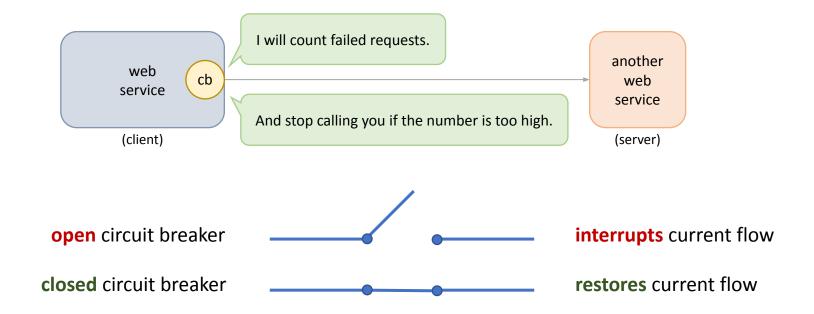
Circuit breaker



well-established open-source libraries help implement the circuit breaker pattern

- Resilience4j
- Polly

we configure a circuit breaker by specifying

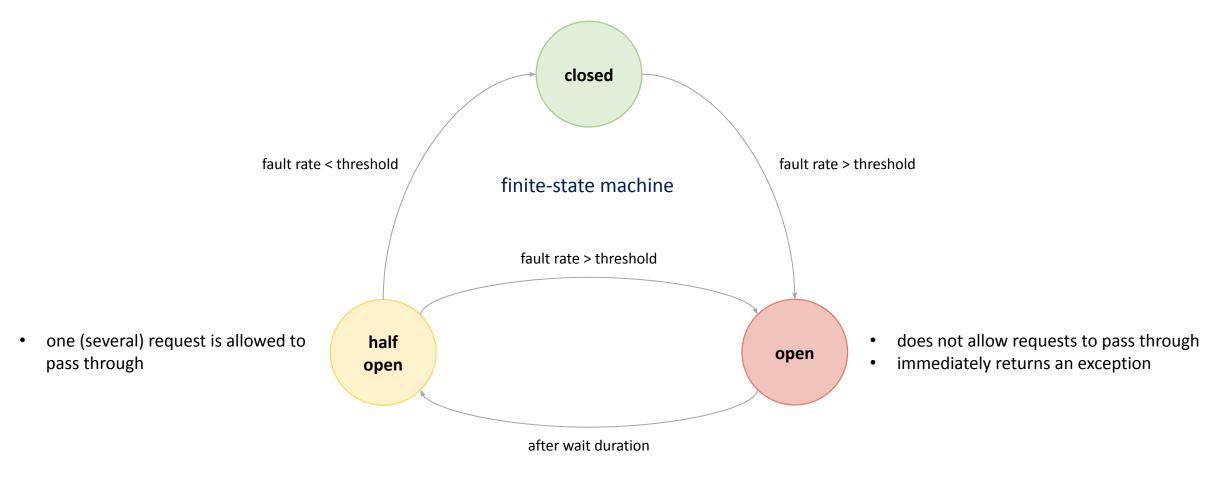
- type of the exception that the circuit breaker monitors
- number of exceptions before the circuit breaker opens
- how much time the circuit breaker remains open

for example

TooManyRequestsException
5
1 minute

Circuit breaker

- requests pass through
- circuit breaker measures the number of failed requests (fault rate)



Circuit breaker

things to consider

• can use health checks instead of a timer to determine when to transition to the half-open state

• circuit breaker instance has to be thread-safe

here is what we do with requests rejected by the circuit breaker:
 buffer, failover, fallback, apply backpressure up the stack, cancel