To analyze the tokens from the token stream, there was no need to use complex data structures/structs. Instead my partner and I chose to use a simple series of if/then statements based of certain indicator variables. These variables (from 1-7) would tell you what kind of character the previous one was.

For example. With the input stream "1234hello". The indicator variable for the character '4' would be number. Therefore when the program analyzes the "h" it uses the previous indicator variable and makes a decision on whether h is a number or is the start of a new token. Essentially we conditioned on the previous indicator variable in order to make a decision for the current variable.

The complexity of this program was minimal because of the use of if then statements and no data structures or complex structs.