

Jflex Scanner SDD

The design of my Jflex scanner is as follows: the jflex file `Scanner.jflex` contains several regex patterns that the generated scanner will parse for. It also contains the instructions for what the scanner will do upon finding each pattern. There is a `Token` class, which has the attributes `lexeme` and `tokentype`. The `lexeme` is the literal string that is parsed, while the `tokentype` is another object, created by the `TokenType` class. `TokenType` is simply an enum of all necessary types of tokens for this assignment. Finally, there is a `LookupTable` class. The `LookupTable` is a hashmap that is used for all the symbol and keyword tokens. When the scanner picks up a symbol or keyword token, it sends it as a key to the `LookupTable` to get back the value associated with it, and assigns that value as its `TokenType`.