



Build with Kubernetes A Self-Learning Edition







From Pod to Prod

2025





Beginner to Absolute Advance

TABLE OF CONTENTS





Monolithic Architecture VS Microservices

Architecture?

Features of Kubernetes

Alternatives of Kubernetes

Docker Swarm VS Kubernetes

Master-Slave/ Client-Server Architecture in

Kubernetes

2 KUBERNETES ARCHITECTURE- MASTER NODE

API Server

Etcd

Controller Manager

Scheduler

Explained with Shopping Mall

Example

KUBERNETES ARCHITECTURE- WORKER NODE

kubelet

kub-proxy

pods

container engine

Explained with Store Managers Example

SETTING UP MINIKUBE ON YOUR MACHINE

Prerequisites

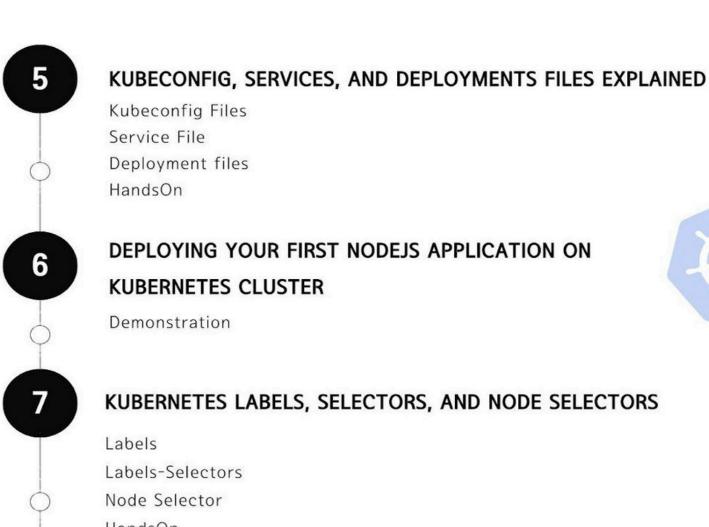
HandsOn

Creating Your First Pod

Deploy the Pod







HandsOn

REPLICATIONCONTROLLER & REPLICASET

ReplicationController ReplicaSet HandsOn



DEPLOYMENT OBJECT IN KUBERNETES

Use Cases for the Deployment Object HandsOn

KUBERNETES CLUSTER (MASTER+WORKER NODE) USING KUBEADM ON AWS

ReplicationController ReplicaSet HandsOn

