

<https://github.com/DragosteSergiu/Facultate/blob/main/Lab4FLCD.py>

Class Transition: It is used to represent a transition between two states.

- It has three fields, which are: state, value, and resultedState.
- It has a getter and a setter for each field.
- It has a to string method.

Class FiniteAutomata: It is the class the represents the automata.

- It has five fields, which are: setOfStates, alphabet, initialState, setOfFinalStates, transitions.
- It has a getter and a setter for each field.
- It has a to string method.
- It contains the method which verifies if a given sequence is accepted by FA.

Class Handler: It is used to perform different kind of tasks.

- It has one field, which is filename.
- It has a function which creates an object of type 'FiniteAutomata', read from the file.
- It has the method which prints the menu.
- It contains the method which performs the interaction with the users.

The finite automata is stored in the file using this pattern:

```
Q = "{"state{, state}"}"
sigma = "{"value{, value}"}"
q0 = state
F = "{"state{, state}"}"
transitions = "{"
    ("state", " value") " ->" newstate";"
    {"("state", " value") " ->" newstate";"}
    "}"
```