A Basic akka presentation

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SCHEDULE

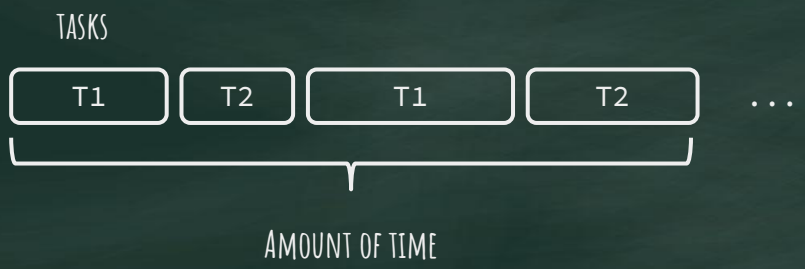
Today we will

- Give a small theory presentation about **akka**
- Give a **scala crash course** for java devs **:P**
- Present a trivial **bank account management** system written using **akka-typed, akka-http and scala**

Some basic notions (1)

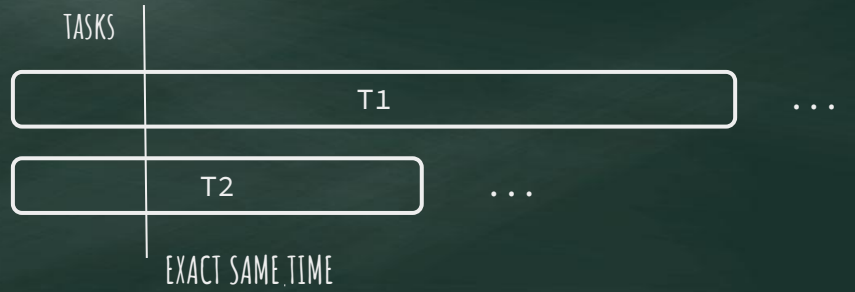
Concurrency

Means that we can execute **multiple** things at a given **amount of time.**



Parallelism

Means that we can execute things at **the exact same time.**



Some basic notions (2)

Performance

Means **how fast** things are being executed.

Scalability

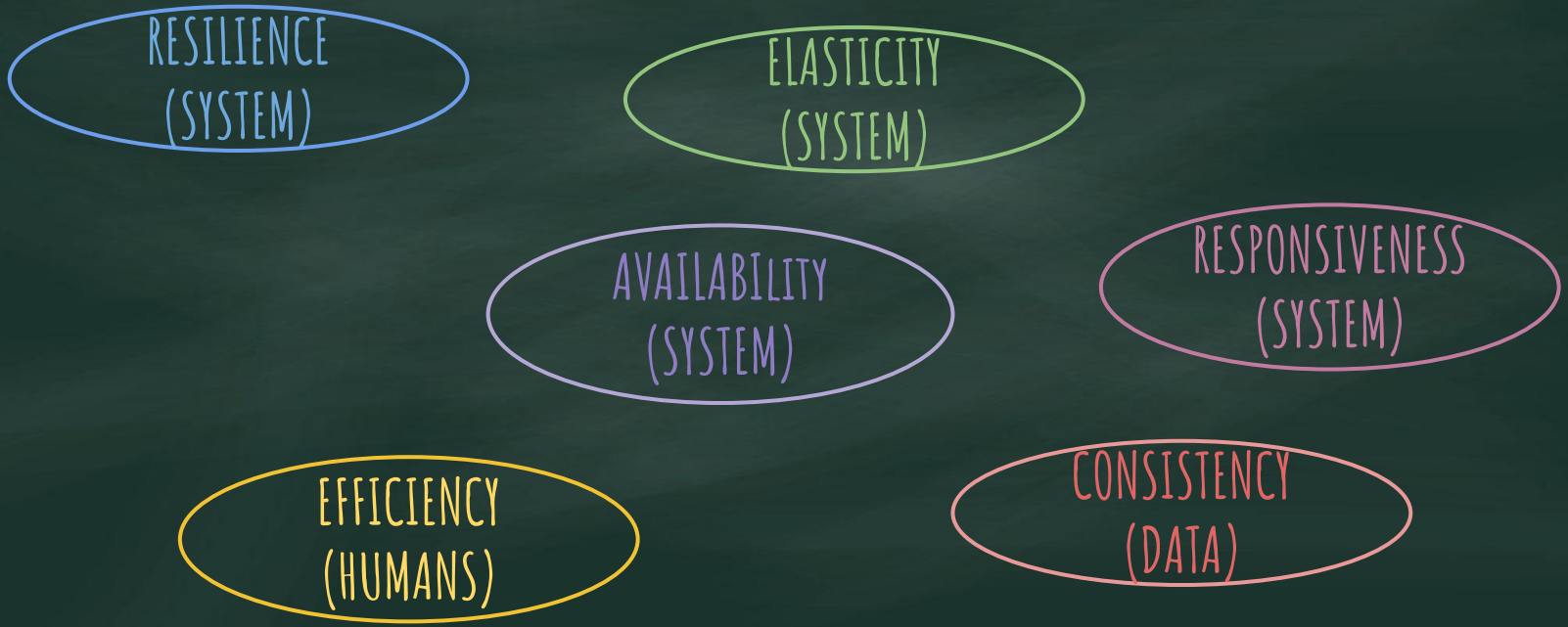
Is the ability of a **system** to **handle** larger amounts of **work** by **adding** resources.

Orthogonal properties

You may have both but many times you may **sacrifice** a little bit of **performance to gain scalability.**

Some basic notions (3)

There are more properties that we are interested in ...



WHAT IS AKKA ?

"Akka is a set of open source **libraries** for designing **scalable**, **resilient** system that **span processor** cores and **networks.**"

(*quoted from akka.io documentation)

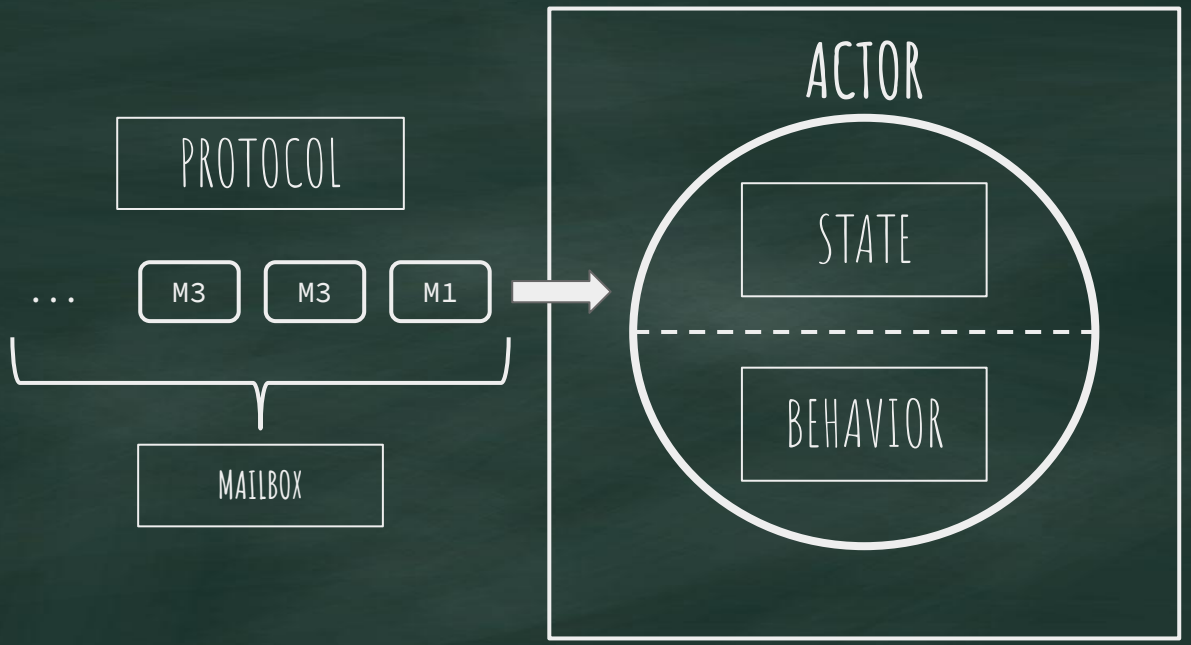
Akka is about:

- Scalability
- Concurrency & Parallelism
- Resiliency
- Workload distribution
- Performance
- Efficiency

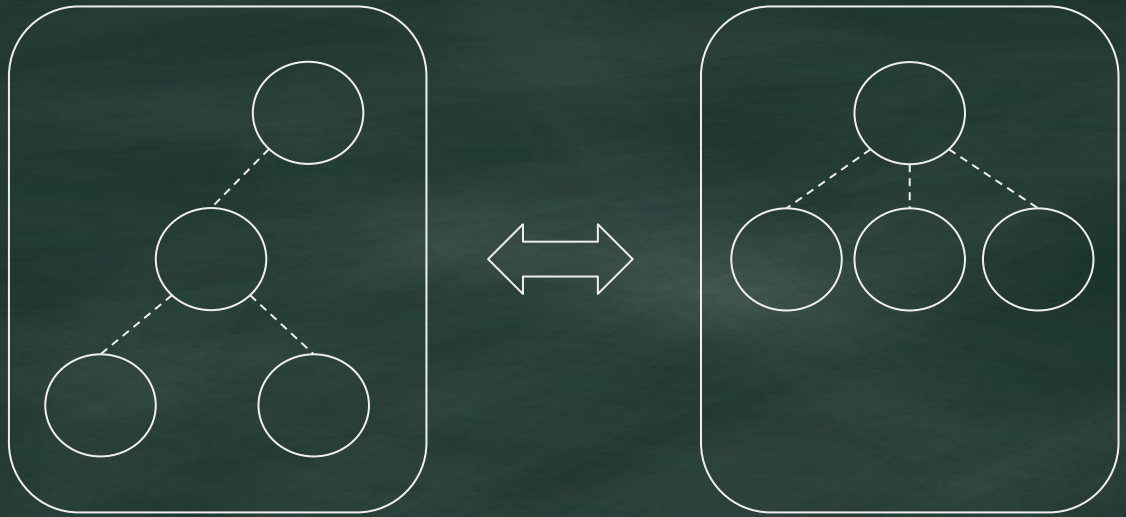
ARCHITECTURE EAGLE VIEW

** FROM ECOSYSTEM AND MANY MORE....

ANATOMY OF AN ACTOR



AN ACTOR IS NO ACTOR



SYSTEM

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ENOUGH TALKING SHOW ME THE CODE

A bank account management system example

https://github.com/fpaschos/simple-bank-system