## Software Quality FS 2017

Exercise 1 - Discussion

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# Grading



#### Colony of Chameleons

Estimating the number of states

#### Colony of Chameleons

Duration/Probability of change

### Colony of Chameleons

Safety? Liveness?

#### Safety

Something bad never happens

#### Liveness

Something good **Eventually** happening

- All chameleons have the same color
- No chameleon are left

# Colony of Chameleons Limitations of SPIN

Number of states explodes rapidly.

If the search is not exhaustive, no guarantee to find a violation even within the search range.

#### Petri Nets

t4 fired at least once

t3 can be fired an infinite number of times

 As soon as p4 recives a token it never gets empty again