① Kubernetes

→ K8

→ Open source container orchestration platform.

— Automate deployment, Scaling & Management of containerized app.

① Pod → Smallest deployable unit wraps! one or more containers with shared container Network

② Node
   ↳ Worker machine that run containerized Application

③ Cluster ↳ Group of Node grouped together & Managed by K8 Control Plane

④ Deployment ↳ Describe desired state. ensure that state is met.

⑤ Service ↳ Expose Pod as a n/w service.

⑥ Config Map & Secret
   ↳ Inject config. & sensitive data into Pod

⑦ Volume
   ↳ Manage the Storage that can persist beyond Pod cycle.

⑧ Ingress.
   ↳ Manage the external Access.

⑨ Namespace. → Virtual cluster within a Kubernetes cluster used to organize the resource.

* Deploy a Simple NGINX Server on Kubernetes'-

① K8 Deployment to run on NGINX Web server ... a Service.

1. K8 Deployment ...

2. Expose it via a Service.

3. Verify the access from a browser or curl..

1. nginx-deployment.yml

2. nginx-service.yml.