# So, I tried Kubernetes The Hard Way

Kenji Miyamoto

# Kubernetes = K8s

κυβερνήτης, Greek for "helmsman" or "pilot" or "governor"

```
> "K#{'ubernete'.length}s"
=> "K8s"
```

https://github.com/kelseyhightower/kubernetes-the-hard-way

# About me before Kubernetes The Hard Way

# About me before Kubernetes The Hard Way

- I've been working/playing around with K8s together with Seph on my spare time (OT!) for 3 weeks on and off
- I've been able to deploy and manage apps with no prior intimate knowledge on Kubernetes (although I've read some high-level overview)

# About me before Kubernetes The Hard Way

- Prior experience with other DevOps tools such as Docker Swarm (and compose) really helped
- Familiarization and experience with concepts like containerization, orchestration, infrastructure-as-code, declarative programming/configuration and others also helped me a lot
- Helm and Kustomize really helped with the application management in K8s

# What is Kubernetes The Hard Way?

# What is K8s The Hard Way?

- A tutorial designed to be a supplementary learning material for K8s concepts by walking you through deploying a K8s cluster "manually" this means without kubeadm or any other K8s deployment/management tools.

# Notes

- Kubernetes the hard way is a supplementary learning material
- You don't need to do Kubernetes the hard way to deploy an app
- You don't need to know every Kubernetes concepts to deploy apps to Kubernetes
- We're not going to be deploying or managing the K8s cluster by ourselves like we did with our Swarm cluster
    - DigitalOcean Managed Kubernetes/GKE/EKS

# My Experience with Kubernetes The Hard Way

# My Experience

- One day isn't enough (for me)
- The hard way is tedious and easy to mess up if you're setting it up by yourself.
- It really made me appreciate K8s management platforms (DigitalOcean)
- This tutorial one of the best tools to start learning about how Kubernetes works
    - Follow the instruction, then read the concepts and repeat.

# Tips on Learning Kubernetes

- Know what Kubernetes is and is supposed to do.
- Start by learn to deploy an app to kubernetes (minikube).
- Stick to high level concepts to maintain momentum and progress
- Familiarize yourself with kubectl
- Familiarize yourself with tools such as Kustomize and more importantly Helm and always be aware of what they're doing
- Documentation is your best friend
- Knowing your way around the shell terminal and its tools will make the learning process and execution faster

# Links

- https://kubernetes.io/docs/tasks/tools/ (stick to minikube or kind instead of kubeadm to be efficient at learning)
- https://kubernetes.io/docs/concepts/overview/
- https://kustomize.io/
- https://helm.sh/docs/