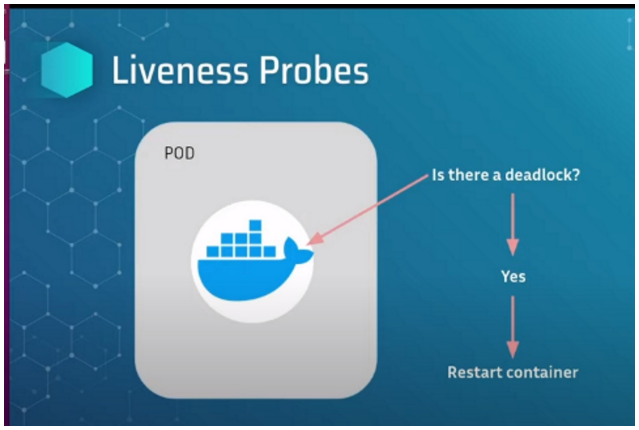
Probes

Saturday, January 1, 2022 8:13 PM

1. Liveness Probes :
   Tell the Kubernetes cluster that Docker container required a restart.



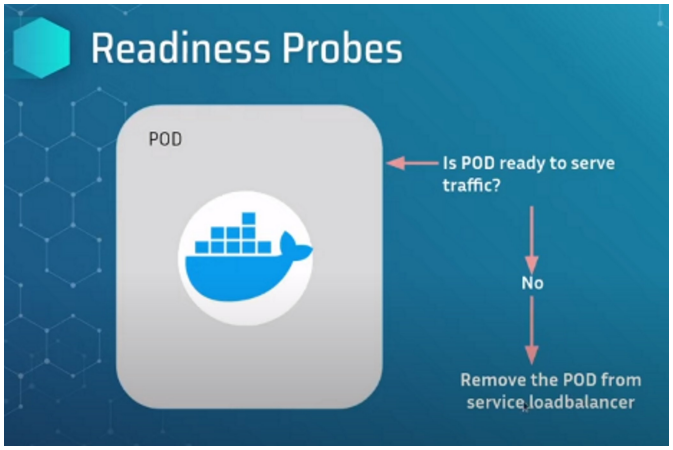
Configuration which we need to put in liveness probe.

```
livenessProbe:
  httpGet:
    path: /hello
    port: 8080
  initialDelaySeconds: 15        <------ First time when liveness will test.
  periodSeconds: 10              <------ Regular interval after the application startup.
```

Lets suppose if some deadlock happens inside cluster and container unable to start then due to liveness probe cluster will restart the container.

Readiness Probe:

Assume it is a door keeper for incoming traffic.
Pod is ready to receive traffic or not.



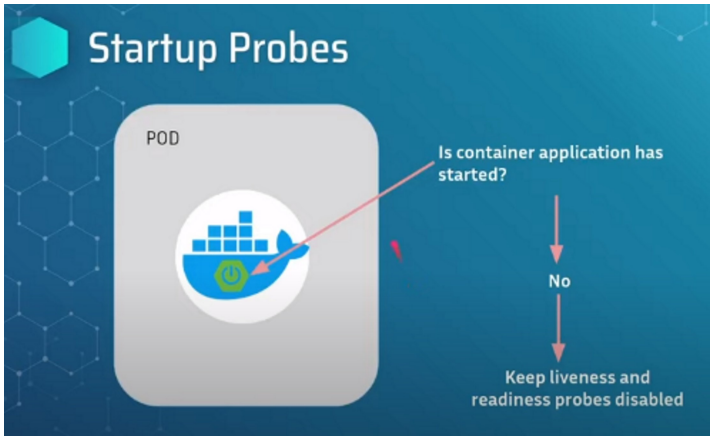
Readiness probe tells the kubernetes cluster that POD is healthy and receiving traffic so keep this pob into load balancer.

Configuration :

```
readinessProbe:
  httpGet:
    path: /hello
    port: 8080
   initialDelaySeconds: 15        <------ First time when liveness will test.
   periodSeconds: 10            <------ Regular interval after the application startup.
```

Startup Probe :

Startup probe is responsible for application deployed in docker container.



Configuration :

```
startupProbe:
  httpGet:
    path: /hello
    port: 8080
   failureThreshold: 30
   periodSeconds: 10            <------ Regular interval after the application startup.
```

FailureThreshold is like : 30 * 10 = 300 means 5 minutes. The application will wait for 5 minutes to finish its startup.

Build :

Docker build -t <Image Name> .
Ex. Docker build -t k8s-springboot .

Output : Successfully tagged k8s-springboot:latest

Docker tag k8s-springboot raj87ng/k8s-springboot:springboot-app

Docker push **raj87ng/k8s-springboot:springboot-app**

Probes shall defined under Kubernetes Deployment.

Kubernetes commands :

kubectl get nodes

kubectl get deployments

kubectl get service

kubectl apply -f k8s-springboot.yml

watch -x kubectl get all

Ref : https://jhooq.com/