# C++ Club Meeting 104

Gleb Dolgich

2020-04-16

### Follow-up: How I Declare My class And Why, by Howard Hinnant

- Howard Hinnant
- Reddit
- Coding guidelines

#### Order:

- · data members
- destructor
- · default constructor
- · copy special members
- · move special members
- · other constructors
- · other member functions

# Follow-up: References, simply, by Herb Sutter

- Herb Sutter
- Reddit

#### Welcome back to C++ - Modern C++

- Microsoft
- Reddit

### **Epic 10-hour C++ port of Doom**

• YouTube video by Jason Turner

## Elements C++ GUI library, by Joel de Guzman

- Home
- GitHub (C++17, MIT)

### {fmt} V6.2.0

- GitHub
- Reddit

#### **Continuable V4.0**

C++14 asynchronous allocation aware futures (supporting then, exception handling, coroutines and connections), by Denis Blank

- GitHub (C++14, MIT)
- Docs
- Reddit

### IceCream-Cpp

Sweet and creamy print debugging. C++ flavored, by Renato Garcia

- GitHub
- Reddit

#### The C++ Lifetime Profile: How It Plans to Make C++ Code Safer

Daniel Martin

#### The C++ rvalue lifetime disaster, by Arno Schödl

- Video
- · Article by Arthur O'Dwyer
- Reddit

See also: Abseil Tip of the Week #107: Reference Lifetime Extension

```
std::string Foo::GetName();
const std::string& name = obj.GetName(); // Is this safe/legal?
```

#### A new decade, a new tool: libman

- Colby Pike (vector-of-bool)
- Reddit
- GitHub
- Specification

**libman** is a new level of indirection between package management and build systems.

dds is Drop-Dead Simple build and package manager.

CppCon 2019: Robert Schumacher "How to Herd 1,000 Libraries"

### "Making new friends" idiom by Dan Saks

#### Wikibooks

The goal is to simplify creation of friend functions for a class template.

```
#include <iostream>
   template<typename T>
   class Foo {
4
      T value:
   public:
      Foo(const T& t) { value = t; }
6
      friend std::ostream& operator <<(std::ostream& os, const Foo<T>& b)
8
9
         return os << b.value;</pre>
10
```

#### **Book: The C++ Annotations, V11.4.0**

- C++ Annotations Version 11.4.0, by Frank B. Brokken
- Reddit 1
- Reddit 2

#### **Twitter**



# Tim Myers @denvercoder tuple = (1, 2) threeple = (1,2,3)

fourple = (1,2,3,4)

let's make this happen people.

22h • 27/01/2020 • 17:39



thread

22h • 27/01/2020 • 17:44 •