

CS335 Milestone 1

1 Description

Using Lex and Bison, we developed a scanner and parser that accepts any Java program as input and outputs a DOT script representing the abstract syntax tree. The DOT script, when processed by the Graphviz tool called dot, will produce a postscript file with the diagram of the parse tree. We incorporated the scanner and parser specifications that are stated in the issue statement.

To compile and execute lexer and parser, use the following commands -
bison -dtvg parser.y
flex lexer.l
g++ -w lex.yy.c parser.tab.c -o out

We have also implemented some extra features and 10 java programs for testing -

- The parser works for multidimensional arrays (more than 3). The test case 4 has the following feature.
- The parser also supports try and throw statements. The test case 8 is an example.
- The parser also supports generics. Test case 8 is an example.
- The parser also supports record and enum classes. Test case 3 is an example