Chapter0: Rest API fundamental

* What is API? Why we need API and CURD operation

Chaper1: K8s Introduction

* What is Kubernetes
* Why we need Kubernetes
* Kubernetes architecture(Master-slave, controller, schedular,etcd and api server, kubelet, proxy and pod)

Chapter2: Kubernetes Installation

Chapter3: Kubernetes objects:

* Pod
* Container
* Ephemeral Containers
* Replication Controllers
* Replica Sets
* Deployments
* StatefulSets
* DaemonSet
* Job
* CronJob
* HorizontalPodAutoScaler

Chapter4: Pod

Chapter5: Liveness and readiness probe Liveness Probe: This is used to determine if the particular container is running or not. If a container fails the liveness probe, the controller will try to restart the pod on the same node according to the restart policy configured for the pod Readiness Probe: This is used to determine whether a particular container is ready to receive requests or not. If this fails Kubernetes controller will ensure that the pod doesn’t receive any requests. If container specifies a readiness probe, its default state will be Failure until readiness probe succeeds.

Chapter6: Label and annotation in k8s

Chapter7: Controller in k8s

Chapter8: service in k8s(Nodeport, clusterip, load balance and headless)

Chapter9: Kubernetes volume and storage class

Chapter10: Configmap and secrate

Chapter11: EKS, ingress and GCE

Chapter12: HPA

Chapter13: Helm

Chapter14: OpenShift