C++ Club UK Meeting 120

Gleb Dolgich

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Perhaps it's time for a more opinionated dialect of C++

- Reddit
- Should I litter my code with (the correct) attributes for every function, or just leave it pretty?

Latest C++: theory vs. reality

- Reddit
 - Godot game engine C++ standard thread on GitHub

David Friberg - Three interesting minor features of C++20

- YouTube
- Slides

mocxx: a versatile C++ function mocking framework based on Frida, by Guardsquare

No macros! Doesn't support mocking virtual functions yet.

- Reddit
 - GitHub (C++17, GPL-3.0)
 - Frida Dynamic instrumentation toolkit for developers, reverse-engineers, and security researchers
 - Explanatory blog post at Guardsquare

Compile 1 Million Lines Of C++ In \sim 2 Minutes With A 16 Core Ryzen 9 5950x

- Embarcadero
 - Reddit

I love how a shitty, bug-ridden development environment that costs US\$1359 for the most basic edition still requires you to buy a separate US\$139 extension to enable parallel builds, a standard feature available on practically every other closed and open source compiler and build system out of the box for \$0 extra.

Dev-C++

A fast, portable, simple, and free C/C++ IDE for Windows, built in Delphi

GitHub

Using std::list::splice to implement a LRU cache

- Article on nextptr
- std::list::splice

What should the state of a moved-from object be?

- Raymond Chen
 - Reddit

Reducing Memory Consumption in Visual Assist

- Blog post
 - Reddit

dont_deduce<T>

- 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>;
```

Writing a custom iterator in modern C++ (C++17)

- Article
 - Reddit

C++ for Swift developers

- Sidharth Juyal
 - Reddit

Wrapping C++ for use in Swift

Reddit

Is Zero a Butterfly?

- Shafik Yaghmour
 - Reddit

std::optional and other useful types

Reddit

If you were allowed to make breaking changes to the C++ specification, what features would you modify/replace/remove to make the language better?

Reddit

EnTT 3.6.0

Gaming meets modern C++ - a fast and reliable entity component system (ECS) and much more.

- Announcement on Reddit
 - GitHub (C++17, MIT)

With std::variant, you choose either performance or sanity

Reddit

MSVC build performance

- Improving code generation time with C++ Build Insights
- Faster C++ builds, simplified: a new metric for time
- The Coalition Sees 27.9X Iteration Build Improvement with Visual Studio 2019
- Faster C++ Iteration Builds
 - Reddit
- C++ Build Analyzer
 - C++ Build Insights SDK

Infix Function Calls with Boost HOF

- Jo Boccara
 - Reddit

Before

```
1 const bool b = isPrefixOf(prefix, text);
```

After

```
1 const bool b = prefix <isPrefixOf> text;
```

Polymorphism Decision Table

Kilian Henneberger

Tracy Profiler

A real time, nanosecond resolution, remote telemetry, hybrid frame and sampling profiler for games and other applications.

Tracy supports profiling CPU (C, C++11, Lua), GPU (OpenGL, Vulkan, OpenCL, Direct3D 12), memory, locks, context switches, per-frame screenshots and more.

GitHub

StackOverflow



Carla Notarobot @ @ @CarlaNotarobot





Boss: Where did you get this code?

Me: Stack Overflow

Boss: From the questions or the answers?

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