C++ Club Meeting Notes

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CMake 3.12.0

- Announcement
  - Reddit
- Book: Professional CMake – $30
  - Reddit

MSVC Preprocessor Progress towards Conformance

- MSVC blog post
  - Reddit

- ▶ Guy Davidson's blog
- ▶ Reddit thread
- ▶ CppCast episode

Four Habit-Forming Tips to Faster C++

Post by KDAB

1. Make use of the (named-) return-value optimisation
2. Return parameters by value whenever possible
3. Cache member-variables and reference-parameters
4. Organize your member variables intelligently

Post

web_view

- P1108R0
  - Reddit

This paper proposes a `web_view` facility for the C++ standard library. This facility enables modern, natural, multimodal user interaction by leveraging existing web standards and technologies.

Full C++17 Filesystem Library Guide

Part of the book C++17 – The Complete Guide by Nicolai Josuttis
(Draft available now)

In-Place Construction for std::any, std::variant and std::optional

- ▶ Post by Bartek Filipek
- ▶ Reddit

C-Rez: A small tool to generate C arrays of data from a list of input files

- Code (MIT)
  - Reddit
- p1040R0 std::embed by JeanHeyd Meneide
  - Implementation

Book: The Modern C++ Challenge

- Review by Scott Meyers
- Book page (Packt)

- Post by B. Filipek

C++17: std::string_view

- Post

- CppReference

C++17 in libsigc++ : `invoke`, `apply`, and `constexpr if`

- ▶ Post
- ▶ Code (LGPL)
- ▶ Docs

libsigc++ implements a typesafe callback system for standard C++. It allows you to define signals and to connect those signals to any callback function, either global or a member function, regardless of whether it is static or virtual.

Unity ("jumbo") builds

AKA: amalgamated, or Single Compilation Unit (SCU) builds.

- ▶ A Guide to Unity Builds by Viktor Kirilov
- ▶ Support for Unity (Jumbo) Files in Visual Studio 2017 15.8 (Experimental)
- ▶ Chromium instructions and GoogleDoc
- ▶ Reddit
- ▶ Other tools:
    - ▶ CMake cotire and Unity Build macro
    - ▶ FASTBuild
    - ▶ Meson
    - ▶ waf
    - ▶ RudeBuild plugin for Visual Studio

Coding Guideline: Avoid const member variables

Reddit

Article

Variadic CRTP

- Steve Dewhurst
- Jonathan Boccara
    - Reddit thread