

CPSC 4660 PL Scanner

Steven Deutekom
Ricky Bueckert
University of Lethbridge

January 27, 2020

1 Contributions

The entire class contributed equally on this project. We discussed the design and then split up the classes. Once we started the implementation there was a lot of communication to decide on how each peice of the Scanner should work. There was also a lot of collaboration deciding on what to put in our test files and debugging when the tests exposed flaws.

2 Files Included

2.1 Header Files

- Symbol.h
- SymbolTable.h
- Token.h
- Scanner.h
- Administration.h

2.2 Source Files

- plc.cc
- SymbolTable.cc
- Token.cc
- Scanner.cc
- Administration.cc

2.3 Test Files

- fullTabTest.pl – Tests making the symbol table full
- keywordTest.pl – Tests each of the valid keywords
- maxNumTest.pl – Tests numbers and makes sure integer overflow is detected
- errorTest.pl – Tests other errors and Test that after 10 errors we quit execution
- scannerOfficialTest.pl – Test a PL program from the Brinch Hanson textbook

3 Compiling and Running

1. Navigate into the project folder and type the following:

```
\$ make compiler
```

2. This will create a binary called **compiler** that can be run with the following command:

```
\$ compiler <testfile-path> -o <output-file>
```

3. If you omit the <output-file> option the tokens will be output to a file called `pl.out`

4 Bugs

None. That we know about.

5 Time Spent

30 total hours spent on this project if you count all group member contributions.