

Is it time to put your pet Kubernetes down?



Chris Nesbitt-Smith

UK Gov | esynergy | Control Plane | LearnK8s | lots of open source



Hello

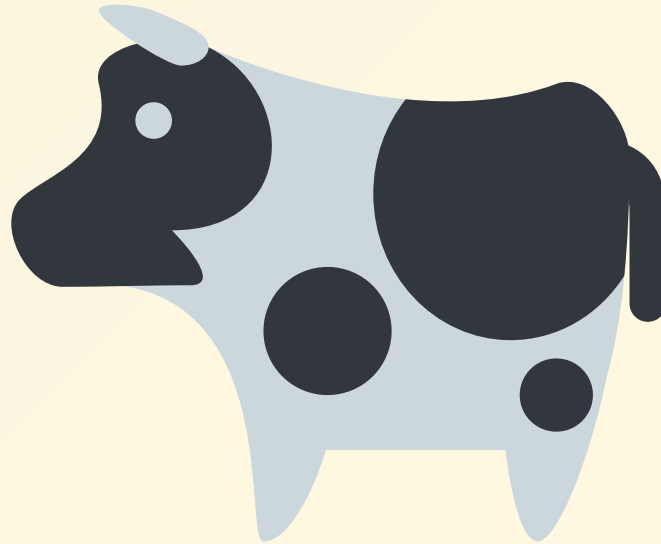
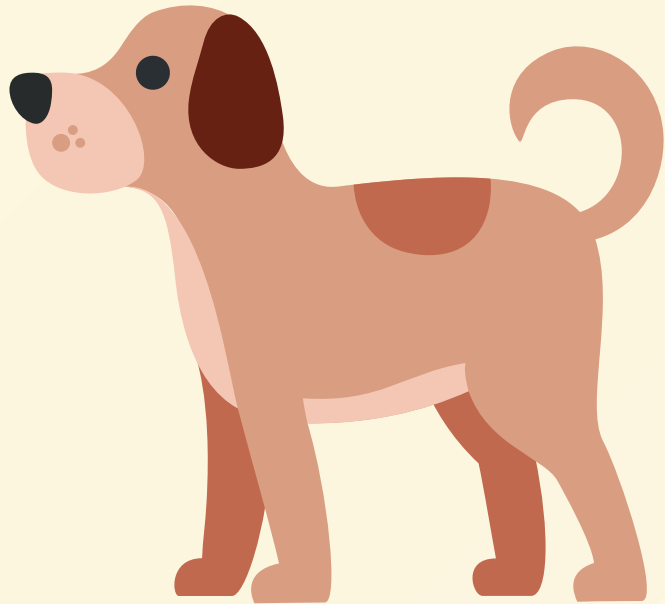


Chris Nesbitt-Smith

- **Learnk8s & Control Plane Instructor + Consultant**
- **esynergy - Digital Transformation Consultant**
- **Crown Prosecution Service (UK gov) - Consultant**
- **Opensource**



Reminder what is Pets vs Cattle?



The before times





HELLO
MY NAME IS

Bob



2023(?)



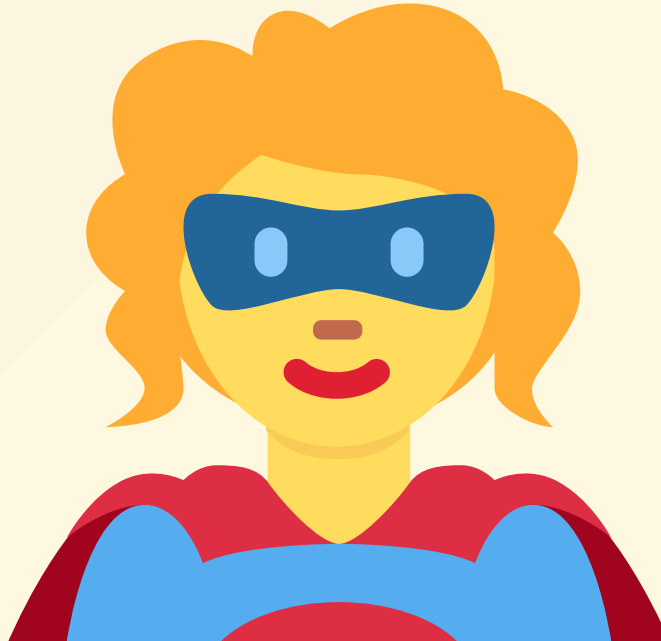




Kubernetes



"duh, we're doing Kubernetes"





Kubernetes: Nodes (naming)

```
$ kubectl get nodes
```

NAME	STATUS	ROLES	AGE	VERSION
ip-10-170-7-102.eu-west-2.compute.internal	Ready	<none>	24h	v1.21.5-eks-9017834
ip-10-170-7-99.eu-west-2.compute.internal	Ready	<none>	24h	v1.21.5-eks-9017834





Kubernetes: Pods (naming)

```
$ kubectl get pods -A
```

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
cert-manager	cert-manager-6d99c7965c-c9q92	1/1	Running	0	24h
cert-manager	cert-manager-cainjector-748dc889c5-ljv8c	1/1	Running	0	24h
cert-manager	cert-manager-webhook-5b679f47d6-wnt2f	1/1	Running	0	24h
kube-system	aws-node-7b7q4	1/1	Running	0	24h
kube-system	aws-node-vwr5m	1/1	Running	0	24h
kube-system	calico-node-jfndm	1/1	Running	0	24h
kube-system	calico-node-zhssf	1/1	Running	0	24h
kube-system	calico-typha-7dd5d4b984-p52gx	1/1	Running	0	24h
kube-system	calico-typha-horizontal-autoscaler-767b5c958c-w6pjt	1/1	Running	0	24h
kube-system	cluster-autoscaler-6c8dc687c6-pts7q	1/1	Running	1	24h
kube-system	coredns-65ccb76b7c-8pqj6	1/1	Running	0	24h
kube-system	coredns-65ccb76b7c-dd48d	1/1	Running	0	24h
kube-system	kube-proxy-5vqz2	1/1	Running	0	24h
kube-system	kube-proxy-zlh5k	1/1	Running	0	24h
kube-system	metrics-server-977777f66-mvr56	1/1	Running	0	24h
nginx-ingress	ingress-controller-5b47bfdf66-c2xj8	1/1	Running	0	24h
nginx-ingress	ingress-controller-5b47bfdf66-g94xw	1/1	Running	0	24h
external-dns	external-dns-689dc89999-s6mjz	1/1	Running	0	24h





Kubernetes: Pods (checks)

```
livenessProbe:  
  httpGet:  
    path: /healthz  
    port: http
```





Don't look

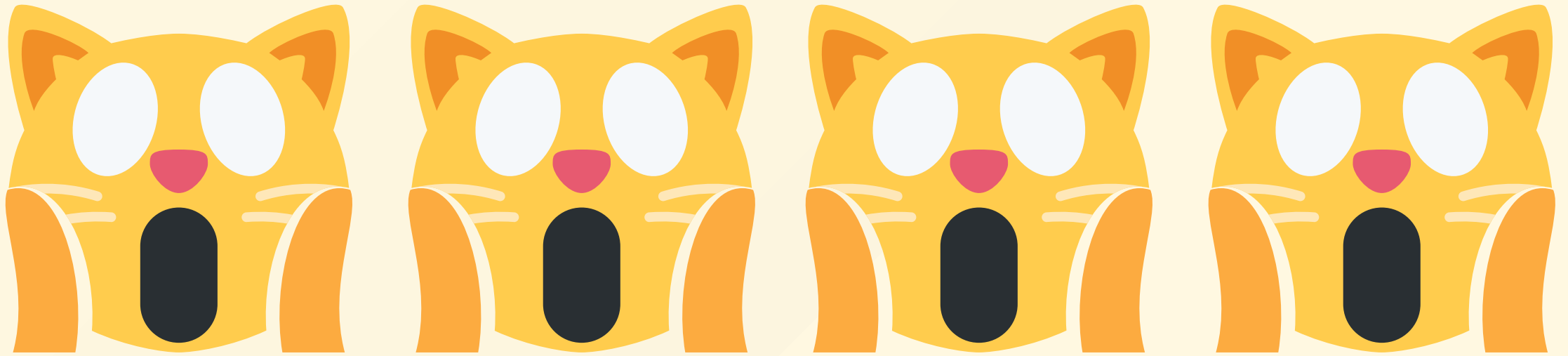


```
eksctl create cluster
```

...now what?











```
helm install cert-manager jetstack/cert-manager  
helm install external-dns external-dns/external-dns  
helm install nginx-ingress nginx-stable/nginx-ingress  
helm install istiod istio/istiod  
etc
```



So?




Well

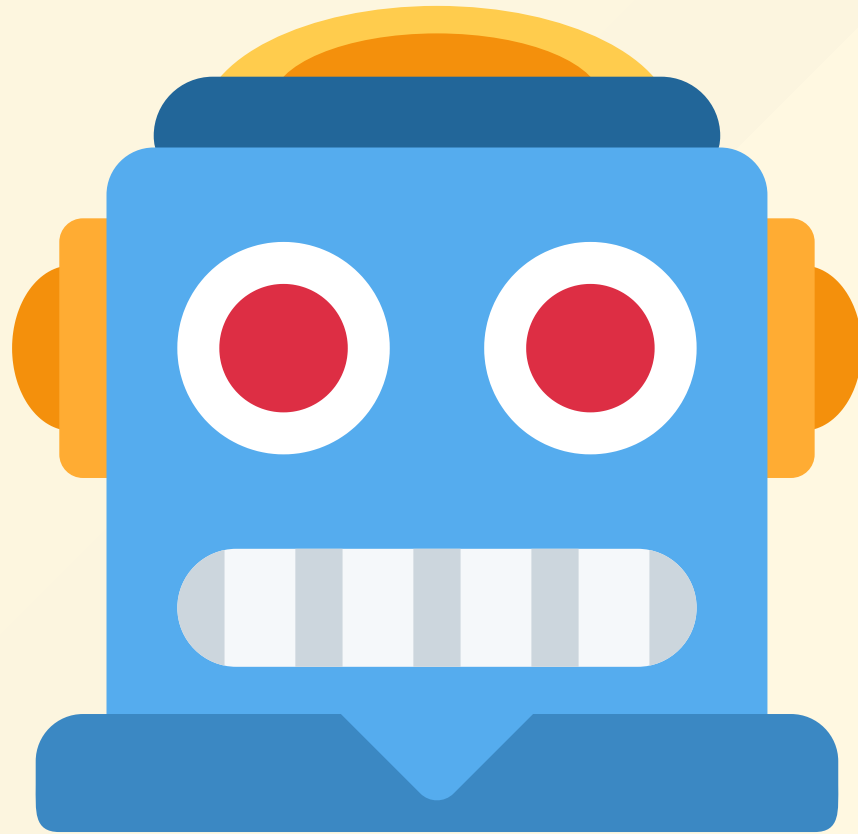
-  **www.mycompany.com**
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Well

-  **team[1-10].www.mycompany.com**
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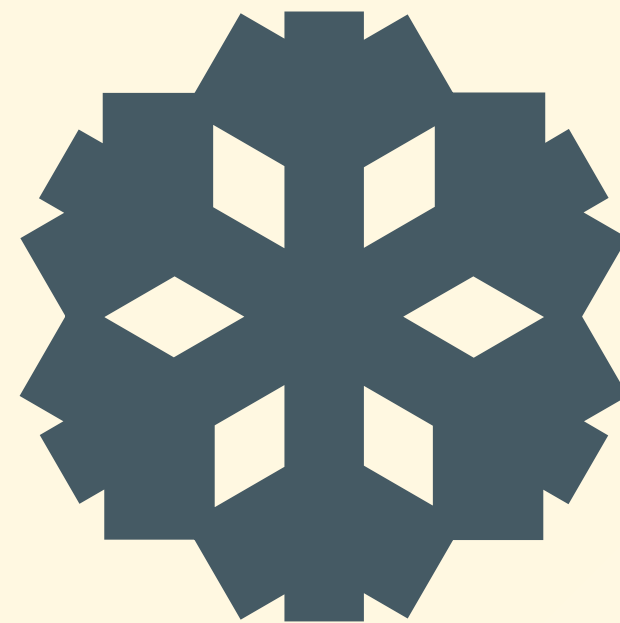


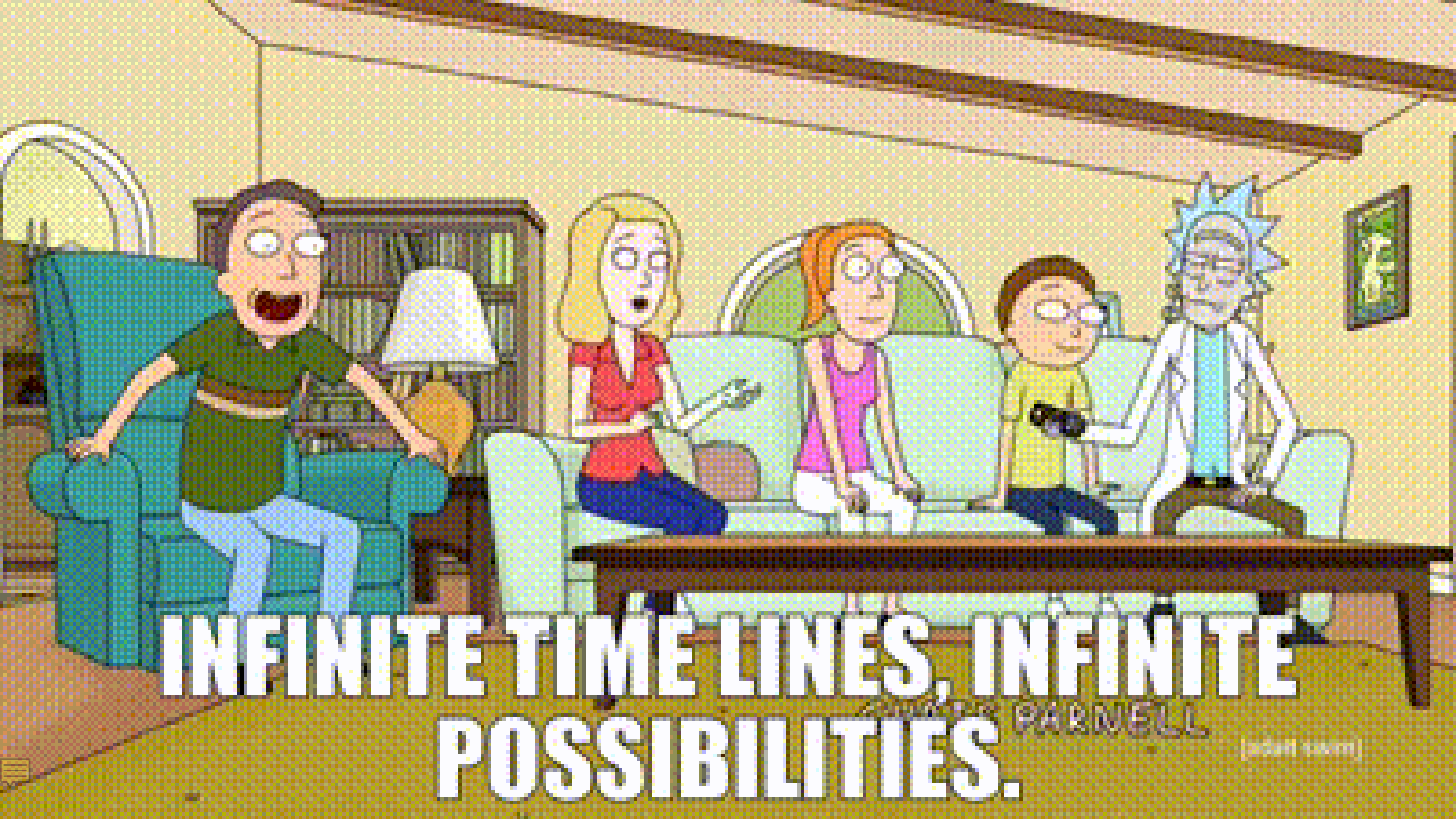


Day 2







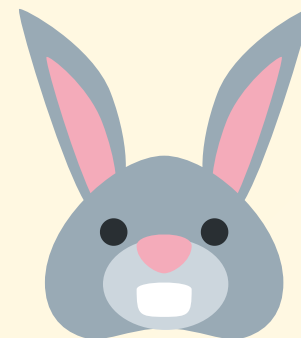
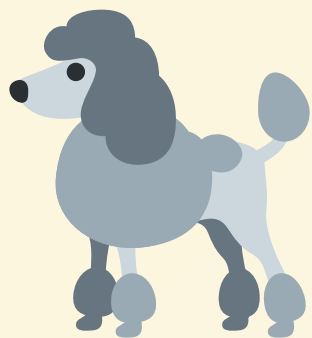
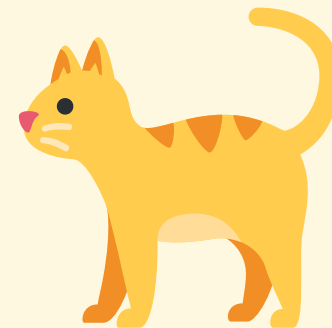
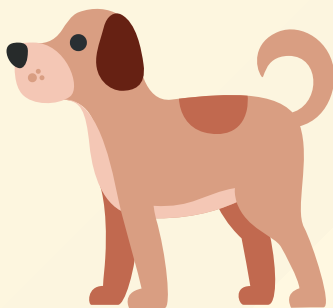


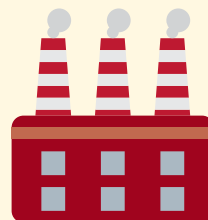
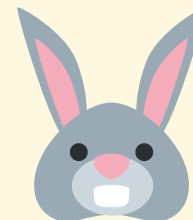
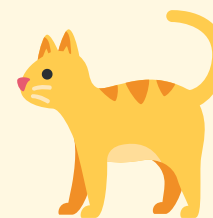
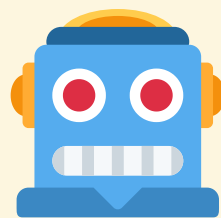
**INFINITE TIME LINES, INFINITE
POSSIBILITIES.**

BY JAMES PARNELL

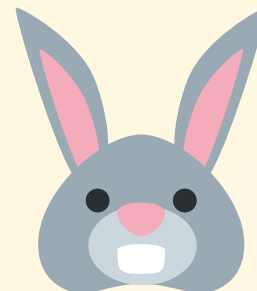
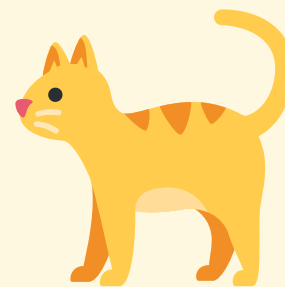
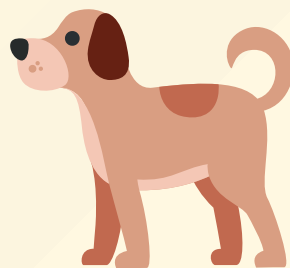
[JOHN HART]









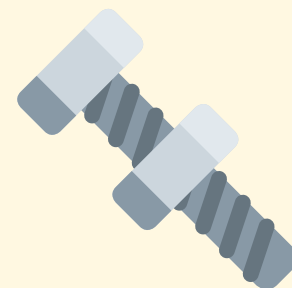
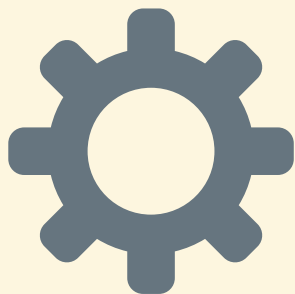






















estau-
250-

304-321-0111 Pam, 2102
www.my.tupperware.ca/leonalevins

WANTED: Someone to go back in time with me. This is not a joke. P.O.Box 1004-1557-4th Avenue, Prince George, BC, V2L 3K1. You'll get paid after we get back. Must bring your own weapons. Safety not guaranteed. I have only done this once before.

S.
chics.
18+.
18+

260

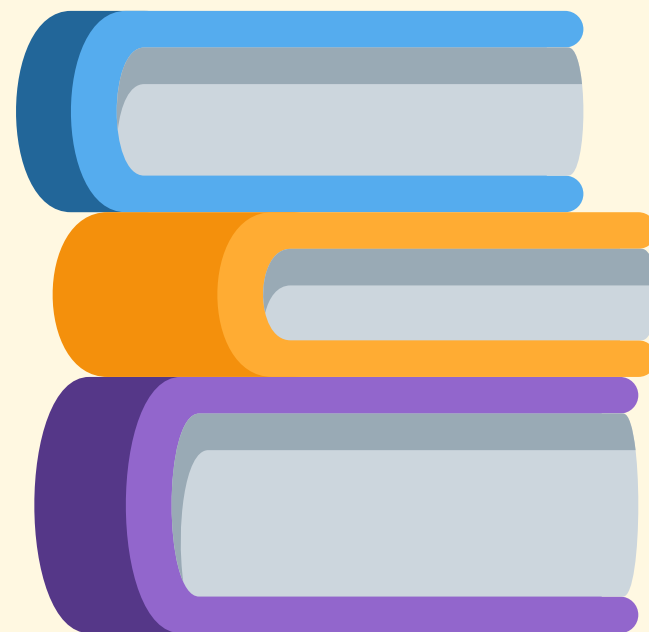
WANTED: ADMINISTRATION

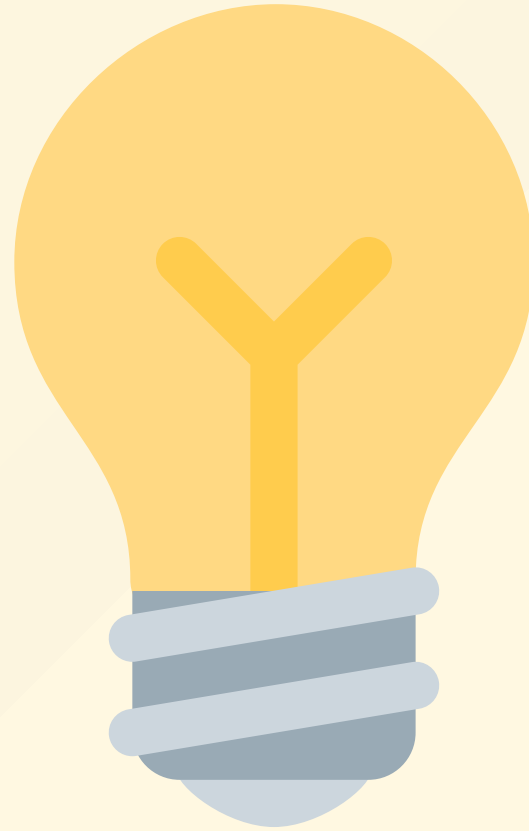
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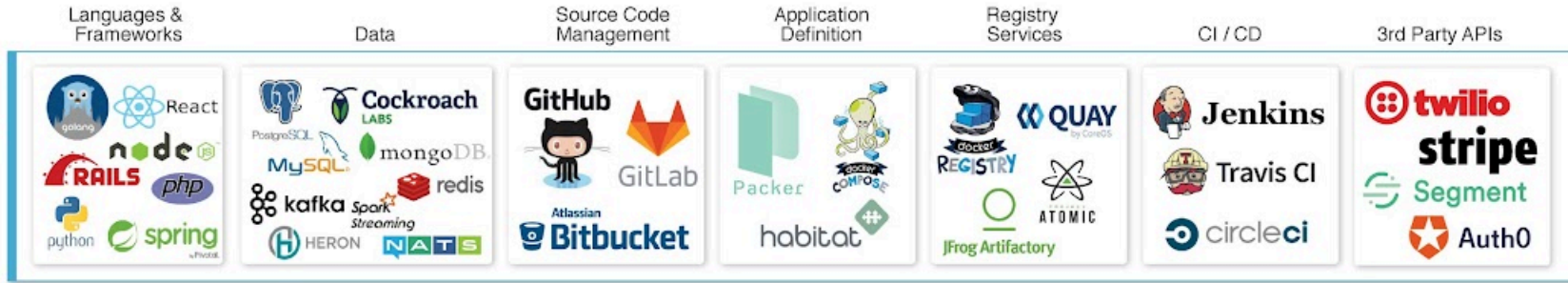








Application Definition & Development



Orchestration & Management



Runtime



Provisioning



Infrastructure



Platforms



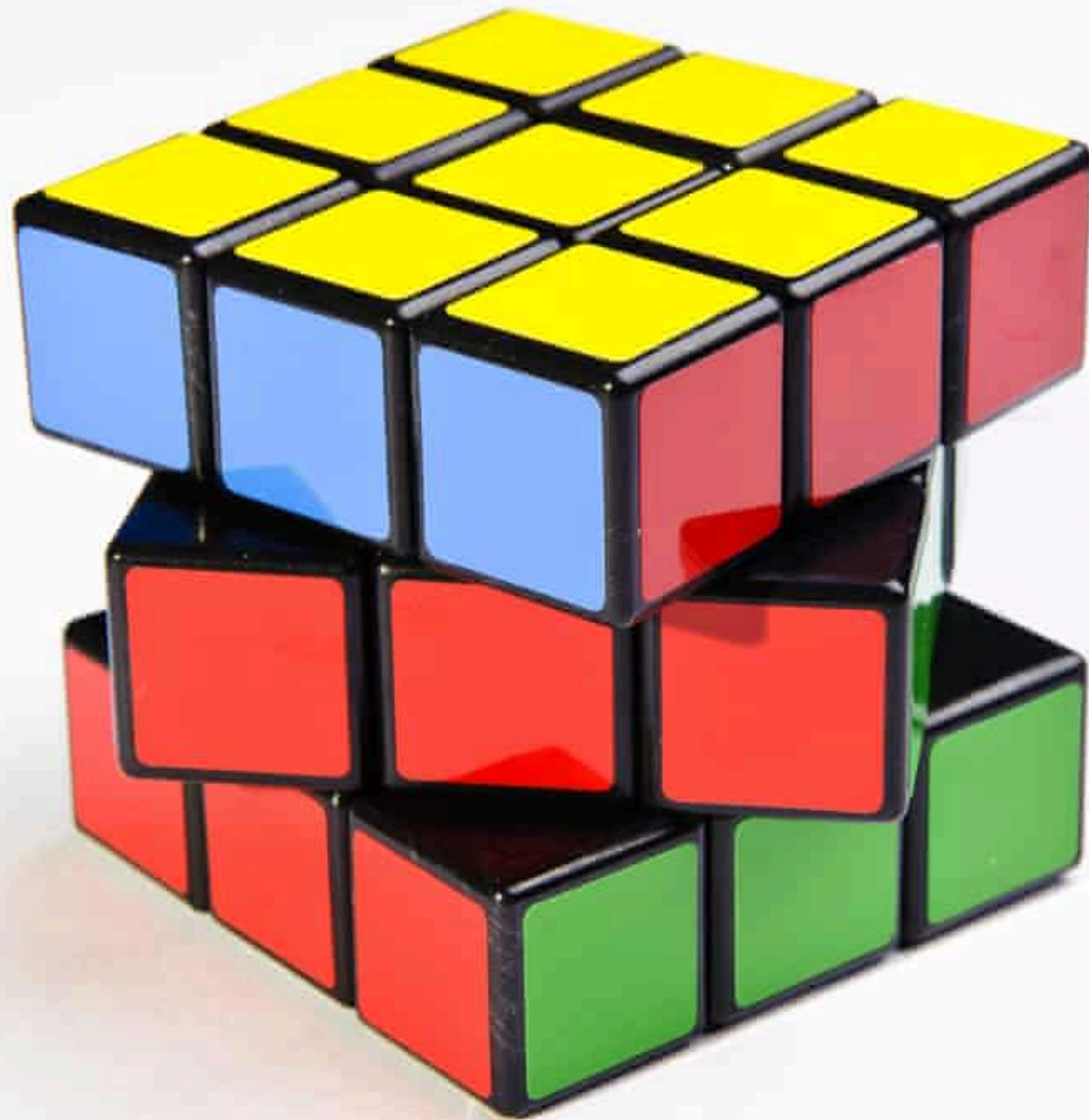
Observability & Analysis



Monitoring

Logging

Tracing





Database

Streaming & Messaging

Application Definition & Image Build

Continuous Integration & Delivery

Platform

Serverless

App Definition and Development

Orchestration & Management

Runtime

Provisioning

Special

Database

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Provisioning

Special

Scheduling & Orchestration

Coordination & Service Discovery

Remote Procedure Call

Service Proxy

API Gateway

Service Mesh

kubernetes

Crossplane

CoreDNS

etcd

gRPC

envoy

contour

avist

bfe

clmrx

emissary ingress

istio

linkerd

consul

eastmesh

Cloud Native Storage

Container Runtime

Cloud Native Network

rook

longhorn

dellemc

gluster

hitachi

ibm

infoblox

mesh

ionix

klup

cri-o

cri-dockerd

kata

cilium

cnv

calico

flannel

cnv-genie

calico

flannel

Automation & Configuration

Container Registry

Security & Compliance

Key Management

Kubernetes Certified Service Provider

Kubernetes Training Partner

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Automation & Configuration

Container Registry

Security & Compliance

Key Management

Kubernetes Certified Service Provider

Kubernetes Training Partner

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Certified Kubernetes - Distribution

Certified Kubernetes - Hosted

Certified Kubernetes - Installer

PaaS/Container Service

Observability and Analysis

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Chaos Engineering

airship

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CNCF Serverless Landscape

See the serverless interactive display at [s.cncf.io](#)

Cloud Native Computing Foundation

Redpoint

Amplify

Members

Cloud Native Computing Foundation

Redpoint

Amplify

CD Foundation Landscape

See the interactive landscape at [cd.foundation](#)

Cloud Native Computing Foundation

Redpoint

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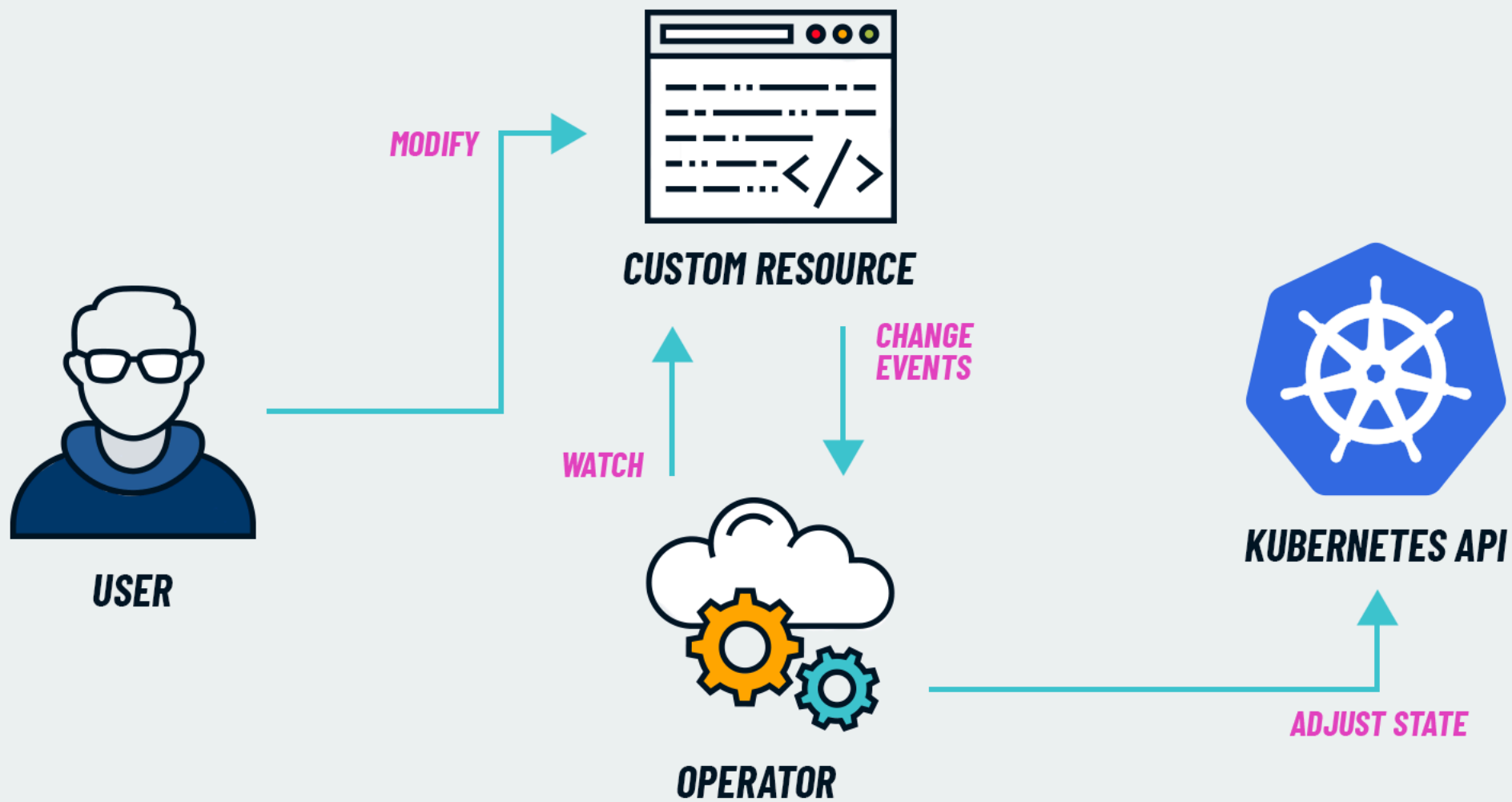
CLOUD NATIVE Landscape

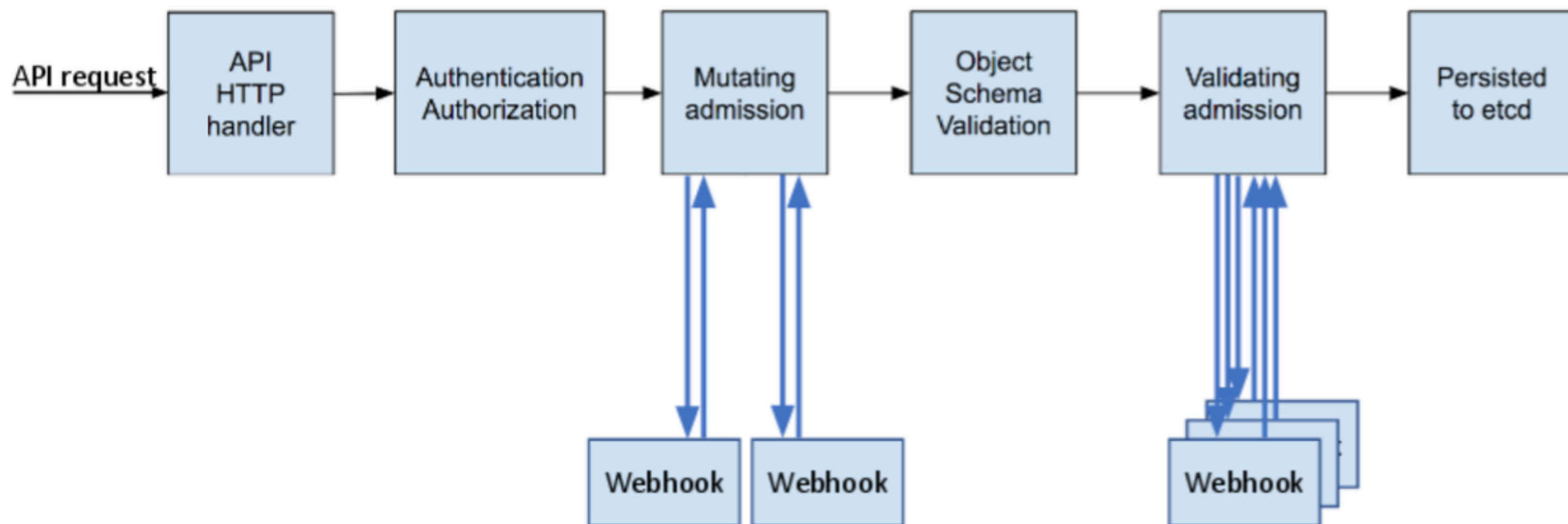
See the interactive landscape at [l.cncf.io](#)

Cloud Native Computing Foundation

Redpoint

Amplify













HELM



HELM



HELP



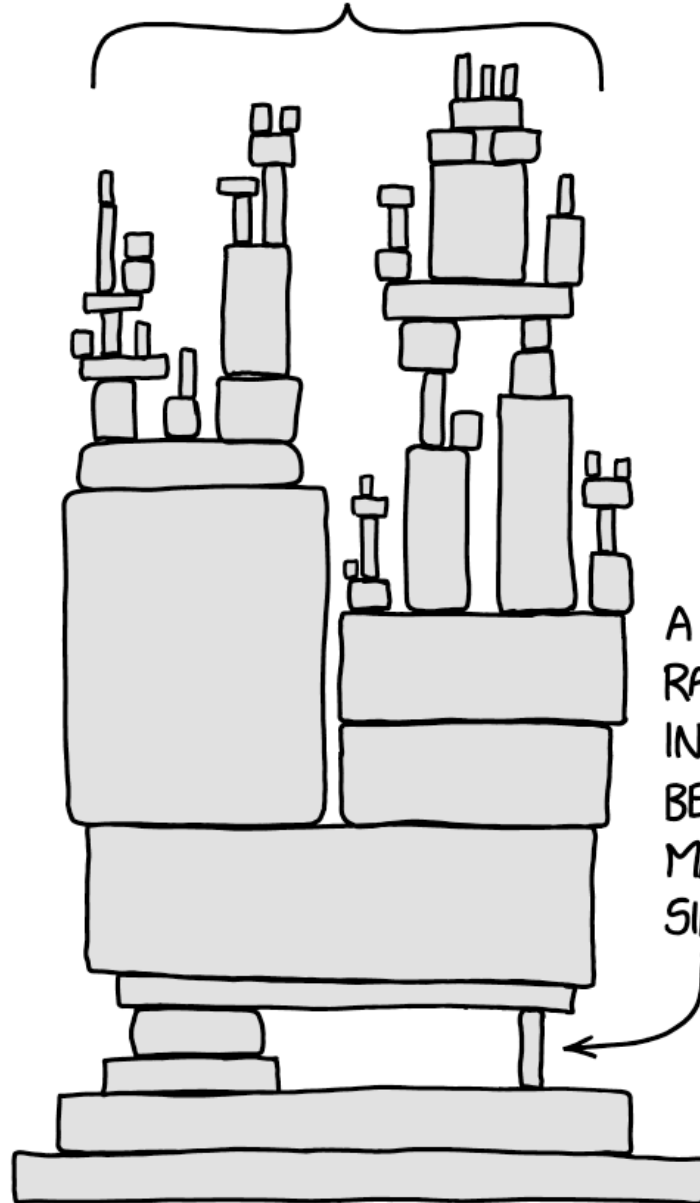








ALL MODERN DIGITAL INFRASTRUCTURE



A PROJECT SOME
RANDOM PERSON
IN NEBRASKA HAS
BEEN THANKLESSLY
MAINTAINING
SINCE 2003



GALAXY





CHEF

SUPERMARKET





forge





SEE YOU IN HELL

HAPPY

PLACE





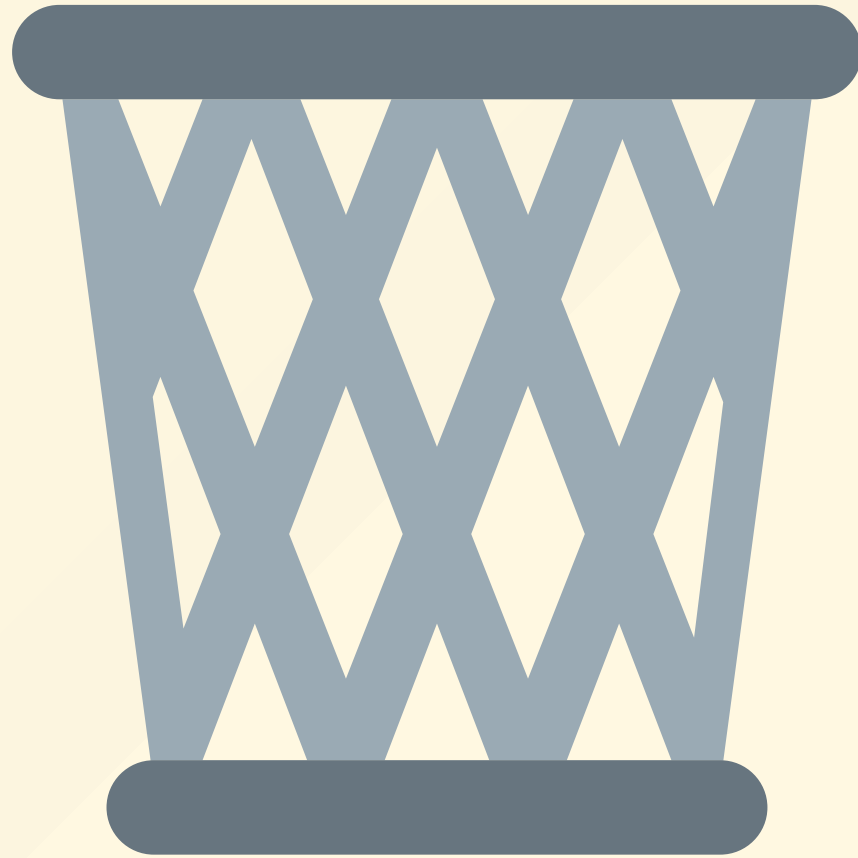






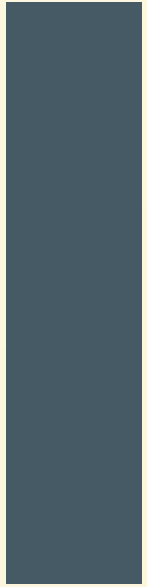
**BE KIND.
REWIND.**













KWZ®



KISS

 Keep It Stupid Simple

KISS

 Keep It Simple, Stupid















#SchittsCreek

YOU EARNED IT





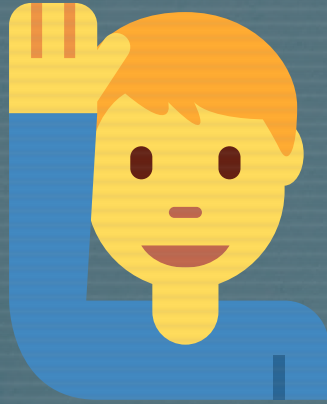


🙏 Thanks 🙏

- cns.me
- talks.cns.me
- github.com/chrisns
- learnk8s.io
- esynergy.co.uk
- controlplane.io

 Chris Nesbitt-Smith



Q&A   

cns.me

Chris Nesbitt-Smith

