

Assignment 4

Documentation

Implementation

- <https://github.com/aalexcampean/flcd-labs.git>

Documentation

- Symbol Table
 - Implemented as a Hash Table with Separate Chaining using linked lists
 - Contains the identifiers and constants
- Program Internal Form
 - Implemented as a List
 - Contains ids and their position in Symbol Table (if it doesn't exist = (-1, -1))
 - id = Identifier
 - const = Constant
 - reserved words
- How it works
 - The scanner parses the file
 - First, it splits the file by separators
 - Secondly, it is split by operators
 - Then the string constants (identified because they start and end with ") are concatenated as they were split by spaces in the previous steps
 - After the aforementioned steps are completed, all words and characters are identified as either an Operator, Separator, Reserved Word, Constant, or Identifier
 - If none of the cases are met, a lexical error is raised indicating the line it was found at
 - Finally, a St file and a PIF file are created where both are printed in a table format to illustrate the underlying representations