

## Software Design Document

This project contains a compiler for Pascal – to then, convert it to machine language, MIPS, in our case.

The main components of the project are the following:

- 1) Scanner.jflex – we used a jflex tool to create Scanner.java which currently contains the skeleton of being able to read-in a file and creating their respective Token.
- 2) Scanner.java – created from the jflex tool.
- 3) Token.java – This class contains the simple Token object, which contains String lexeme and TokenType.
- 4) TokenType.java – This class is an enum that contains all the relative token types in Pascal.
- 5) LookupTable.java – This class is a HashMap containing lexeme as a key and TokenType as value. The lexeme is matched to their respective TokenType using this LookupTable.
- 6) ScannerTest.java – This class currently contains Junit testing for yytext() and .nextToken().