Secret door logic (boolean secretDoorUnlocked)

General description

The secret door logic is triggered when <boolean> secretDoorUnlocked is true and will replace the map with an empty map containing a dutch flag. It will also replace the green player symbol with a blue one.

The <boolean> secretDoorUnlocked is true if the player supplies the following input in order:

- 1. y (caseless check)
- 2. Nothing OR anything other than exit (caseless check)
- 3. unlock (caseless check)
- 4. Nothing OR anything other than exit (caseless check)
- 5. Mandatory a, c AND m plus optional y AND unlock in any order (caseless check, repetition is possible)
- 6. Nothing OR anything other than exit (caseless check)
- 7. open (caseless check)

After point 7., the <boolean> secretDoorUnlocked is true and the secret door logic triggers.

Automaton

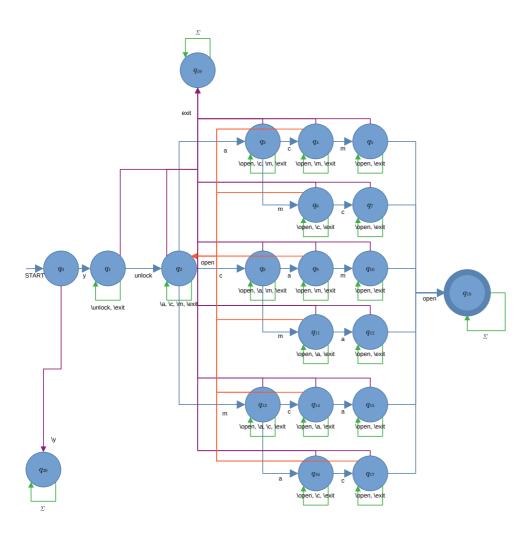
$$D = (Q, \Sigma, \delta, q_0, F)$$

 $a{=}w, up, s, down, a, left, d, right$

 $\Sigma \!\! = \!\! \{y, unlock, a, c, m, open, exit\} \; (\text{caseless check}) \\ \delta : Transition Function$

 $L(D) = \{ \text{y, unlock, \{mandatory a, c, m and optional y, unlock in any order; repetition is possible} \}, \text{ open} \} \\ Q = \{ q_0, q_1, q_2, q_3, q_4, q_5, q_6, q_7, q_8, q_9, q_{10}, q_{11}, q_{12}, q_{13}, q_{14}, q_{15}, q_{16}, q_{17}, q_{18}, q_{19}, q_{20}} \}$

 $F = \{q_{18}\}$



Table

_	State	у	unlock	a	С	m	open	exit
	$^{ ightarrow} oldsymbol{q}_0$	q_1	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}
	q_1	q_1	q_2	q_1	q_1	q_1	q_1	q_{19}

State	у	unlock	a	С	m	open	exit
q_2	q_2	q_2	q_3	q_8	q_{13}	q_2	q_{19}
q_3	q_3	q_3	q_3	q_4	q_6	q_2	q_{19}
q_4	q_4	q_4	q_4	q_4	q_5	q_2	q_{19}
q_5	q_5	q_5	q_5	q_5	q_5	q_{18}	q_{19}
q_6	q_6	q_6	q_6	q_7	q_6	q_2	q_{19}
q_7	q_7	q_7	q_7	q_7	q_7	q_{18}	q_{19}
q_8	q_8	q_8	q_9	q_8	q_{11}	q_2	q_{19}
q_9	q_9	q_9	q_9	q_9	q_{10}	q_2	q_{19}
q_{10}	q_{10}	q_{10}	q_{10}	q_{10}	q_{10}	q_{18}	q_{19}
q_{11}	q_{11}	q_{11}	q_{12}	q_{11}	q_{11}	q_2	q_{19}
q_{12}	q_{12}	q_{12}	q_{12}	q_{12}	q_{12}	q_{18}	q_{19}
q_{13}	q_{13}	q_{13}	q_{16}	q_{14}	q_{13}	q_1	q_{19}
q_{14}	q_{14}	q_{14}	q_{15}	q_{14}	q_{14}	q_2	q_{19}
q_{15}	q_{15}	q_{15}	q_{15}	q_{15}	q_{15}	q_{18}	q_{19}
q_{16}	q_{16}	q_{16}	q_{16}	q_{17}	q_{16}	q_2	q_{19}
q_{17}	q_{17}	q_{17}	q_{17}	q_{17}	q_{17}	q_{18}	q_{19}
$^*q_{18}$	q_{18}						
q_{19}	q_{19}	q_{19}	q_{19}	q_{19}	q_{19}	q_{19}	q_{19}
q_{20}	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}	q_{20}