Milestone 1

Group Id 18
CS335

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Tools Used

Lexer - Lex is a program designed to generate scanners, also known as tokenizers, which recognize lexical patterns in text. Lex is an acronym that stands for "lexical analyzer generator." It is intended primarily for Unix-based systems.

Parser Yacc - YACC stands for Yet Another Compiler Compiler. YACC provides a tool to produce a parser for a given grammar. YACC is a program designed to compile a LALR (1) grammar. It is used to produce the source code of the syntactic analyzer of the language produced by LALR (1) grammar. The input of YACC is the rule or grammar and the output is a C program.

Graphviz - Graphviz is open source graph visualization software. Graph visualization is a way of representing structural information as diagrams of abstract graphs and networks. It has important applications in networking, bioinformatics, software engineering, database and web design, machine learning, and in visual interfaces for other technical domains.

Instructions for Compilation and Execution

Explanation of commands :

lex lexer.l // lexical analysis to create tokens
yacc -d parser.y // parses the tokens recieved from lexer
g++ lex.yy.c y.tab.c -ll -o parser // to run the parser and lexer output files together to generate the parser
the above 3 commands are included in make
./src/parser tests/test_1.java // for each specific testcase to create a dot file
dot -Tps tests/test_1.dot -o tests/test_1.ps // to generate graph
Commands to run - :
chmod +x make.sh
./make.sh
./src/parser tests/test_1.java
dot -Tps tests/test_1.dot -o tests/test_1.ps