

GitHub link: <https://github.com/vteccc/FLCD>

Implementation:

The State class has the following fields:

- String Identifier                      --identifier of the state

The Transition class has the following fields:

- String state                            --name of the start state
- String letter                          --letter input
- List<String> result                    --set of result states

Finite Automata class has the following fields:

- List<State> States                    --set of all states
- List<String> Alphabet                --alphabet of FA
- String initState                      --initial state
- List<Transition> Transitions        --set of Transitions
- List<String> FinalStates            --set of final states

The finite automata is read from a file and has the following EBNF form:

```
state = letter {letter}
states = '{' state {',' state } '}'
alphabet = '{' stateIdentifier {',' stateIdentifier } '}'
initState = stateIdentifier
finalStates = '{' state {',' state } '}'
transition = { { state, stateIdentifier, { state, {state} }, { state,
stateIdentifier, { state, {state} } } } }
transitions = transition { transition }
stateIdentifier = letter { letter }
digit = '0-9'
letter = 'a-z'
charIdentifier = digit | 'a-z' | 'A-Z' | { digit | 'a-z' | 'A-Z' }
```