# Maier Bogdan (933) – Lexical Analyzer

Git:

+ scan (String filePath)

+ toString ()

+ st: SymbolTable

+ pif: List<Pair<String, int>>

LexicalAnalyzer

SymbolTable

+ table: String[][]

+ size: int

+ add (String value)

+ find (String value)

+ get (String value)

+ toString ()

Lexical Analyzer

public void scan (String filePath) throws IOException, LexicException

**Input**: filePath, specifies the absolute file path for the file to be scanned.

**Output**: st and pif generated with the appropriate values.

**Description**: The method scans a file line by line, tokenizes the line and starts then it checks each token:

1. If the token is reserved word or operator or separator, the token will be added to the pif with the constant 0.
2. If the token is identifier or constant, the token will be added first to the symbol table and then tot the pif. The corresponding constant in pif, in this case, will be the position from the symbol table where the token was added.

If none of these conditions are met the method will throw a LexicException which will contain the line from the file where the error is met.