Monitoring Container Health with Probes

Relevant Documentation

- Pod Lifecycle
- Container Probes

Lesson Reference

Create a pod with a command-based liveness probe.

```
vi liveness-pod.yml
```

```
apiVersion: v1
kind: Pod
metadata:
  name: liveness-pod
spec:
  containers:
  - name: busybox
    image: busybox
    command: ['sh', '-c', 'while true; do sleep 3600; done']
    livenessProbe:
      exec:
        command: ["echo", "Hello, world!"]
      initialDelaySeconds: 5
      periodSeconds: 5
```

```
kubectl create -f liveness-pod.yml
```

Check the pod status.

```
kubectl get pod liveness-pod
```

Create a pod with an http-based liveness probe.

```
vi liveness-pod-http.yml
```

```
apiVersion: v1
kind: Pod
metadata:
  name: liveness-pod-http
spec:
  containers:
  - name: nginx
    image: nginx:1.19.1
    livenessProbe:
      httpGet:
        path: /
        port: 80
      initialDelaySeconds: 5
      periodSeconds: 5
```

```
kubectl create -f liveness-pod-http.yml
```

Check the pod status.

```
kubectl get pod liveness-pod-http
```

Create a pod with a startup probe.

```
vi startup-pod.yml
```

```
apiVersion: v1
kind: Pod
metadata:
  name: startup-pod
spec:
  containers:
  - name: nginx
    image: nginx:1.19.1
    startupProbe:
      httpGet:
        path: /
        port: 80
      failureThreshold: 30
      periodSeconds: 10
```

```
kubectl create -f startup-pod.yml
```

Check the pod status.

```
kubectl get pod startup-pod
```

Create a pod with a readiness probe.

```
vi readiness-pod.yml
```

```
apiVersion: v1
kind: Pod
metadata:
  name: readiness-pod
spec:
  containers:
  - name: nginx
    image: nginx:1.19.1
    readinessProbe:
      httpGet:
        path: /
        port: 80
      initialDelaySeconds: 5
      periodSeconds: 5
```

```
kubectl create -f readiness-pod.yml
```

Check the pod status.

```
kubectl get pod readiness-pod
```