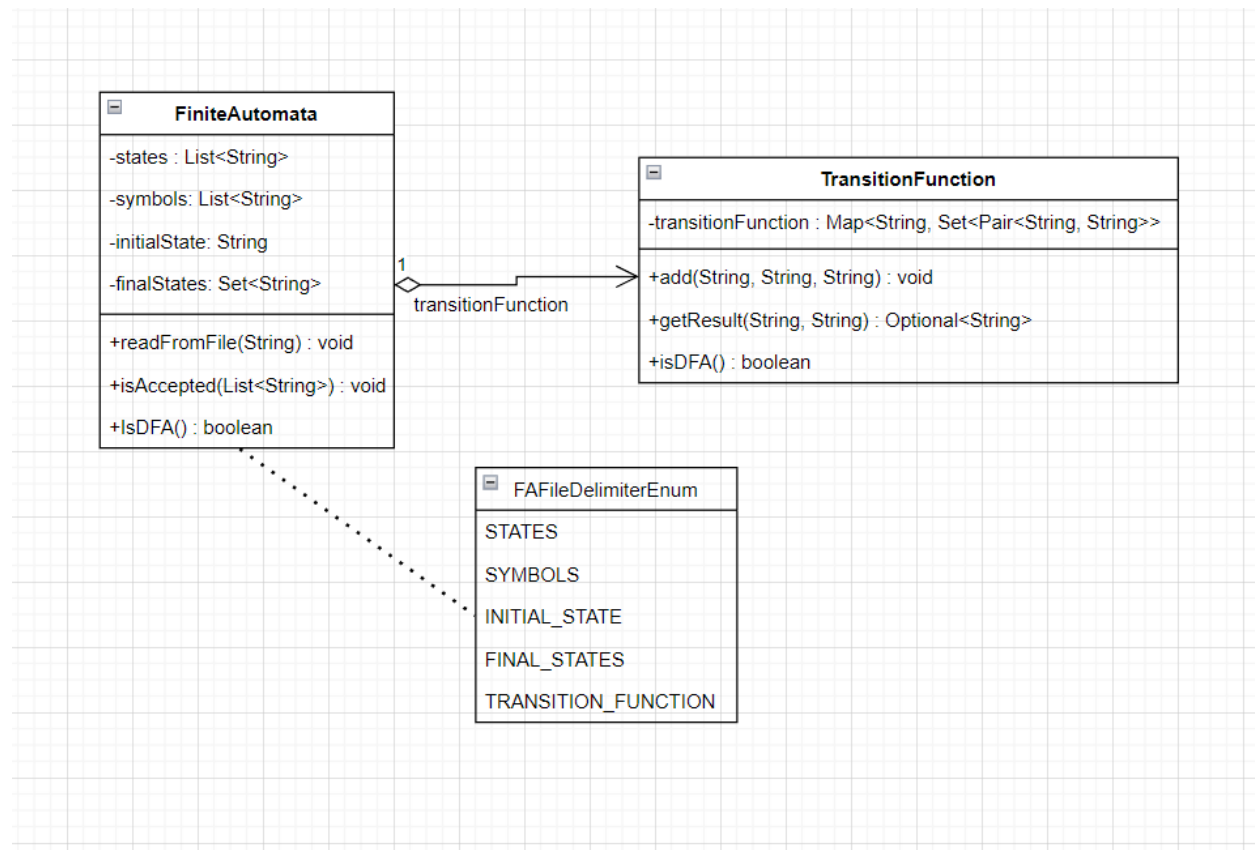


<https://github.com/Szabo-Mark/FLCD>



Finite Automata:

- the states are represented by a set of strings.
- the symbols are represented by a set of strings.
- the initial state is a string.
- the final states are a set of strings.
- the transition function has its own class: `TransitionFunction`
- the `readFromFile(String pathToFile)` function will print the errors and their line numbers (if there are any).
- the in-file delimiters are : `STATES`, `SYMBOLS`, `INITIAL_STATE`, `FINAL_STATES`, `TRANSITION_FUNCTION`

Transition Function:

- a wrapper over a $\text{Map}\langle \text{String}, \text{Set}\langle \text{Pair}\langle \text{String}, \text{String} \rangle \rangle \rangle$ in which:
 - the key is the source state
 - the value is a set of pairs in which the first element of a pair is the symbol and the second one is the destination state.

FA.in

- The EBNF of the input file is:

```
FA.in = "STATES" {state} "SYMBOLS" {symbol} "INITIAL_STATE" [state] "FINAL_STATES" {state}  
"TRANSITION_FUNCTION" {transition};
```

```
character = letter | digit | special_char;
```

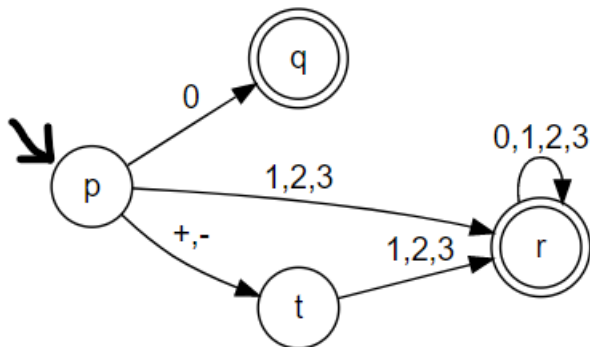
```
state = character;
```

```
symbol = character;
```

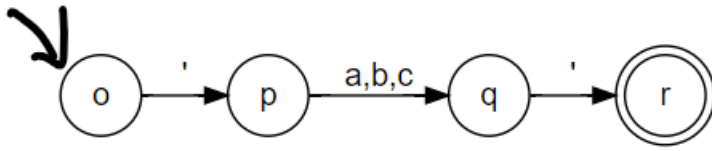
```
transition = state "," symbol "=" state;
```

Scanner with FA

- constantFA_Integer.in



- constantFA_Character.in



- identifierFA.in

