C++ Club UK

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ACCU 2019

- ACCU 2019 Slides and Trip Report by Anthony Williams
- ► Trip report by Ori Ben-Shir (a Rust developer)

C++17/20 Features and Fixes in Visual Studio 2019

- https://devblogs.microsoft.com/cppblog/cpp17-20-features-and-fixes-in-vs-2019/
- https://www.reddit.com/r/cpp/comments/bf3fmk/c1720_features_and_ fixes_in_visual_studio_2019/

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (1/9)

https://youtu.be/HBulBa0EqYQ

How have you seen the embedded systems industry change over the last 20 years?

The ubiquity of embedded systems (in 2008!)

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (2/9)

https://youtu.be/HBuIBa0EqYQ

What would you say is the most difficult aspect of your work with C++?

Combining flexibility with performance is hard, especially when you have to remain backward compatible.

C++ had \$5000 over 3 years of advertisement budget.

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (3/9)

https://youtu.be/HBuIBa0EqYQ

If you were starting off in the industry today, what would you want to invent, and why?

Better support for hard realtime constraints, reliability, concurrency. A combination of language and tools, compilation and execution techniques. Perhaps a subset of a general-purpose language, or a subset of C++ (1/10 in size).

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (4/9)

https://youtu.be/HBuIBa0EqYQ

Are there any aspects of C++ that you wish you could change?

- C++ syntax is baroque (some decisions were made because the C compiler had to fit in 48K memory)
- Inside C++ there is a smaller language (1/10 in size)
- Scope, RAII
- Classes, templates would still be there

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (5/9)

https://youtu.be/HBulBa0EqYQ

Did you ever imagine that C++ would become so important?

Performance still matters.

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (6/9)

https://youtu.be/HBuIBaOEqYQ

Is there any reason for a competent programmer to use C when a C++ compiler of comparable quality is available for a target platform?

No.

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (7/9)

https://youtu.be/HBuIBa0EqYQ

What's your opinion on the embedded C++ subset?

- A bad idea. No templates (?!)
- Need rules specific for the area.
- > Start with a superset (language + libraries), then cut off unnecessary things.
 - JSF was mentioned!
- In a hard realtime environment:
 - Don't rely on a general-purpose free store manager
 - Be very careful with C pointers

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (8/9)

https://youtu.be/HBuIBa0EqYQ

What's next after C++?

C++ will be around as a major factor for another 20 years at least. Next generation (C++0x) will be finished in a couple of years. It will be a significant improvement.

Teaching, writing a book for beginners. Researching tools and techniques.

Work on C++0x will wind down over the next few years. (!!)

Bjarne Stroustrup 2008 interview for Embedded Systems Conference keynote (9/9)

https://youtu.be/HBuIBa0EqYQ

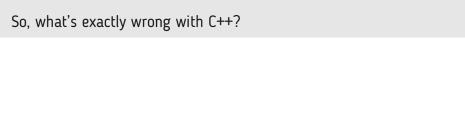
Which programming techniques and language features are the most important?

With C++ you combine different techniques and features to solve the problem. This will improve with C++0x.

With hard realtime constraints we shouldn't use free store or exceptions ("I'm very sad"), given the tools we have today.

Interactive C++: Meet Jupyter / Cling - Neil Horlock [ACCU 2019]

https://youtu.be/UzfYG8GdB3I



https://www.reddit.com/r/cpp/comments/bfia2h/so_whats_exactly_wrong_with_c/

Why is std::move not [[nodiscard]] in C++20?

https://stackoverflow.com/questions/55772424/why-is-stdmove-not-nodiscard-in-c20

Twitter



Twitter

Greg Ferro:

An engineer who works remotely should be called an 'engifar'

Twitter



Jason Karns @jasonkarns

Bought a mechanical keyboard with more resistance so my code will be strongly typed.

7,901 Likes 27 Mar 2019 at 19:23 1,940 Retweets

via Twitter for iPhone