

## Lab 4 – Documentation

<https://github.com/iulianapascotescu/FiniteAutomata.git>

integration: <https://github.com/iulianapascotescu/Scanner.git>

FiniteAutomataSpecification := States

Alphabet

Transitions

InitialState

FinalStates

Space := ' '

Letter := 'A' | 'B' | ... | 'Z' | 'a' | 'b' | ... | 'z'

Alphanumeric := '0' | '1' | ... | '9' | Letter

State := Alpha {Alphanumeric}

States := "{ State { "," Space State } }

Alphabet := "{ State { "," Space State } }

InitialState := State

FinalStates := "{ State { "," Space State } }

Transitions := "{ (" State "," Alphanumeric ")" "-" ">" State { "," Space (" State "," Alphanumeric ")" "-" ">" State } }

«A,B» <b>Pair</b>
-element1: A -element2: B
+toString(): String

<b>FiniteAutomata</b>
-file: String -states: List<String> -alphabet: List<String> -initialState: String -finalStates: List<String> -transitions: List<Pair<Pair<String, String>, String>>
+readFromFile() +split(line: String): List<String> +splitProductions(line: String): List<Pair<Pair<String, String>, String>> +isAccepted(DFA: String): boolean +toString(): String