

CAPHYON ⚡ **LIGHTNING TALKS**

Compiler Explorer

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What is Compiler Explorer ?



Matt Godbolt

Compiler Explorer is an *interactive* tool that lets you type code in one window and see the results of its compilation in another window.

<https://github.com/mattgodbolt/compiler-explorer>

What is Compiler Explorer ?

The left-hand pane shows editable `C`, `C++`, `Rust`, `Go`, `D`, `Haskell`, `Swift` and `Pascal` code.

The right, the assembly output of having compiled the code with a given compiler and settings.

Multiple compiler versions are supported for each language.

<https://godbolt.org>

GODBOLT ALL THE THINGS !!!



<https://godbolt.org>



Demo Time



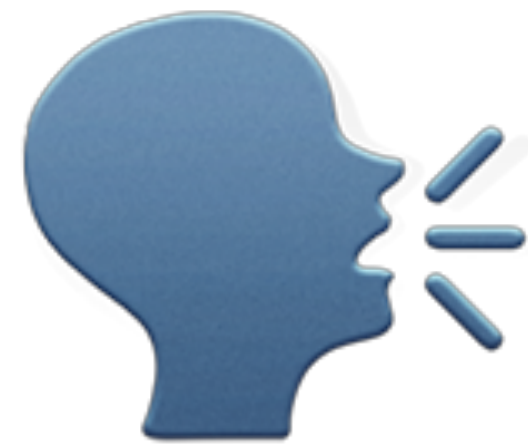
Demo Highlights

- * overview of UI
- * supported languages
- * supported compilers (including **trunk** daily builds)
- * compiler switches
- * code <> assembly highlight
- * tooltips for ASM instructions
- * load/save examples
- * Eg. `sum_over_array`
 - * `-O2 gcc 7.3`
 - * compare with `-O3`
- * filters for compiler output: `.text` `.LX0` `//` `\s+` `Intel` `Demangle` `11001`

Demo Highlights

- * add new compiler (eg. side-by-side MSVC, Clang)
- * Difference view
- * Output pane (errors, warnings); custom split layout
- * builtin libraries (Boost, GSL, {fmt}, Google Benchmark, Abseil, range-v3, etc)
- * experiment with libs with zero config. eg. `#include <boost/lexical_cast.hpp>`
- * Clang AST output
- * dependency graph view
- * gcc optimization passes
- * Conformance view
 - * clang 4.0.1 5.0
 - * gcc 6.3 7.3
 - * `-std=c++17`

Questions



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