User Manual

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Overview

This manual will walk you through how to use this compiler to compile the mini Pascal code into MIPS assembly language.

First locate the compiler.jar file in the product folder, then locate the .pas file to be compiled. The .pas will be the mini Pascal file you would be compiling. You will want to put both files in the same directory and navigate to that directory from the command line using the following command:

java -jar Compiler.jar input.pas

Next, an assembly file should be generated called input.asm. You would then need to open the input.asm file into QtSpim and run the file by clicking the green arrow toward the top of the program.

Possible Errors:

If there are any errors within, they may include the following:

- 1. There is no file name entered while entering commands through the terminal
- 2. There may be an error in the code and if there is the code generation cannot happen. There could be semantic errors that would be caught and send out an error message explaining the issue.
- 3. There could be an empty file
- 4. There could be an error with the arrangement of words an phrases, and an error will explain what was expected

TokenTypes

Our small Pascal keywords and symbols, the definitive list.

KEYWORDS 1) and AND 2) array ARRAY begin BEGIN 4) div DIV 5) do

6) else ELSE 7) end END 8) function FUNCTION

DO

- 9) if ΙF 10) integer INTEGER
- 11) mod MOD
- 12) not тои
- 13) of of
- 14) or OR 15) procedure PROCEDURE
- 16) program PROGRAM
- 17) real REAL
- 18) then THEN 19) var VAR
- 20) while WHILE
- 21) multiply MULTIPLY

SYMBOLS

;	SEMICOLON
	COMMA

- PERIOD
- COLON
- LEFTBRACE [
- RIGHTBRACE
- LEFTPARA
- RIGHTPARA
- PLUS
- MINUS
- = EOUAL
- <> NOTEQUAL
- < LESSTHAN
- <= LESSTHANEQUAL
- > GREATERTHAN
- >= GREATERTHANEQUAL
- * ASTERISK
- SLASH
- := ASSIGN