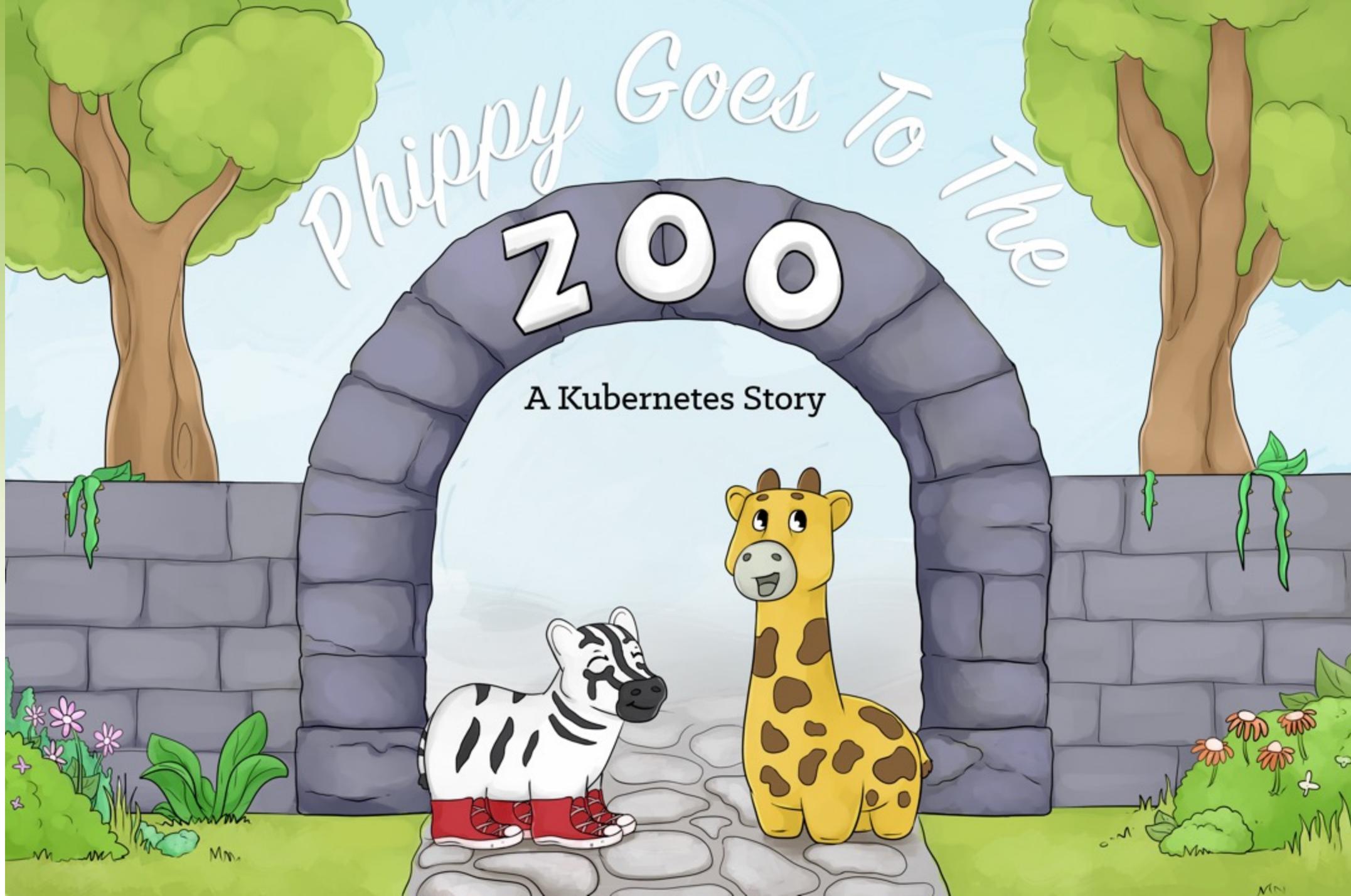


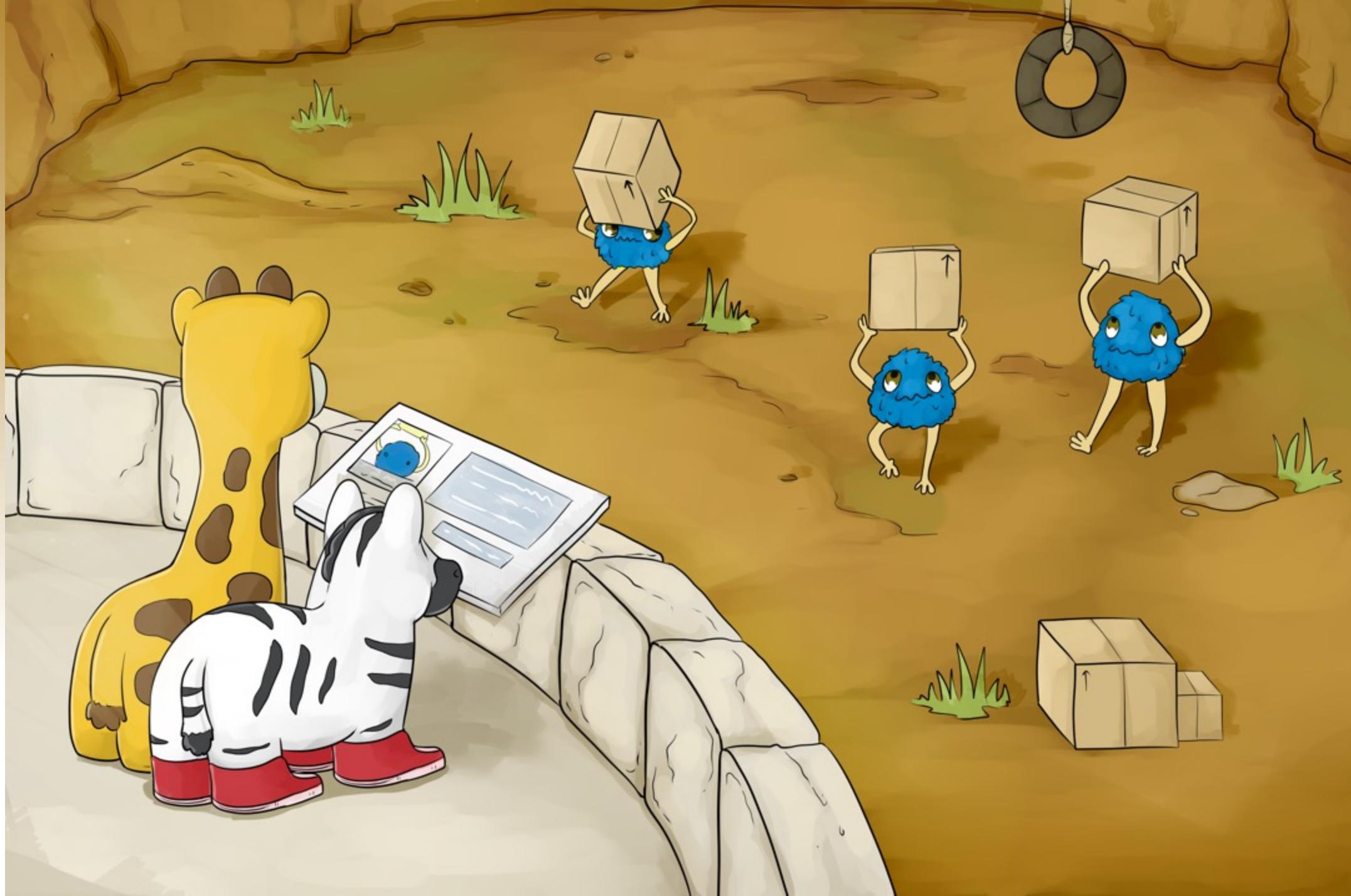


Phippy Goes to the

ZOO

A Kubernetes Story

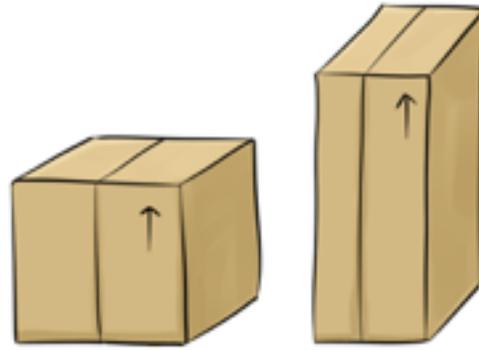




Pods

- Pods are the basic unit for running containers inside of Kubernetes
- A Pod provides a way to set environment variables, mount storage, and feed other information into a container

Pod

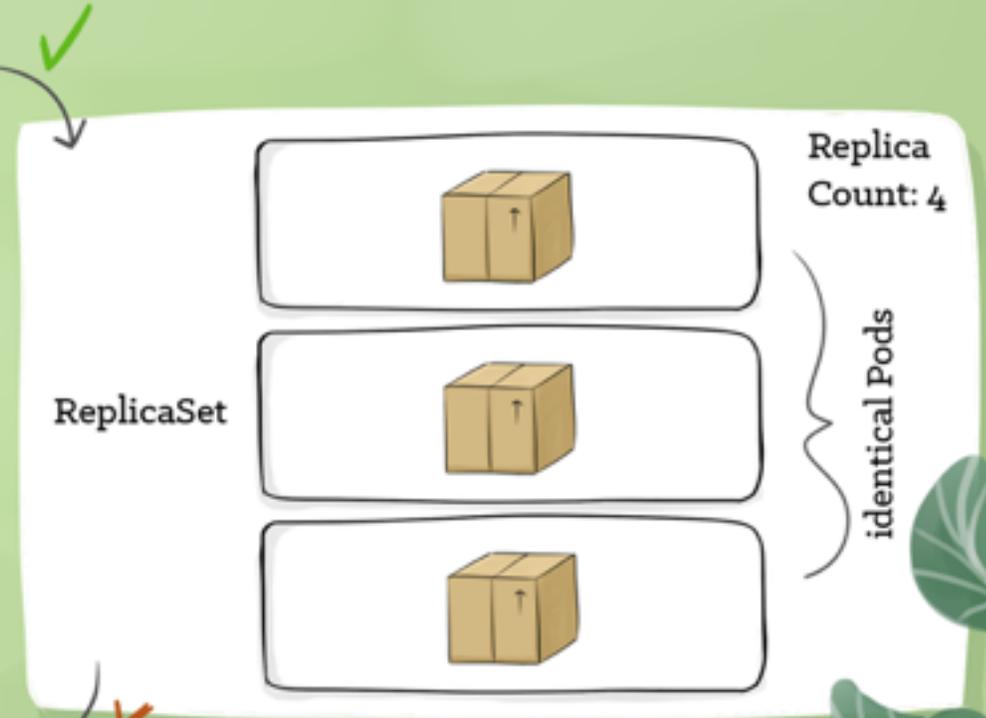


one or more containers



ReplicaSets

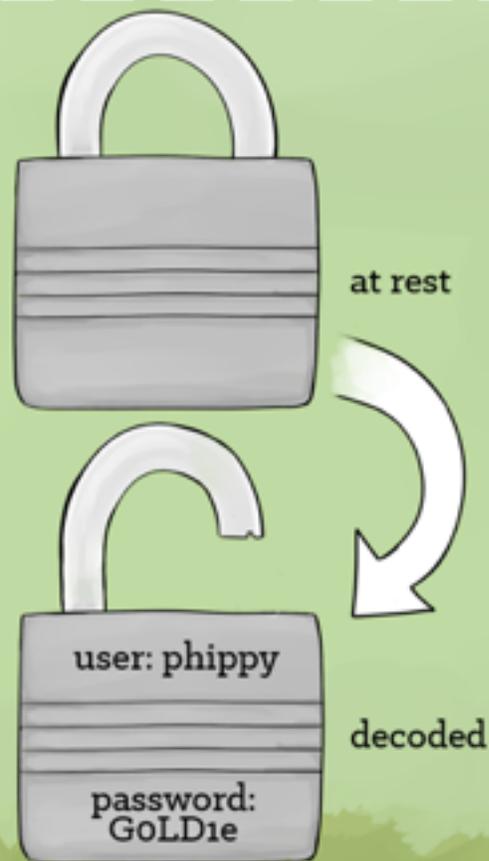
- ReplicaSets are considered a “low-level” type in Kubernetes
- Often, Kubernetes users opt for higher level abstractions like Deployments and DaemonSets





Secrets

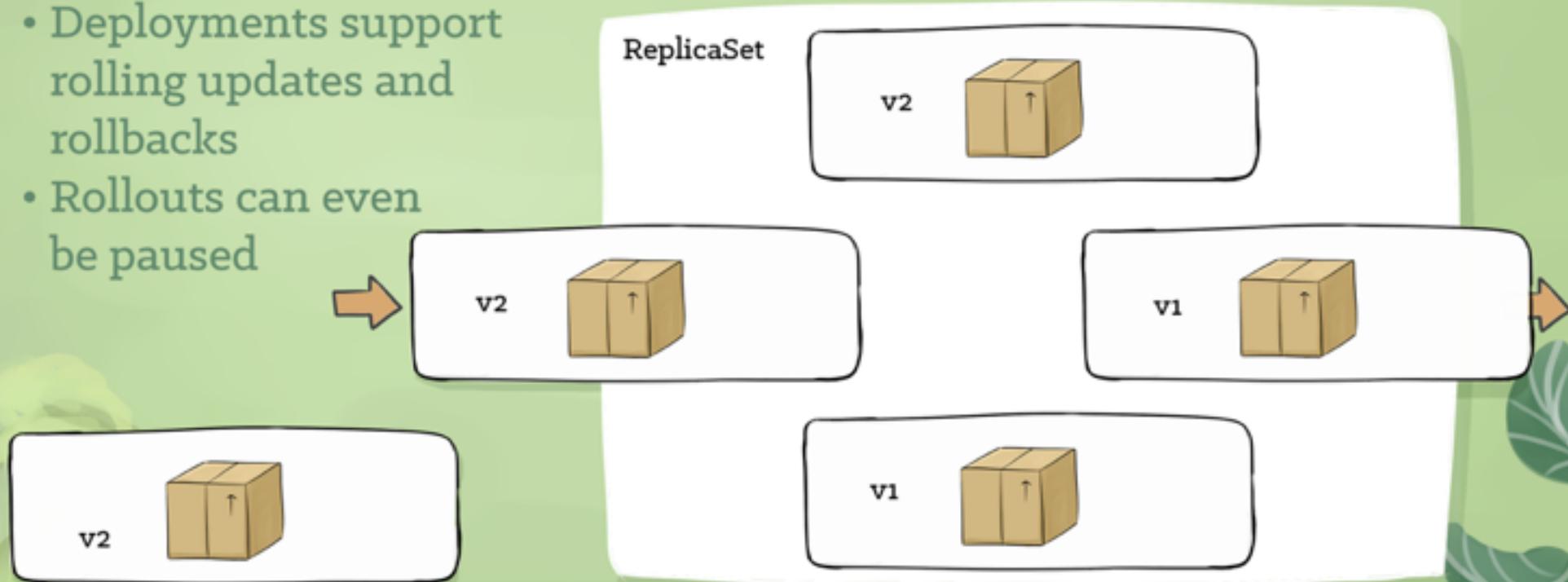
- Secrets are Base 64 encoded “at rest” but the data is automatically decoded when attached to a Pod
- Secrets can be attached as files or environment variables
- Use add-on encryption providers for locking your data

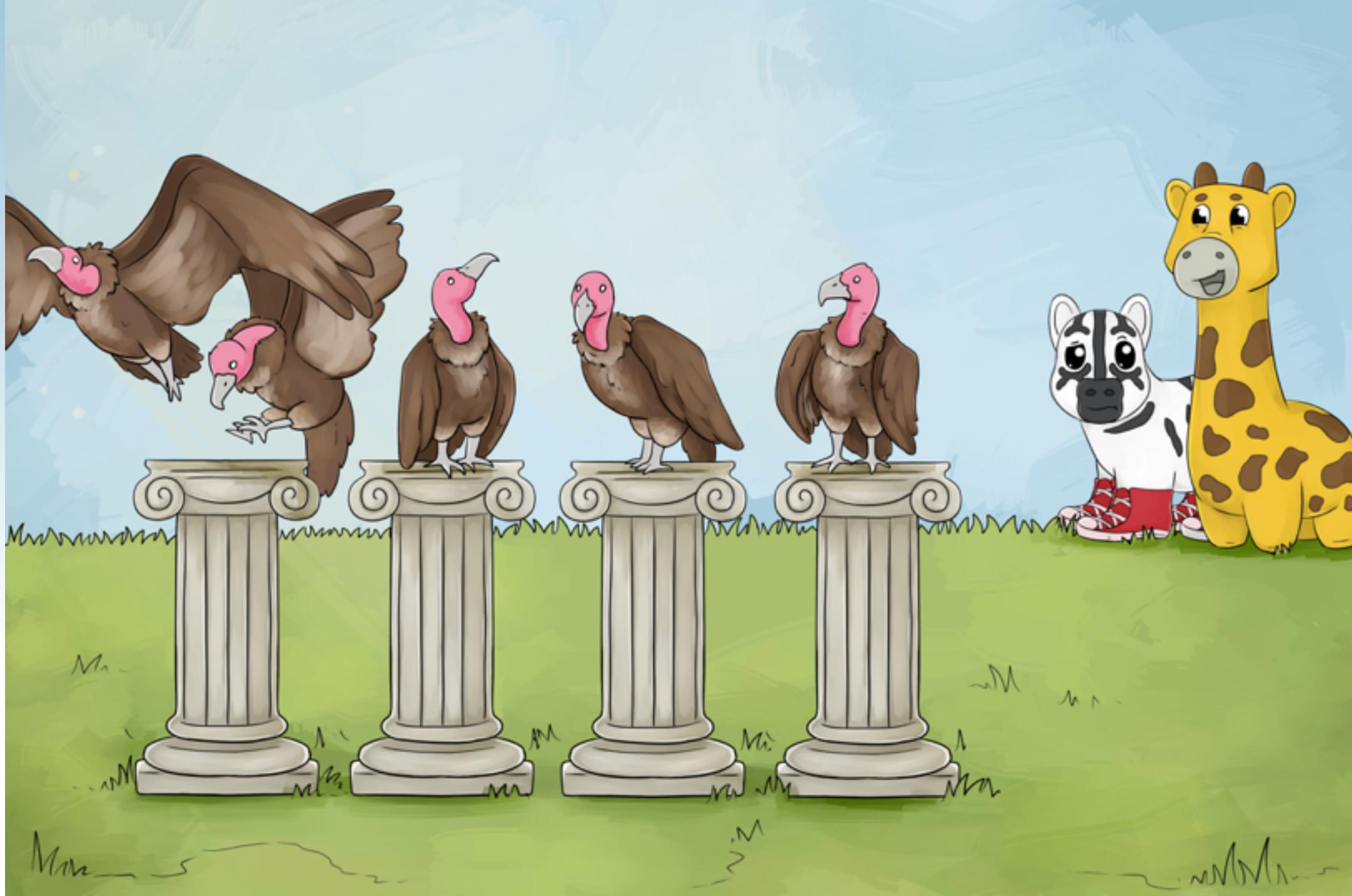




Deployments

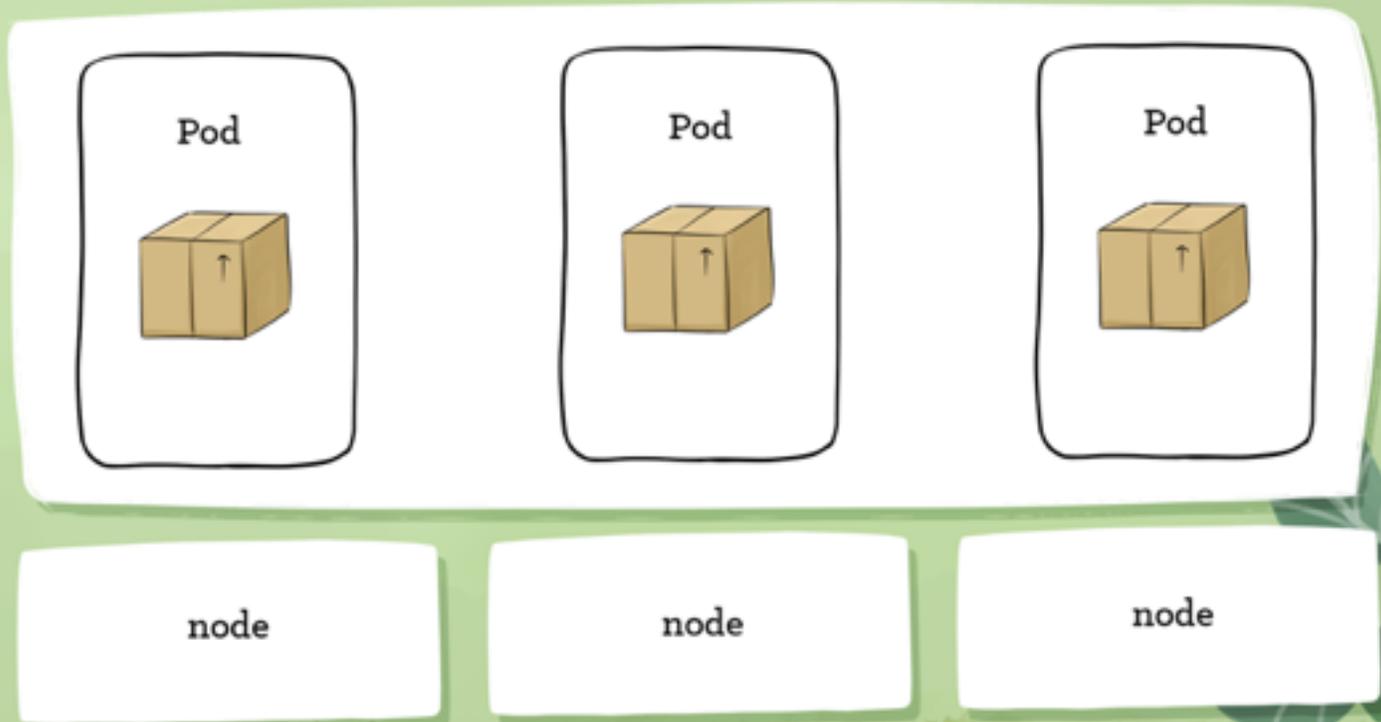
- Deployments support rolling updates and rollbacks
- Rollouts can even be paused

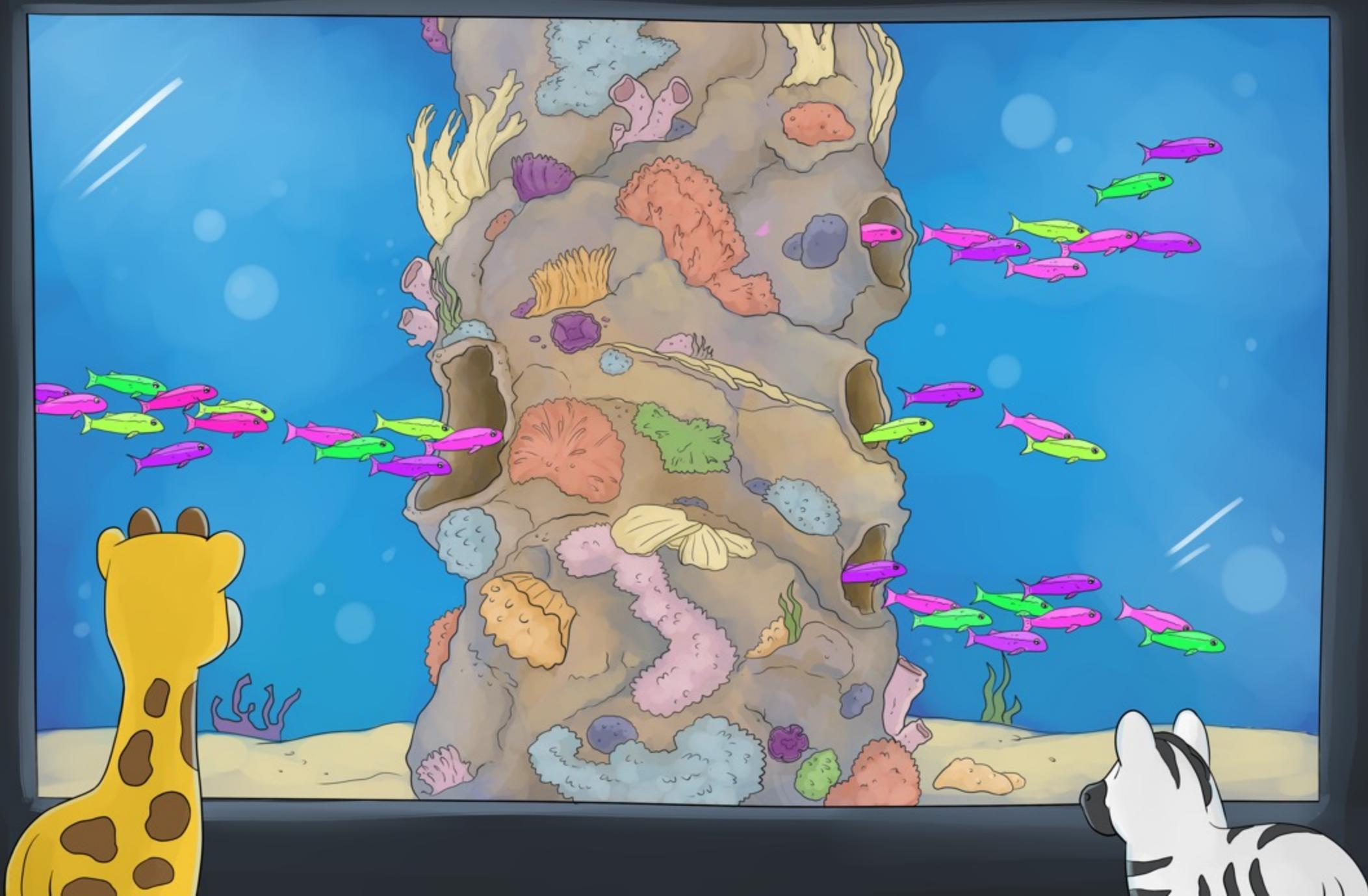




DaemonSets

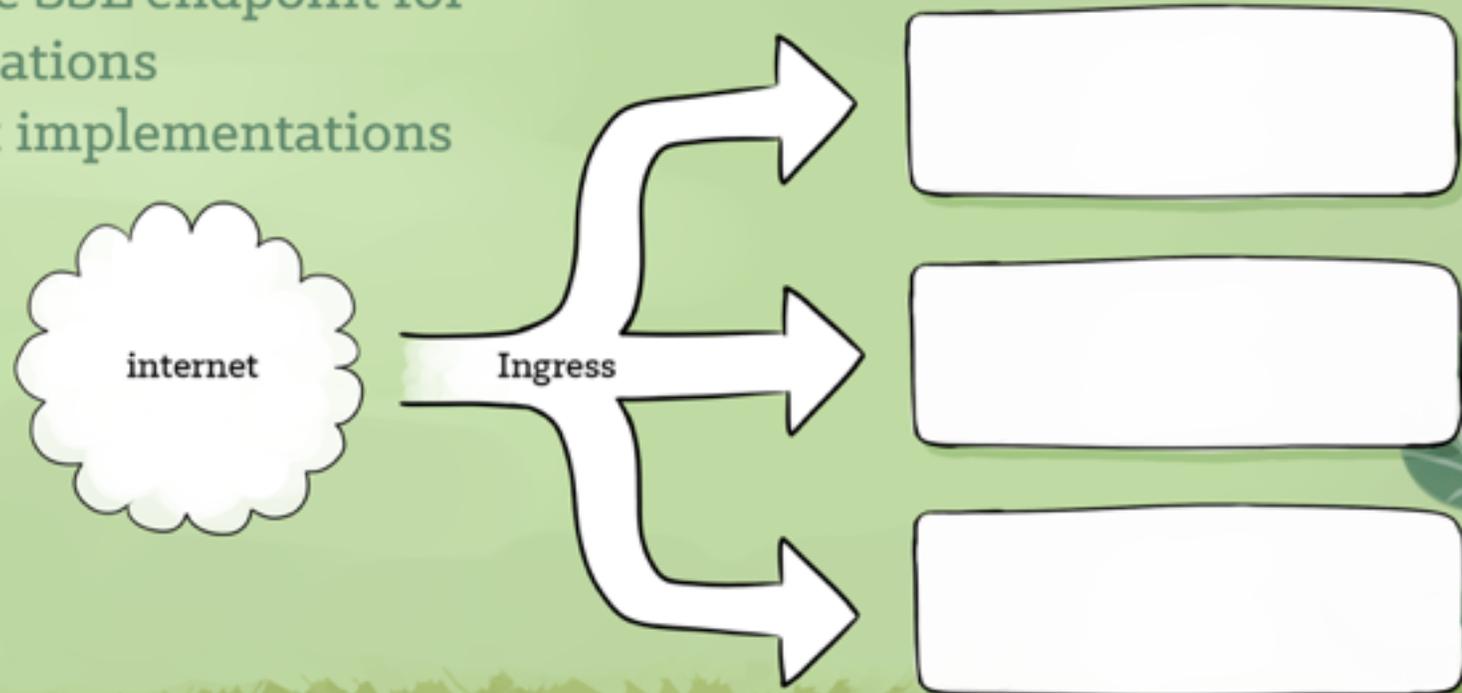
- DaemonSets have many uses – one frequent pattern is to use a DaemonSet to install or configure software on each host node





Ingresses

- Route traffic to and from the cluster
- Provide a single SSL endpoint for multiple applications
- Many different implementations of an ingress allow you to customize for your platform





CronJobs

- Use common Cron syntax to schedule tasks
- CronJobs are part of the Batch API for creating short lived non-server tools

CronJob

at: 07:00 AM



sleeping

CronJob

at: 01:05 PM

running



CronJob

at: Wed 01:00 AM

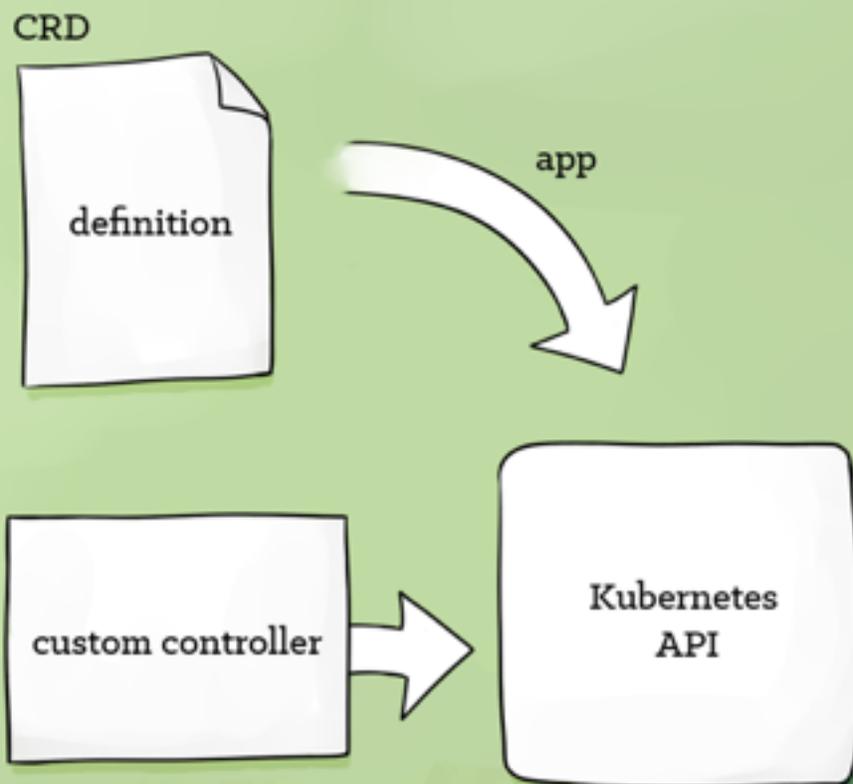


sleeping



CRDs

- A CRD defines a new resource type, and tells Kubernetes about it
- Once a new resource type is added, new instances of that resource may be created
- Handling CRD changes is up to you. A common pattern is to create a custom controller that watches for new CRD instances, and responds accordingly





Behind The Scenes



- Matt drafted the text – Phippy Goes On Safari (original title)
- Matt and Karen edited the text and drafted storyboards
- Karen and Bailey worked together off storyboards to create sketches + work through countless iterations
- Bailey finalizes all illustrations
- Karen added in text and laid out the rest of the book
- Books sent to CNCF for publication

Behind The Scenes

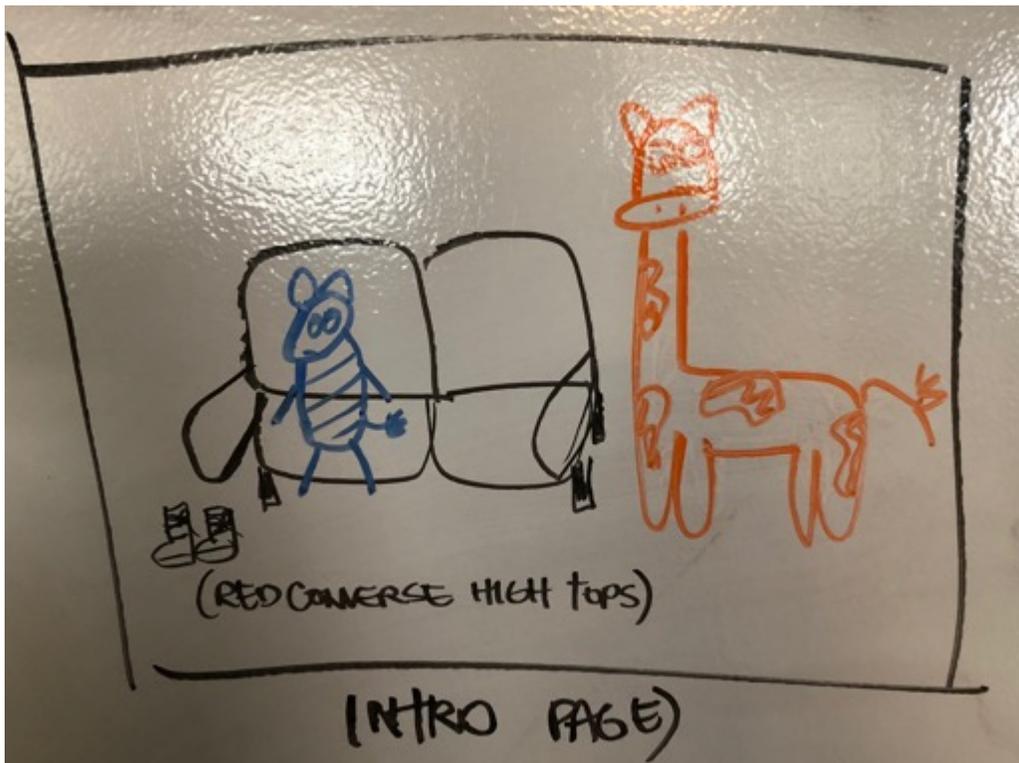


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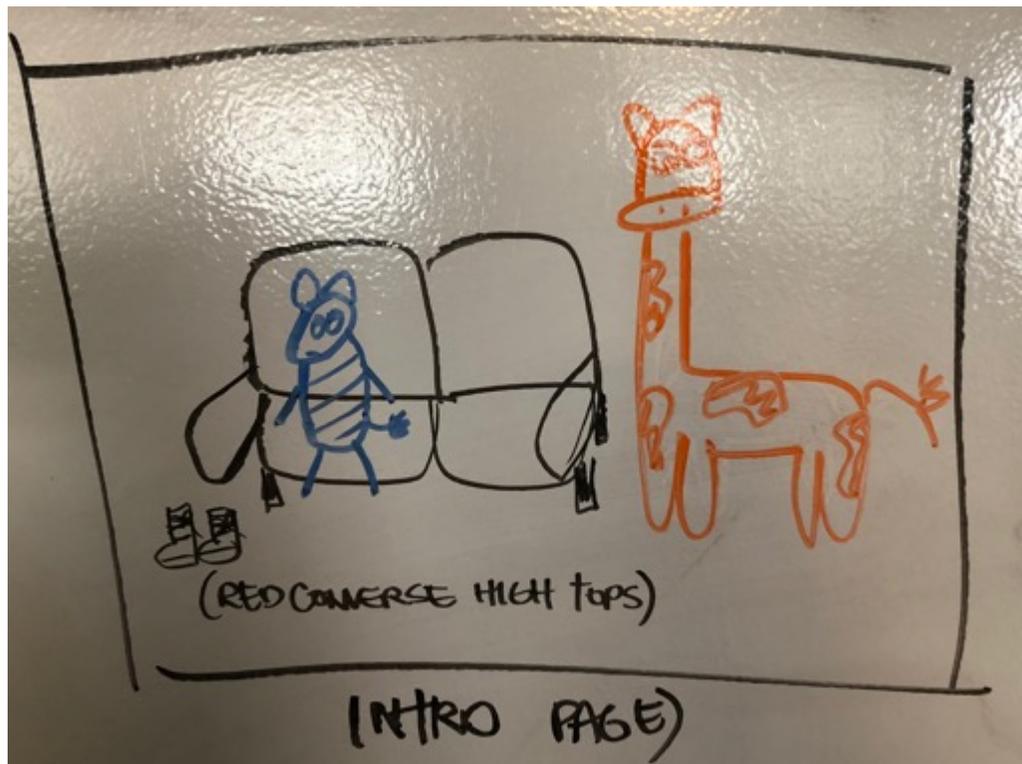


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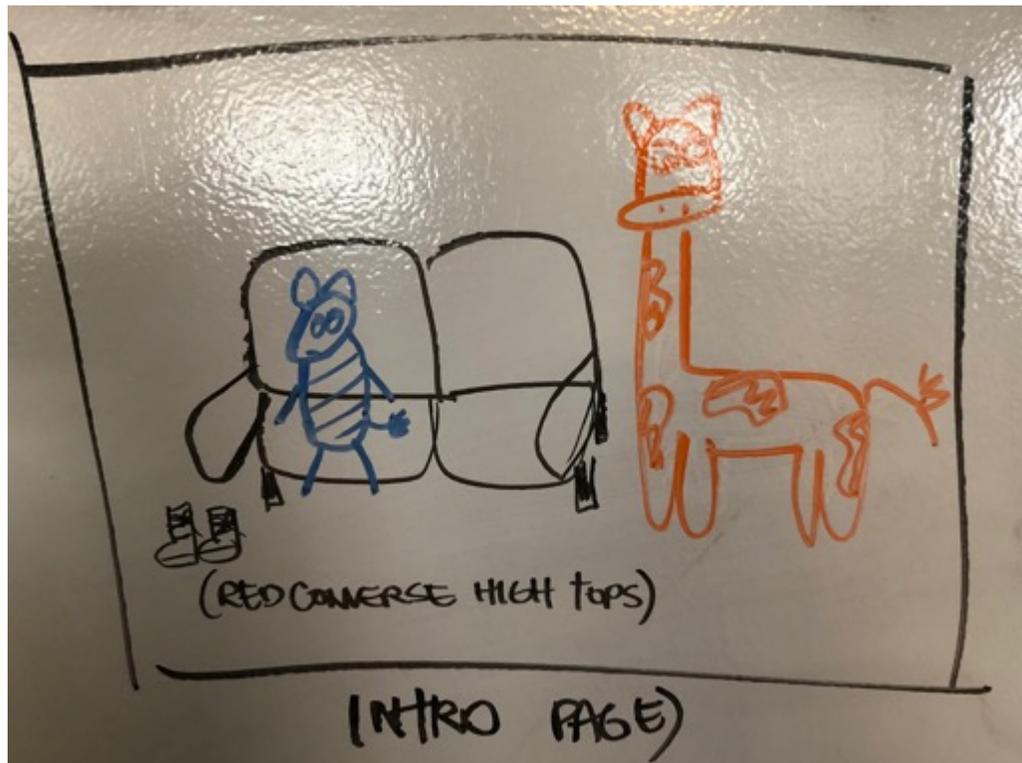


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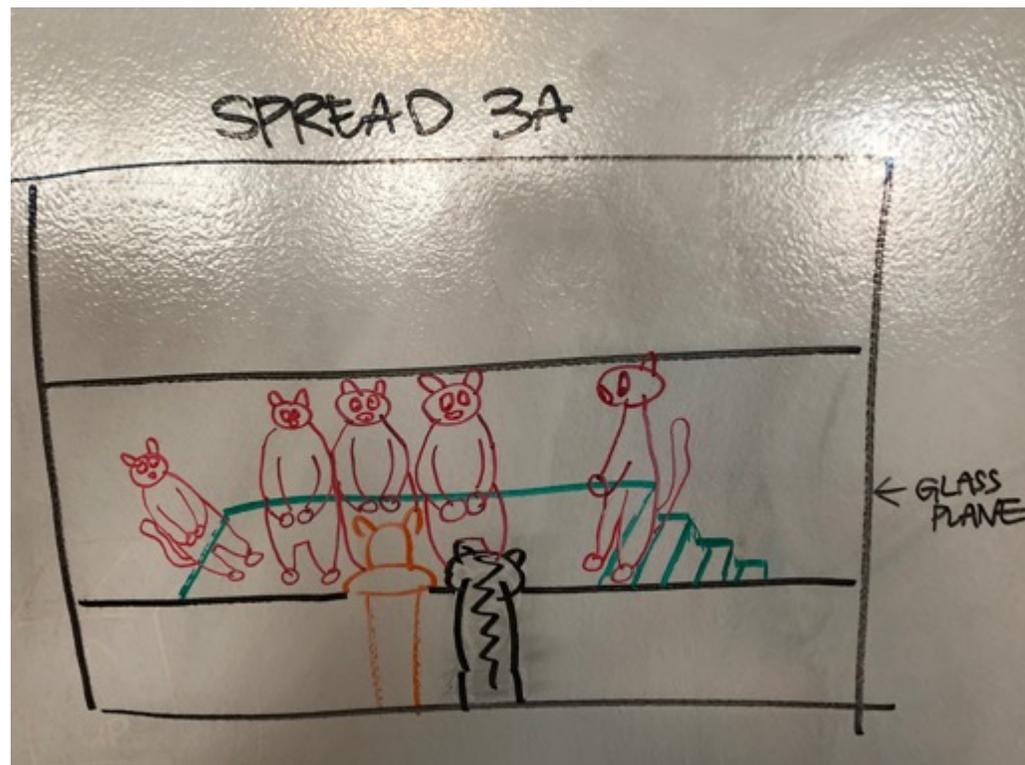


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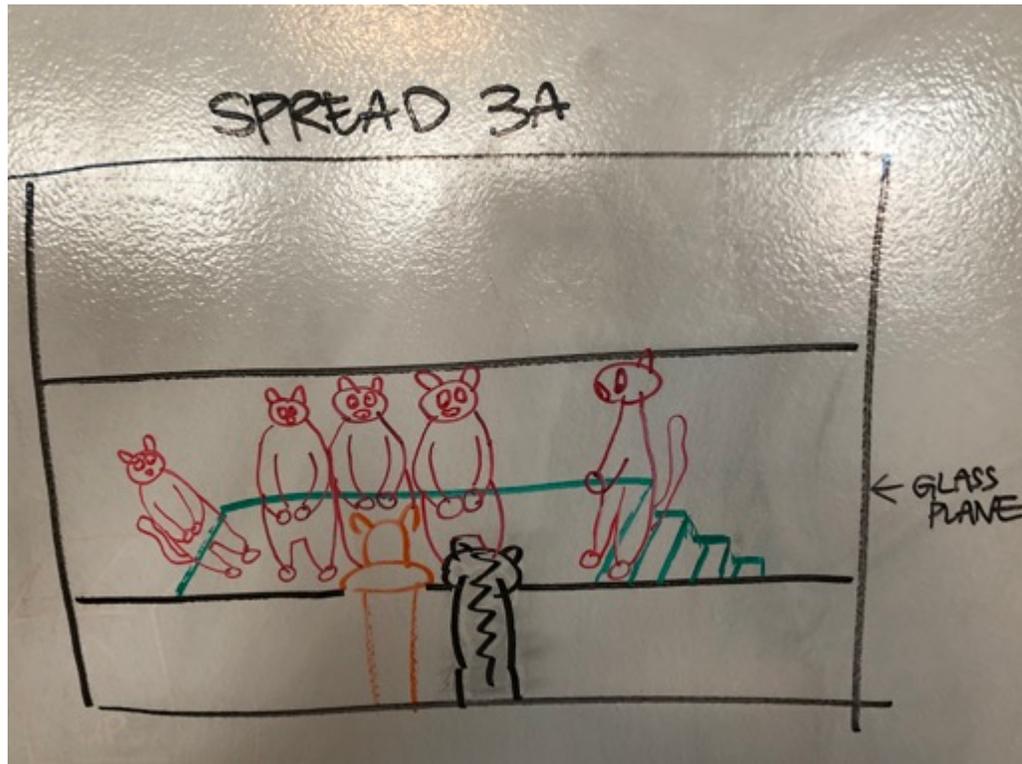


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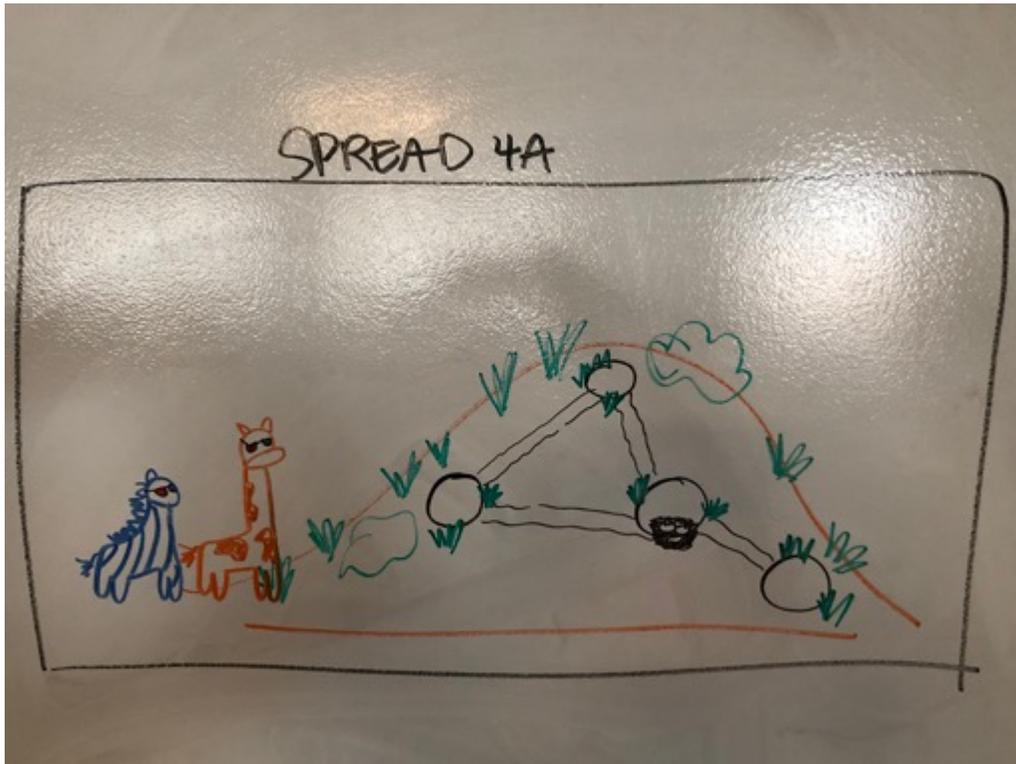


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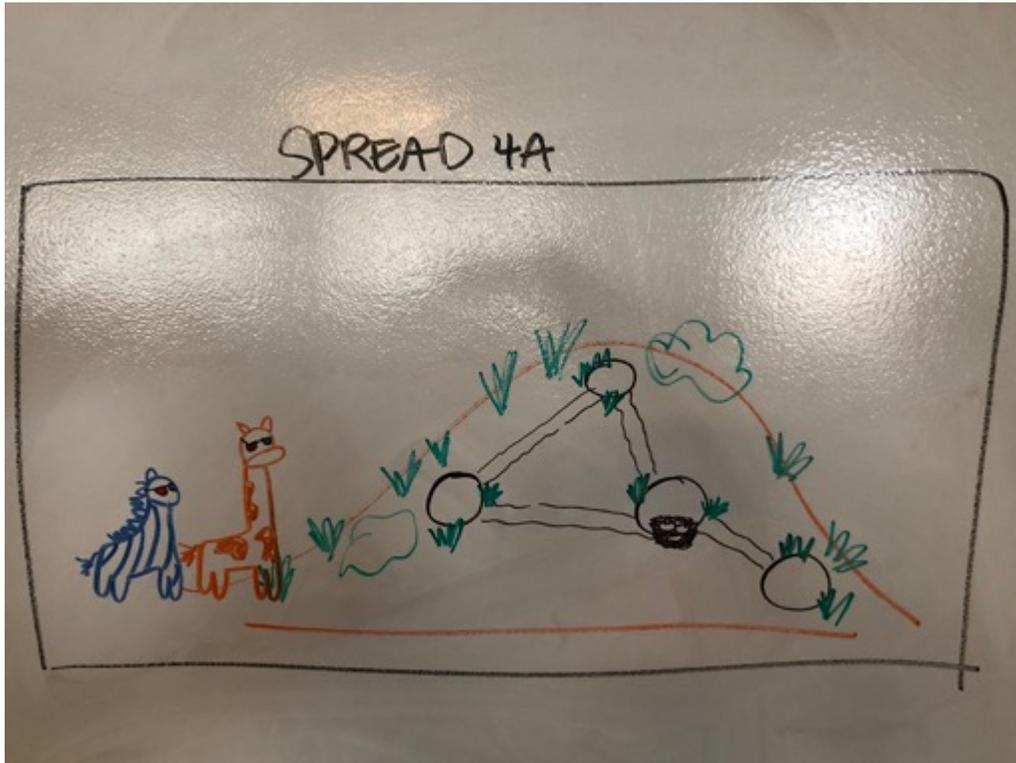


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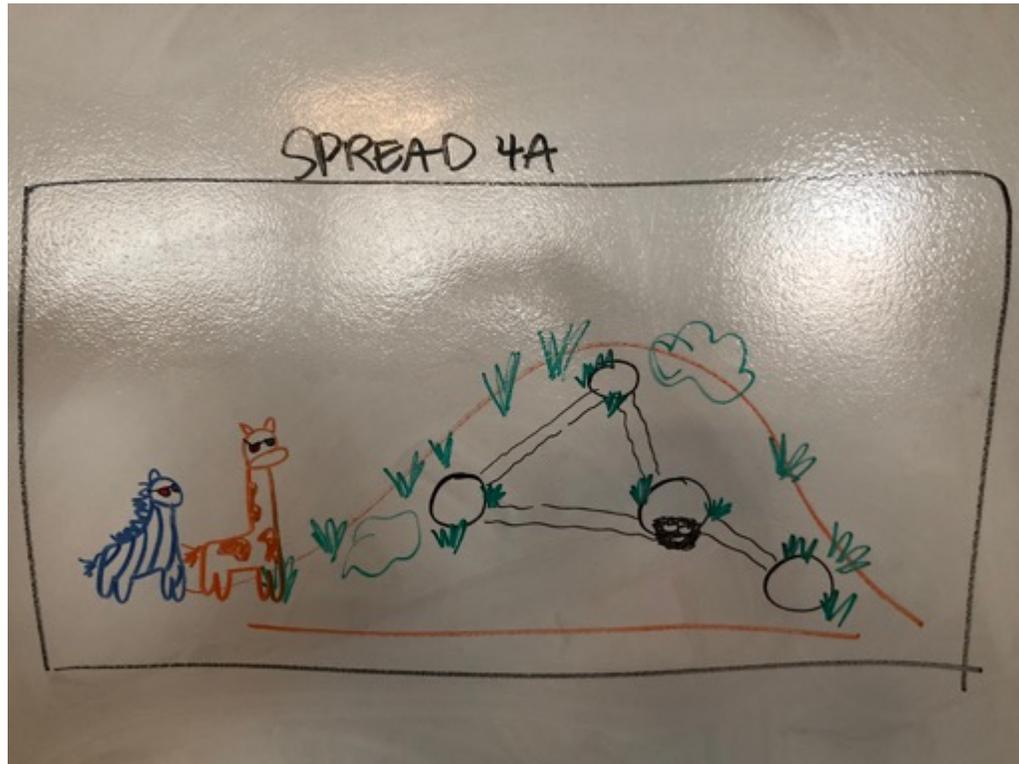


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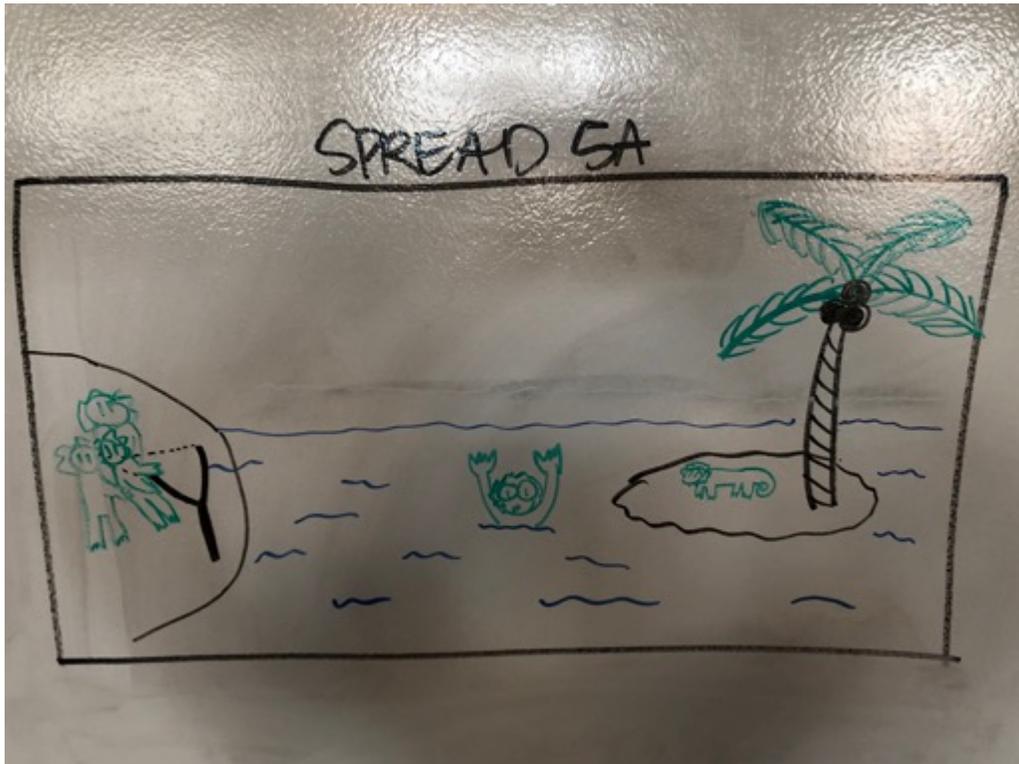


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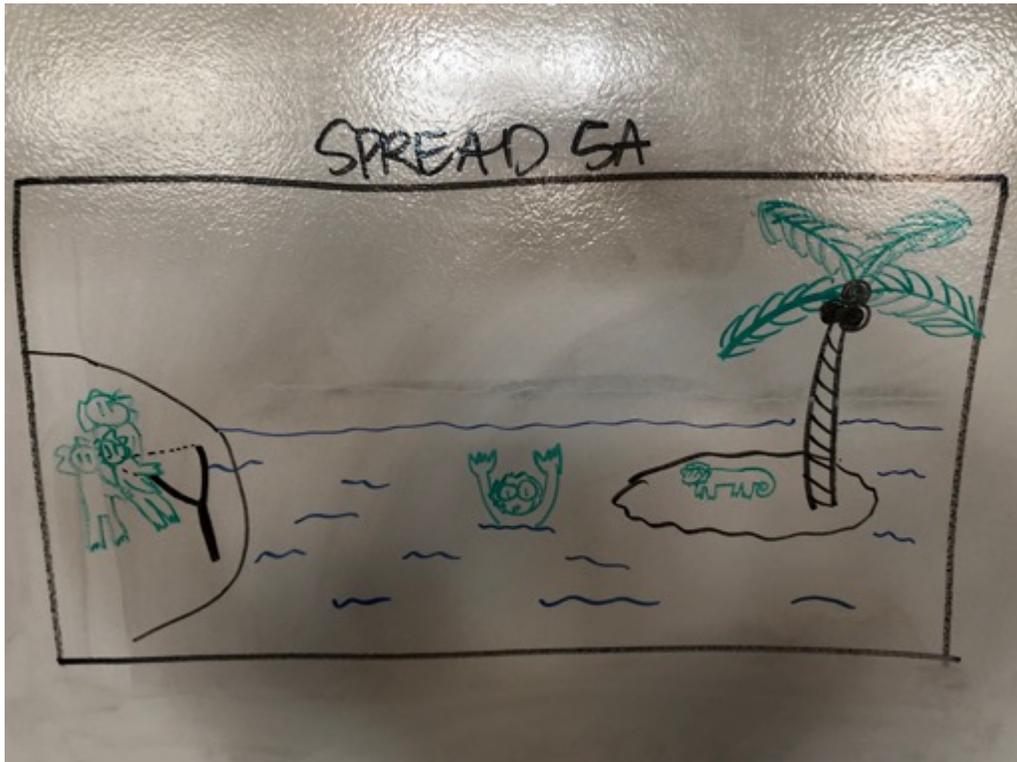


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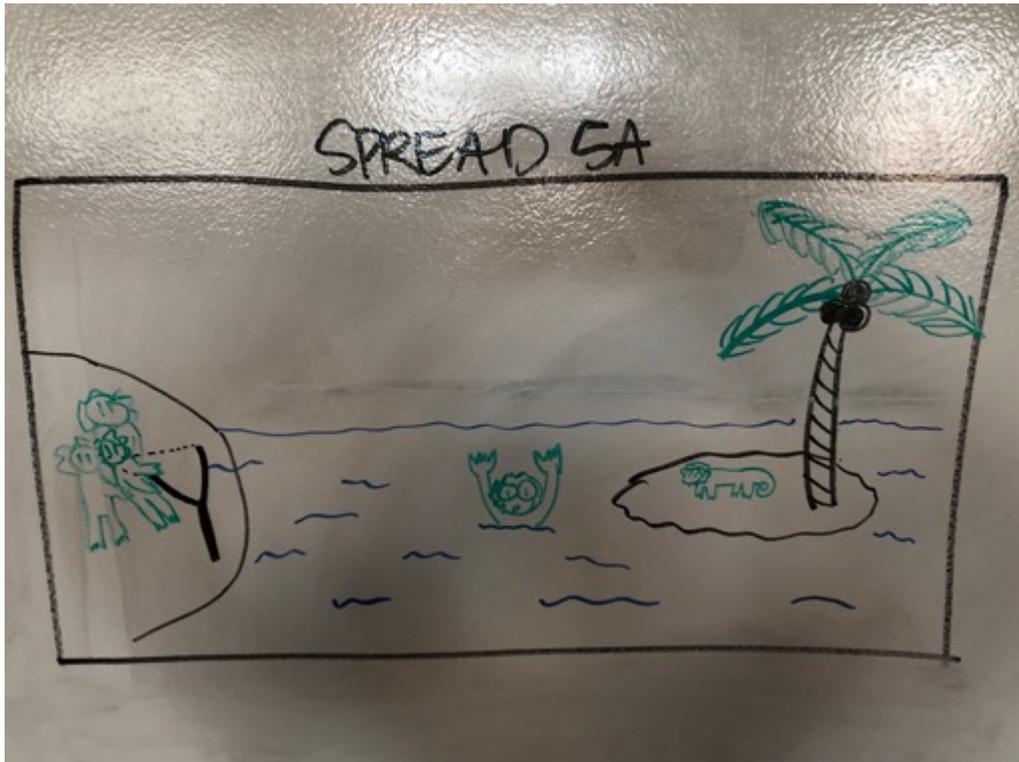


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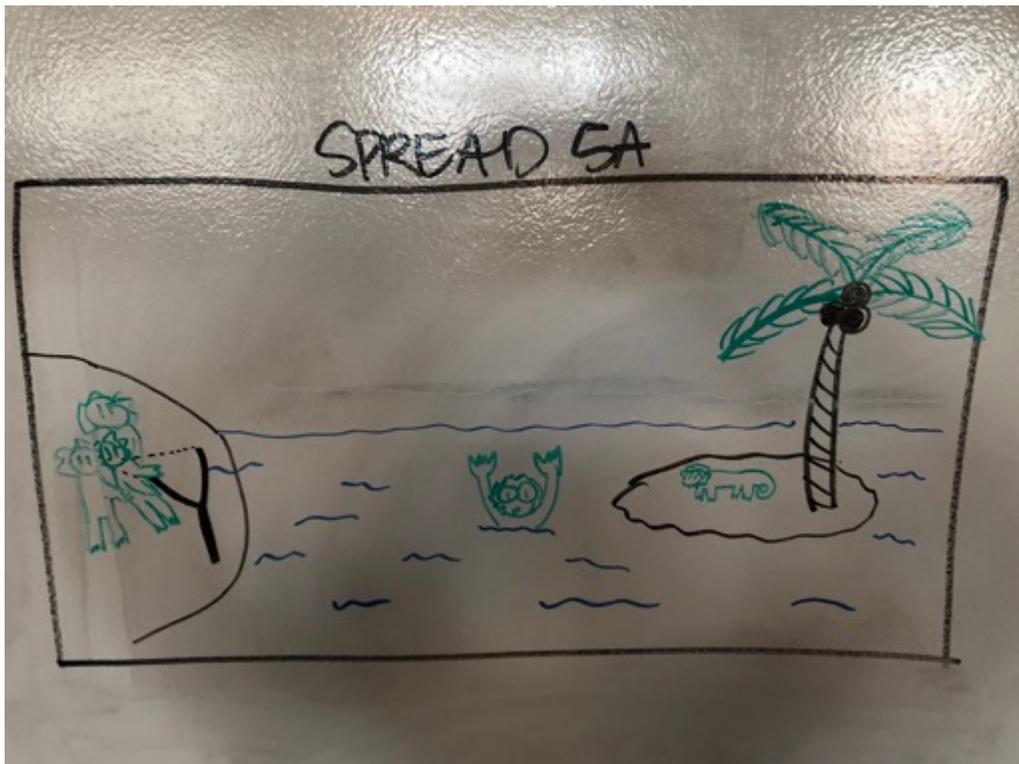


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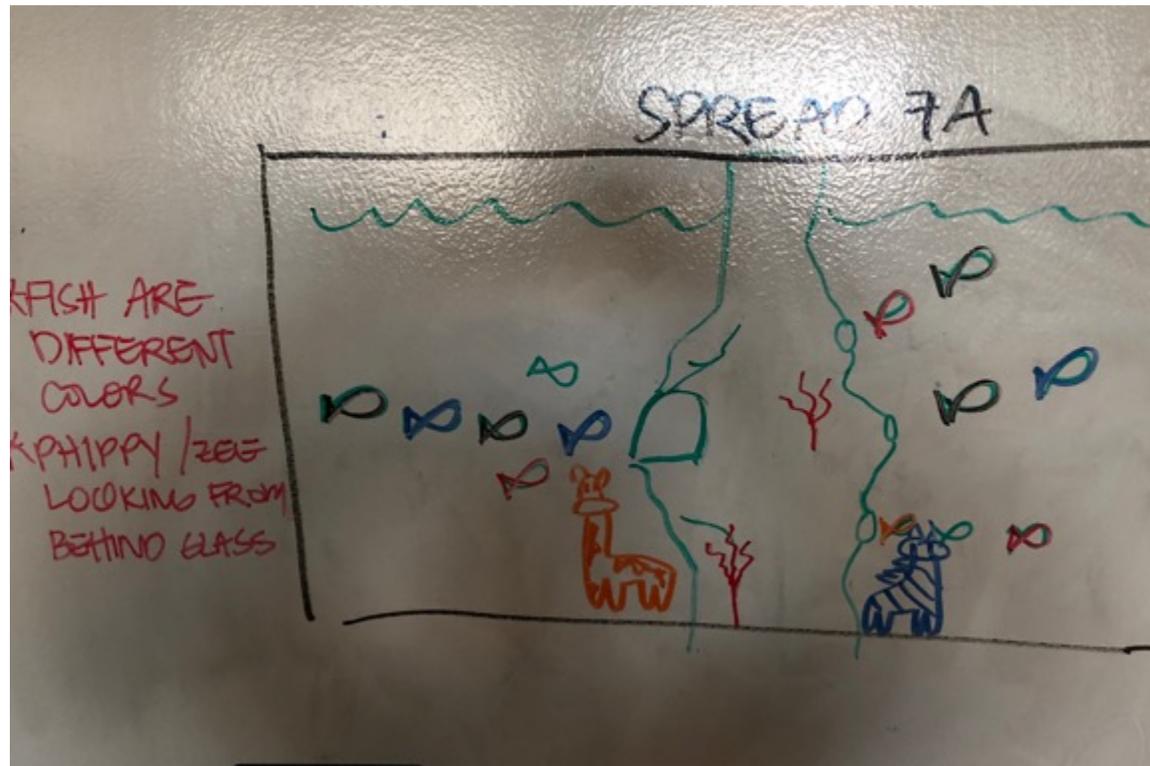


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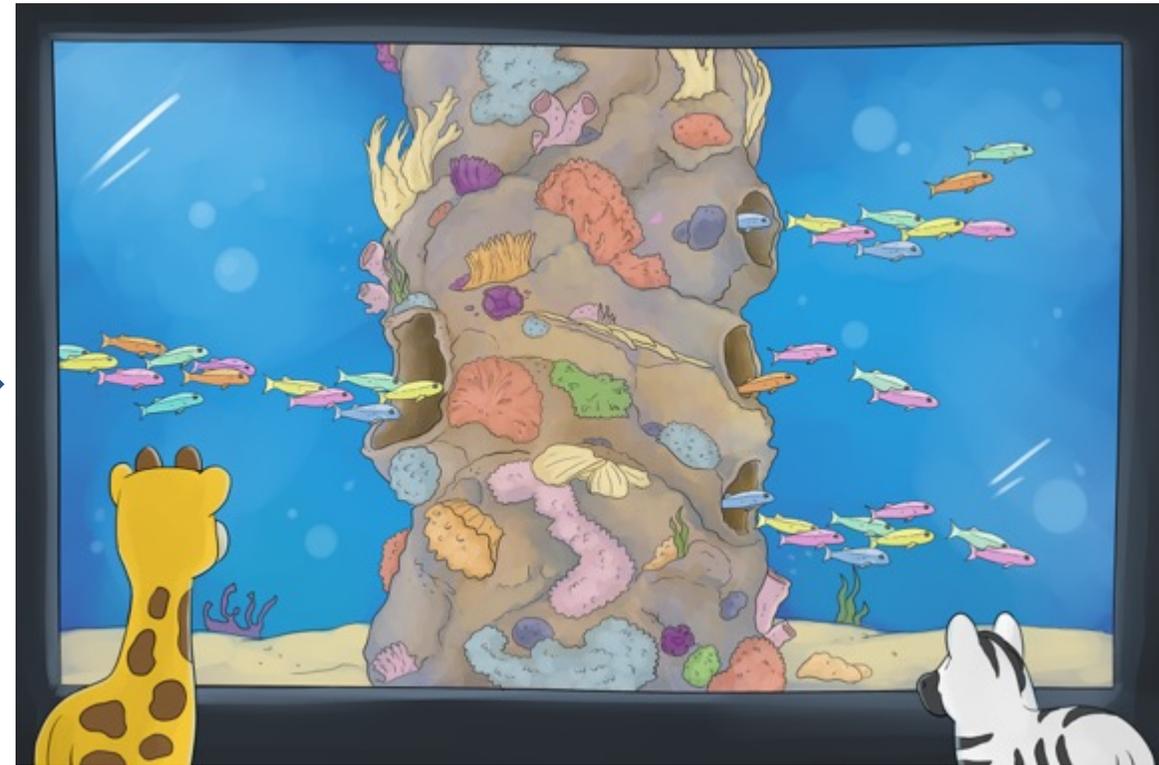
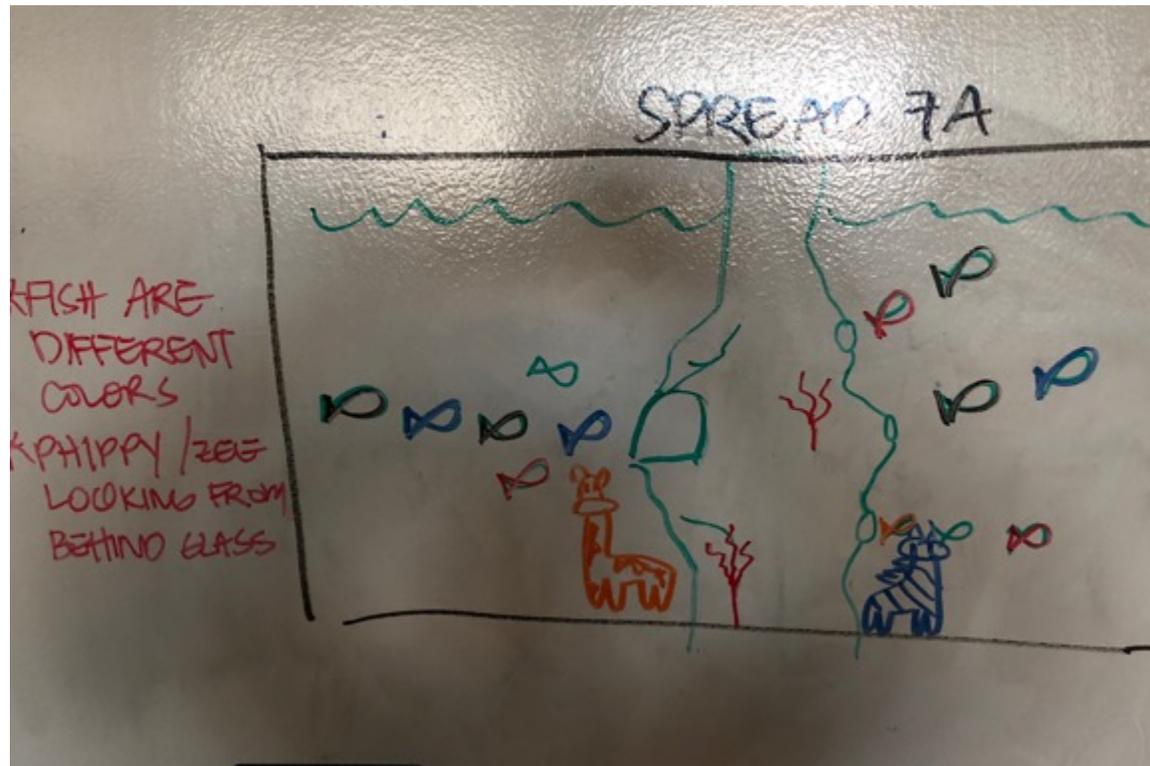


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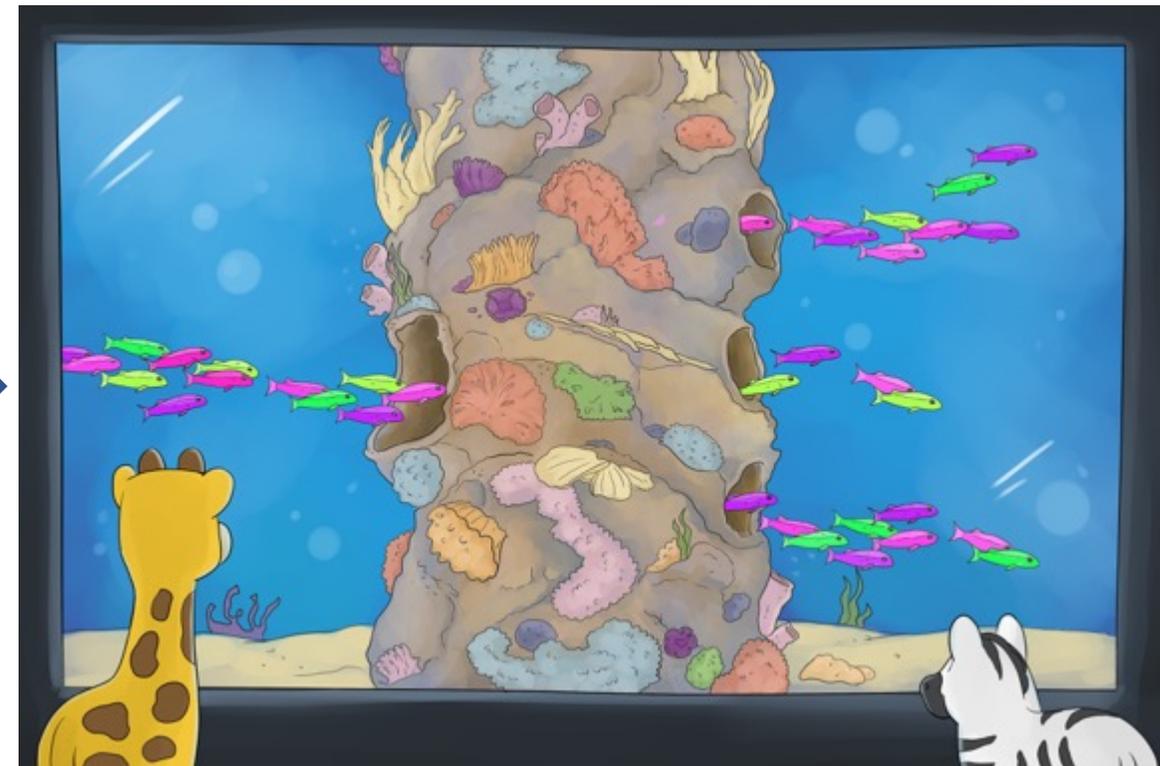
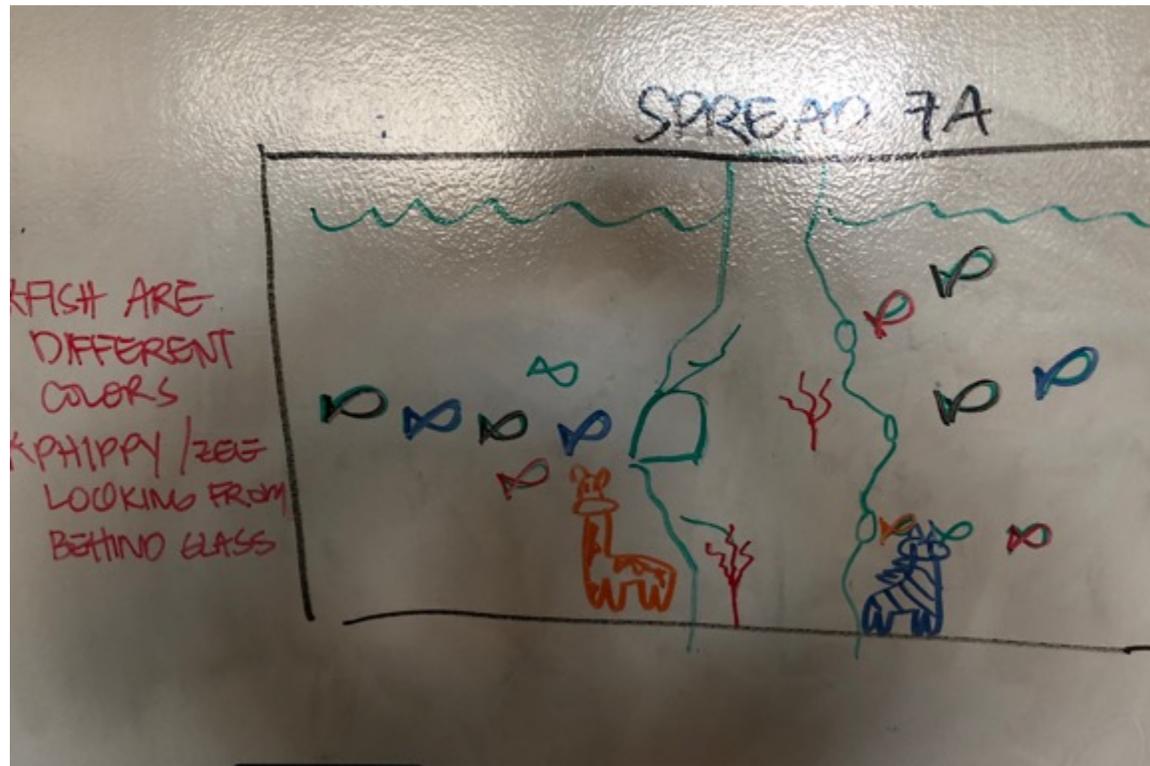


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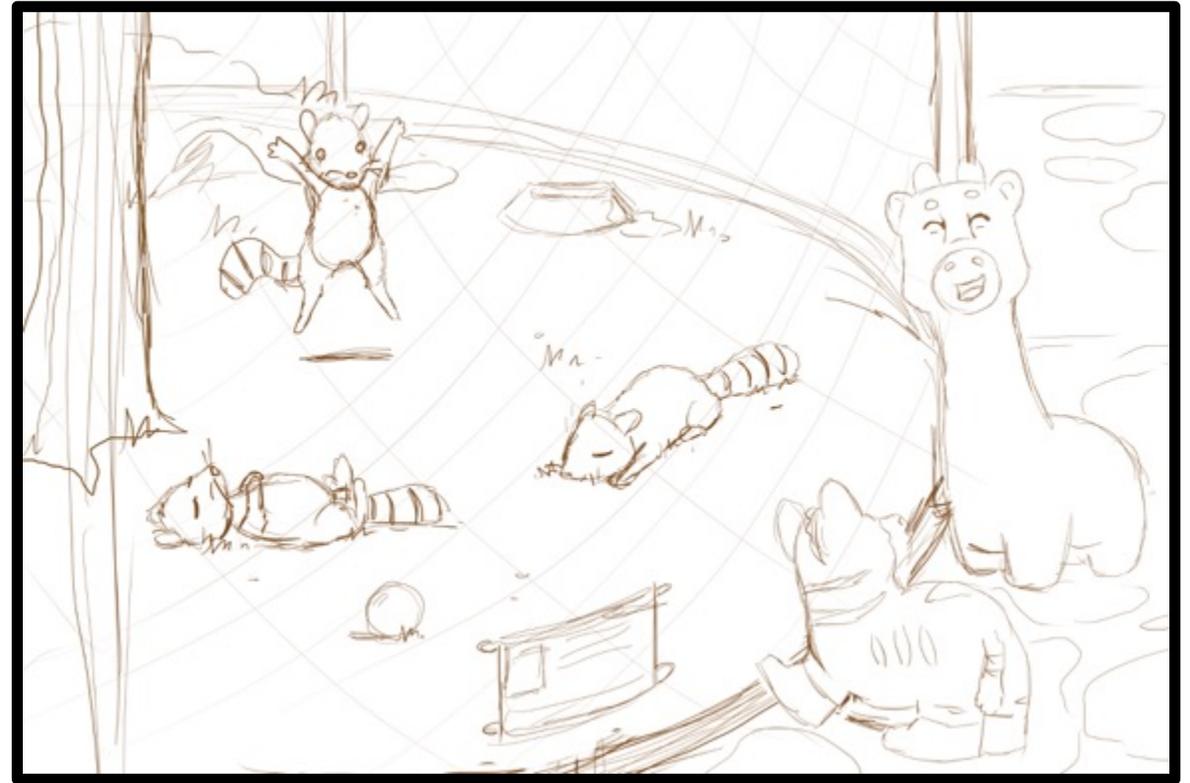
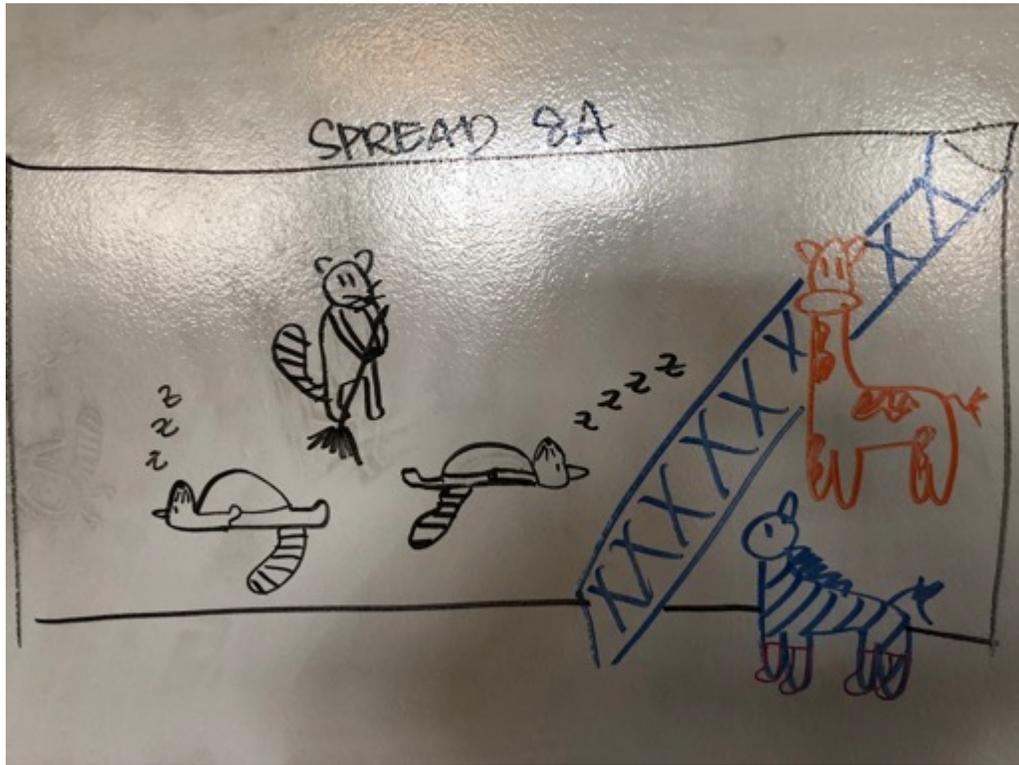


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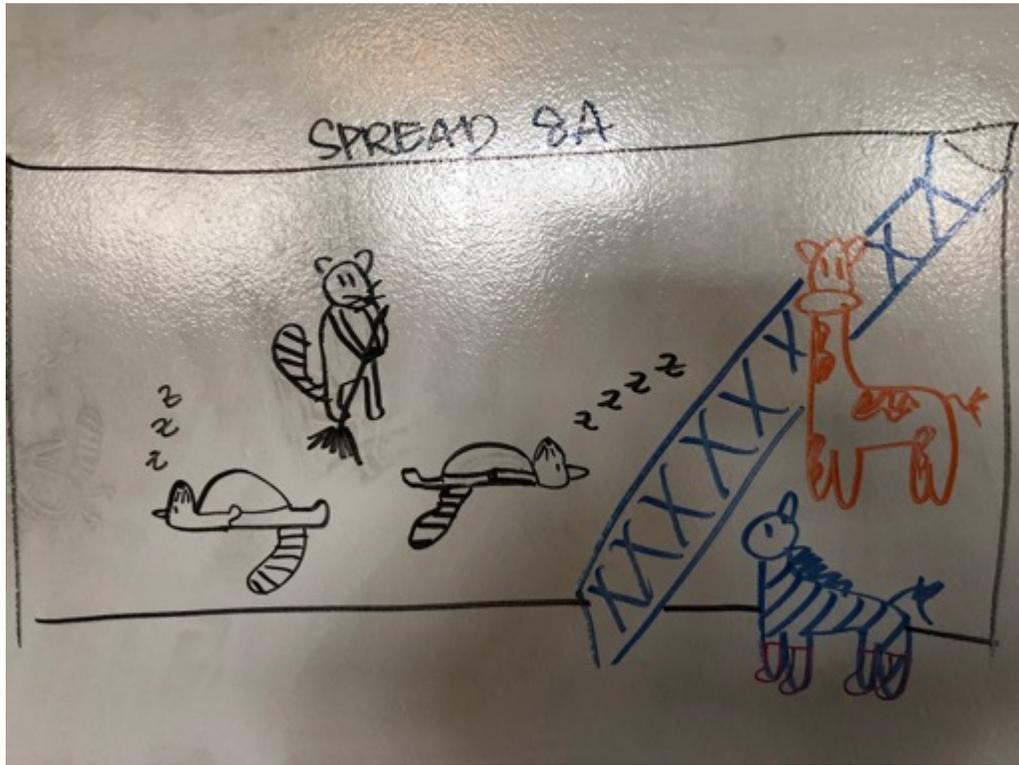


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Phippy and Friends







The Characters



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Phippy



Goldie



Zee



Captain Kube

Contribution

- Created by Matt Butcher, Karen Chu, and Bailey Beougher
 - Goldie is based on the Go Gopher, created by Renee French
- Contributed by Microsoft to CNCF
- CNCF has licensed the characters and the 2 books under Creative Commons Attribution (CC-BY)
 - You can remix, transform, and build upon the material for any purpose, even commercially
 - Use them to illustrate your cloud native story
 - Please reference “phippy.io”

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