SKEPTICAL ZOOKEEPER

A HIGH-LEVEL GUIDE ON WHEN TO USE ZOOKEEPER, AND WHEN TO RECONSIDER

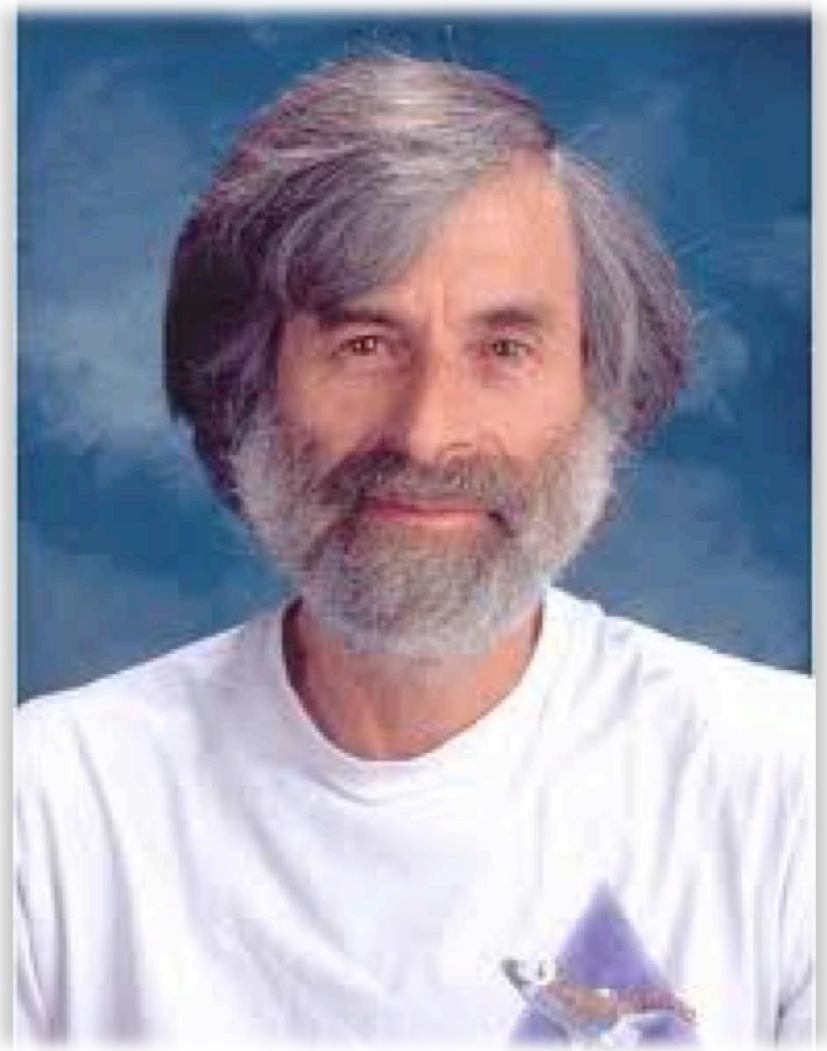
CAMILLE FOURNIER, RENT THE RUNWAY

ZOOKEEPER PMC MEMBER

@SKAMILLE

ZOOKEEPER IS EVERYWHERE

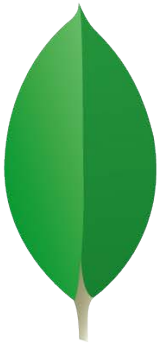
“LOOK INSIDE OF BING OR GOOGLE OR AMAZON—WHERE THEY’VE GOT ROOMS FULL OF COMPUTERS, THEY’LL PROBABLY BE RUNNING AN INSTANCE OF PAXOS.”



Leslie Lamport

WHO ISN'T USING ZOOKEEPER?

Cassandra



mongoDB

WHY NOT?

$$$

OPERATIONAL COMPLEXITY

AVAILABILITY

BUT ALSO…

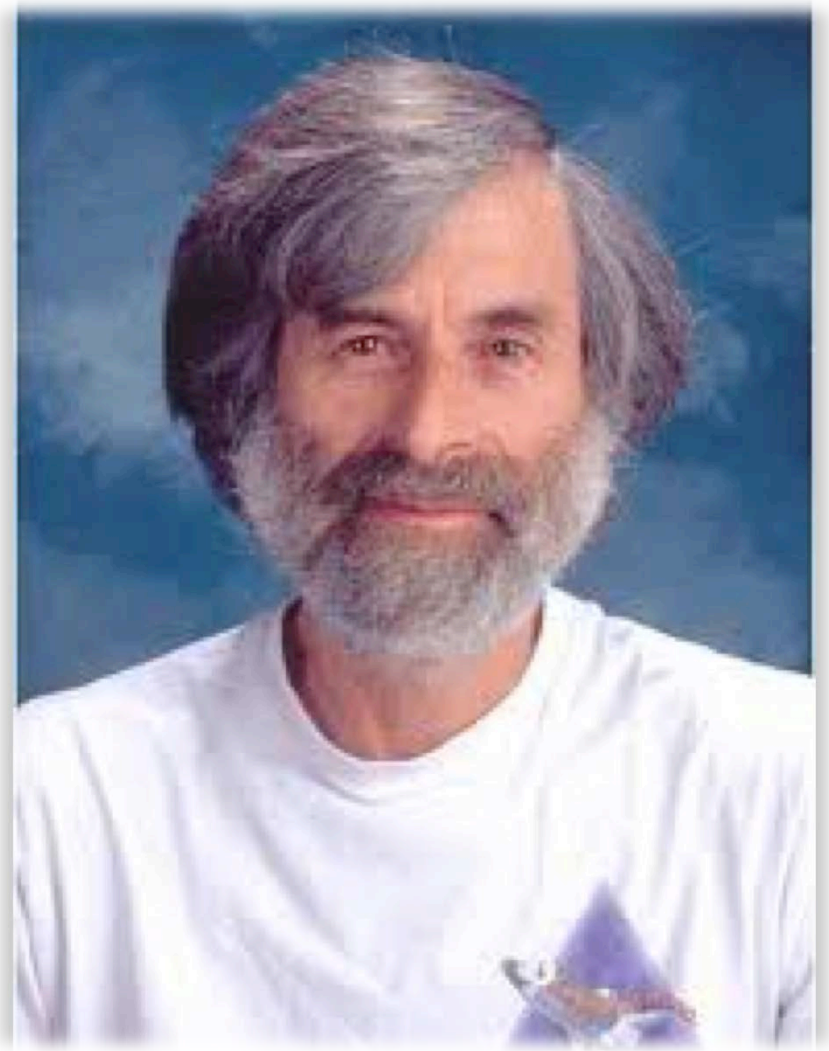
RENTTHERUNWAY

love. wear. return.

3 AREAS FOR EVALUATION

WHERE IS IT RUNNING?

“A DISTRIBUTED SYSTEM IS ONE IN WHICH THE FAILURE OF A COMPUTER YOU DIDN’T KNOW EXISTED CAN RENDER YOUR OWN COMPUTER UNUSABLE”



Leslie Lamport

ENVIRONMENT

OPERATIONAL SUPPORT

RAPID GROWTH

DYNAMIC

WHAT IS IT DOING?

USE CASE

DISTRIBUTED LOCKING

SERVICE MANAGEMENT

SERVICE MANAGEMENT ALTERNATIVES

LOAD BALANCER

DNS

DATABASE

WHAT ARE WE USING?

PRIMITIVES

CONSISTENCY

EPHEMERAL NODES

WATCHES

Henry Robinson
@HenryR

Following

@skamille @aphyr @coda but ZK seems to have some identity problems: is it for coordination? is it a kind of K-V store? is it pub-sub?

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CHALLENGES

CLIENTS RUN AMOK

DON’T SHARE

CODE REVIEW

PROVIDE WRAPPERS

ODD NUMBERS RULE

3 OR 5 QUORUM MEMBERS

ALSO APPLIES TO DATA CENTERS

ZOOKEEPER OWNS YOUR AVAILABILITY

ALTERNATIVES

NEW ALTERNATIVES

etcd

https://github.com/coreos/etcd

Consul

http://www.consul.io/

Serf

http://www.serfdom.io/

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http://whilefalse.blogspot.com/2012/12/building-global-highly-available.html

http://labs.spotify.com/tag/zookeeper/