

Kelsey O'Brien

March 6, 2014

Senioritis Project 1 Write Up

I included 8 test programs as buttons in my project. Some provide errors and other show successful lexing and parsing.

1. **Lex Error:** attempts to parse characters (!@#...) that are unknown tokens. The lexer catches these errors and displays a message outlining what the unknown tokens are and what line they can be found on.
2. **Variable Declaration:** Successfully lexes and parses a variable declaration.
3. **Variable Declaration Error:** attempts to declare a variable with an invalid id type. This test passes lex, but catches the error in parse telling the user what token was expected and what token was found on which line.
4. **Statement:** This test successfully lexes and parses a block containing a print statement, a variable declaration, and an assignment statement.
5. **While Statement:** Successfully lexes and parses a block containing a while statement. The while statement test a Boolean expression and contains a variable declaration and an assignment statement.
6. **If Statement Error:** This program is missing a curly brace to end the block. It passes lex, but the parser catches the error when it is expecting a curly brace, but finds the end of file marker.
7. **EOF Error:** This program contains an end of file marker in the middle of the block. The compiler alerts the unexpected token during parse.
8. **EOF Warning:** This program is missing the \$ at the end. This test shows that the parser warns the user nicely of their mistake, but does not consider it an error.
9. **Parse Error:** This test attempts to parse an invalid string expression. The parser gets to the first invalid character in the string (a digit) alerts of the error and ignores the rest of the line.
10. **Parse Error 2:** This program contains an invalid integer expression. The parser catches this error and alerts user of the error and where it can be found.
11. **Redeclaration error:** This test tests if the parser will catch the redeclaration of an id.