Design decisions: Milestone 1

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1   Language choice

We initially considered C, Java, and Python as potential implementation languages, based on our shared familiarity with them. We decided not to use C because of the extra development costs incurred by using a language without features like memory safety. We opted for Java over Python because we judged there to be resources for compiler development available.

2   Tool choice

We decided to use SableCC 3 because it made it easy to implement a full scanner/parser toolchain with utilities for AST traversal, and because there was in-class support for it. This was very useful, for instance, in the case of semi-colon insertion.

That choice determined most of the design for the scanner, parser, and for the weeder, which we implemented with one depth-first AST traverser.