

C++ Club Meeting Notes

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2019-11-21

[Podcast page](#)

[YouTube](#)

- Bryce Lebach via Reddit
- Botond Ballo
 - Reddit
 - Papers on GitHub
- Timur Doumler via CppCast
 - Reddit
- Ben Craig via Reddit
- Guy Davidson
 - Reddit

- [Stephan T. Lavavej](#)
 - [Reddit](#)

I've maintained this distro for over 14 years, and I still don't serve ads, sell anything, or accept donations.

- [GCC 9](#)

Sourcetrail is now free and open-source software

[Blog post](#)

[GitHub](#)

[Reddit](#)

When is it justified to use C++ for a project?

Reddit (1), Reddit (2)

Is it time for a rebased Boost2 that assumes C++20 as its starting point?

Reddit

TL;DR: No.

Corentin Jabot

P0443R11 The Unified Executors Proposal

Eliminating the Static Overhead of Ranges

Colby Pike — [Reddit](#)

Without ranges

```
1 vector<string> child_names;
2 for (auto& person : all_people) {
3     if (person.age < 14) {
4         child_names.push_back(person.name);
5     }
6 }
```

With ranges

```
1 auto children_names =
2     all_people
3     | filter([](const auto& person) { return person.age < 14; })
4     | transform([](const auto& person) { return person.name; })
5     | to_vector;
```

- [Wikipedia](#)
- [We don't need no stinking expression templates](#) by Andy G
 - [Reddit](#)

Change standard containers' `size()` method to return signed integer?

Reddit

Is requiring lambdas to explicitly list what they capture a good coding standard?

Reddit

The arrow operator (1/2)

StackOverflow:

The operator-> has special semantics in the language in that, when overloaded, it reapplies itself to the result. While the rest of the operators are applied only once, operator-> will be applied by the compiler as many times as needed to get to a raw pointer and once more to access the memory referred by that pointer.

The arrow operator (2/2)

```
1 struct A { void foo(); };
2 struct B { A* operator->(); };
3 struct C { B operator->(); };
4 struct D { C operator->(); };
5 int main() {
6     D d;
7     d->foo();
8 }
```

Thanks to Martin Waplington for suggesting this.

P1930R0

Reddit

Robert Ramey:

The value of a paper like this would be to narrow the scope or domain of a problem to something that would be useful component in solving bigger problems. This paper does the opposite – expanding the domain to encompass the whole world of physics.

C++ `std::string_view` for better performance: An example use case

Article

Reddit

Arthur O'Dwyer: `std::string_view` is a borrow type

Borrow types are essentially “borrowed” references to existing objects. They lack ownership; they are short-lived; they generally can do without an assignment operator. They generally appear only in function parameter lists; because they lack ownership semantics, they generally cannot be stored in data structures or returned safely from functions.

cppreference: `std::basic_string_view` (C++17)

Scott Meyers's guideline "Make non-leaf classes abstract"

Reddit



JF Bastien @jfbastien

Today's episode of "something I didn't know about C and C++":

```
int size() {  
    struct empty {};  
    return sizeof(struct empty);  
}
```

This code returns 0 in C and 1 in C++, because empty structs have different size in both languages. 🙄

🗨 thread

20w • 21/02/2019 • 20:33

Hello World with C++2a modules

Arthur O'Dwyer

Here's how to build a "Hello world" program using Clang's implementation of C++2a Modules, as it currently stands as of November 2019.

Reddit

Beginner's Guide to Linkers

<http://www.lurklurk.org/linkers/linkers.html>

```
1 g++ -o test1 test1a.o test1b.o
2 test1a.o(.text+0x18): In function 'main':
3 : undefined reference to 'findmax(int, int)'
4 collect2: ld returned 1 exit status
```

If your reaction to this is 'almost certainly missing extern "C"' then you probably already know everything in this article.



Victor (🔧) Zverovich @vzverovich

TDDD - technical debt driven development

5h • 17/10/2019 • 14:50



Ellen Ullman:

We build our computer (systems) the way we build our cities: over time, without a plan, on top of ruins.