

CSC 254 Project II

Scanner/Parser

Due Date: Friday Oct 10th, 2003, noon.

This project is the first in the series of projects that you have to implement in order to build a compiler for 'C-', a variant of 'C'. Your compiler will scan, parse, type check, and eventually generate Java byte code from input C- programs. In this project, you will implement the compiler front end (scanner & parser) for C-.

Getting Started

To get the materials for this project, download them from the class web page. On the csug machines, type the following line to copy over the files.

```
cp -r ~cs254/proj2 ~/proj2
```

Look at the file README for more detailed directions and hints.

Requirements

Lexical Analyser The lexical analyser should identify the keywords, operators, identifiers, strings, constants, and other necessary characters correctly. You have to generate the lexical analyser using JLex, the java lexical analyzer generator. The JLex specifications are very similar to the lex specifications. In addition, you will need to support C++ style comments.

Parser The parser is generated using the java parser generator, CUP. CUP specifications are similar to yacc/bison. You will be required to insert error tokens to provide informative error messages for several common errors.

Submission Instructions

You can turn in your assignment using the TURN_IN script. To use TURN_IN, add the following line to your .login file.

```
alias TURN_IN ~cs254/bin/TURN_IN
```