https://github.com/cs-ubbcluj-ro/lab-work-computer-science-2024-NikAlien/tree/main/1-Mini-Language-And-Scanner

Documentation

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Class Scanner

• public void scanProgramFile()

Scans the program file, and call the relevant functions to separate the tokens. Check if they are separators, operators or reserved word for PIF, or id or const for symbol table.

In case of errors we get them printed in console. In case of everything right, we get a "Lexically correct" message in console.

private boolean checkIdOrConst(String token)

Checks if the ID or Const satisfies the lexical rules using regex

Input: string, token -> the string that needs to be checked **Output**: Boolean -> true if token is id or const, false otherwise

• private List<String> detectToken(String line)

Detects the tokens in the line, based on separators

Input: string, line -> the read line that is separated in tokens

Output: list<string> -> list of the tokens

• private void generatePIF(String token, Pair<Integer, Integer> position)

Creates and writes into the PIF.out file the token and it's position

Input: string -> The token written into the file, Pair<Integer, Integer> -> tokens position in Symbol Table
Output: void

private void generateST()

Creates and writes into the ST.out the symbol table

private void generateTokensList()

Generates the lists of tokens used in the scanning