

# Welcome!

## CORE C++: BUILD TO LAST

2022-Feb-23

LI

[corecpp.org](https://corecpp.org)

# Core C++ Goals









Since  
November 2017

- ▶ 4+ Years!
- ▶ Israeli C++ dev community
- ▶  JLM    TLV
- ▶ Diverse community
- ▶ Focus on C++
- ▶ Monthly meetings
- ▶ Beginner *and* Expert Levels



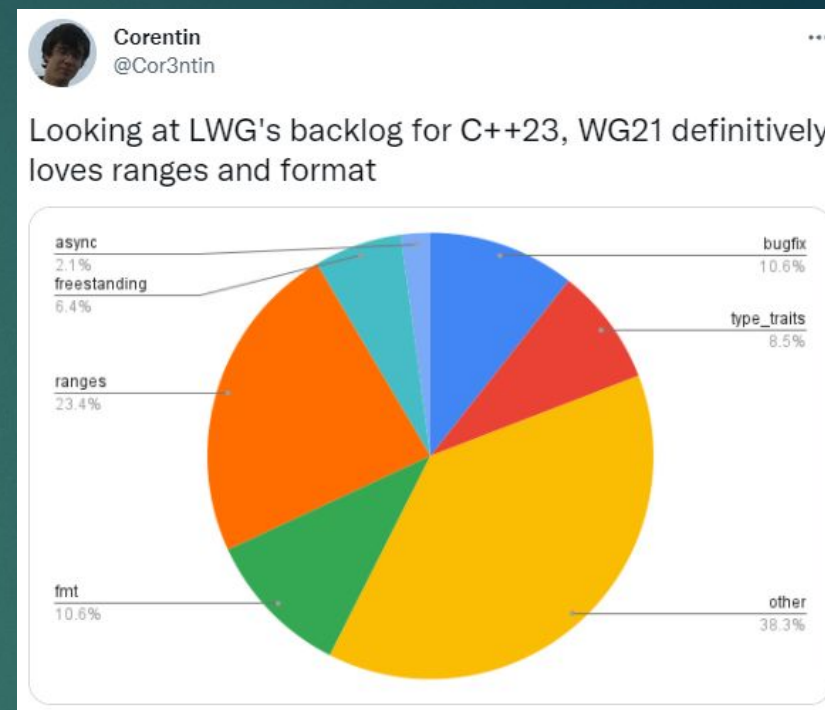


# Presence

- ▶ Meetup: [meetup.com/CoreCpp](https://meetup.com/CoreCpp) 
- ▶ YouTube: [CoreCppIL goo.gl/FYnqKu](https://www.youtube.com/channel/UCvYnqKu) 
- ▶ Web: [corecppil.github.io/Meetups](https://corecppil.github.io/Meetups) 
- ▶ Twitter: [@corecpp twitter.com/corecpp](https://twitter.com/corecpp) 
- ▶ C++ Slack: [#ug\\_il\\_corecpp](#), [#israel\\_national\\_bo](#) 
- ▶ Facebook: [facebook.com/corecpp](https://facebook.com/corecpp) 

# C++23 (Library)

- ▶ Standard Modules (std, std.all)
- ▶ ~~std::execution~~ (AKA Executors)
- ▶ std::generator (using coroutines)
- ▶ std::expected (Boost.outcome)
- ▶ Formatting ranges (including existing containers)
- ▶ More Ranges: zip, cartesian\_product, join\_with, etc.
- ▶ More Containers: mdspan (multidimensional array), flat\_set, etc.
- ▶ More Type Traits: Reference Binding To Temporary, hash\_enabled<T>etc.



# Census

- ▶ *Meet Your Neighbor Survey*
  - ▶ 30 sec. to fill the form...
- ▶ [shorturl.at/mpzTX](http://shorturl.at/mpzTX)







# Cool C++ Tricks!

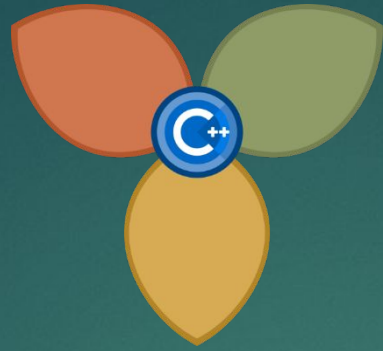
- ▶ C++ Cheat Sheet:  
[https://hackingcpp.com/cpp/cheat\\_sheets.html](https://hackingcpp.com/cpp/cheat_sheets.html)
- ▶ C++20/17 Cheat Sheet (Bartlomiej Filipek):  
<https://dev.to/fenbf/c-20-cheatsheet-with-examples-440g>
- ▶ C++ Core Guidelines (Bjarne & Herb):  
<http://isocpp.github.io/CppCoreGuidelines/CppCoreGuidelines>
- ▶ Doxygen all the things!
  - ▶ <https://llvm.org/doxygen/>
  - ▶ <https://clang.llvm.org/doxygen/>



# Cool C++ Tricks!

- ▶ Compiler's support:  
[https://en.cppreference.com/w/cpp/compiler\\_support](https://en.cppreference.com/w/cpp/compiler_support)
- ▶ Isocpp SD-FeatureTest (feature test macros) (SG10, Barry Revzin):  
<https://isocpp.org/std/standing-documents/sd-6-sg10-feature-test-recommendations>
- ▶ Awesome C++:  
<https://fffaraz.github.io/awesome-cpp/>
- ▶ Modern-cpp-features (AnthonyCalandra):  
<https://github.com/AnthonyCalandra/modern-cpp-features>
- ▶ Wiki!:  
<https://en.wikipedia.org/wiki/C%2B%2B23>

# Agenda



19:00 Welcome notes, Inbal Levi

19:15 Dockerized build environments for C/C++  
projects, Dima Danilov

20:00 Show and Tell