 const auto totalVolume = cityTrees.iter()  
2   .filter([](c onst auto &tree) { return tree.kind ==  
   Tree::Oak && tree.diameter > 25; })  
3   .map([](const auto &tree) { return tree.volume(); })  
4   .sum();
```

Compiling C/C++ on Apple M1

- Boris Kolpackov
 - [Reddit](#)

A Small Open Source Game In C++

- Preshing
 - Reddit
 - GitHub

That tongue animation :-)

Linux developer going Windows

- Reddit

BinOpt — A Library for Self-guided Runtime Binary Optimization

- [GitHub](#) (LGPLv2.1+)

Easily currying functions in C++

- **Reddit**

```
1 // Existing, non-curried function
2 auto f(int a, int b, int c) noexcept -> int {
3     return a * b * c;
4 }
5
6 auto g = fn::curry(f); // g is the curried form of f
7
8 int main() {
9     return g(2)(5)(10); // returns 100
10 }
```

Cheerp 2.6 rc1: C++ compiled for the Web

- Carlo Piovesan

Interactive C++ with Cling

- LLVM Blog

C++ executors

- **Reddit**
 - CppCon 2019: Eric Niebler, David Hollman “A Unifying Abstraction for Async in C++”
 - A Unified Executors Proposal for C++ | P0443R14
 - libunifex (Facebook)

Conditionally Trivial Special Member Functions

- Sy Brand
 - Reddit

repr: return printable value

- GitHub
 - Reddit

Twitter on editor themes

