

# Compiler Architecture Presentation

CSC 7351, Fall 2018

Select an open-source compiler and give a presentation about the software architecture of the compiler. Please, schedule your presentations within the two weeks following the midterm, i.e., no later than October 24. We can only fit two or three presentation in one class period.

Many open-source compilers have well-documented parse tree and intermediate code data structures as well as online material describing them. Compile any information you can find about the compiler of your choice and give an approximately 15 minute presentation about its software architecture.

Examples of open-source compilers include GCC, Oracle javac, LLVM, Mono, Polyglot Compiler, ROSE Compiler, and Open64. For a larger list of compilers, look up "List of compilers" on Wikipedia.

For the software architecture, present which, if any, lexical analyzer and parser generator tools are used, describe the structure of the parse tree node and intermediate code data structures, and how the compiler passes (tree traversals) are written.

Please, coordinate with your class mates that you don't present the same material. For large compilers with multiple frontends and backends (such as GCC and LLVM), it might work to have two presentations about the same compiler if you coordinate who presents which part.

## **Submission**

Please, email me a copy of your slides after your talk.