Managing Container Resources

Relevant Documentation

- Resource Requests and Limits

Lesson Reference

Create a pod with resource requests that exceed aviable node resources.

```
vi big-request-pod.yml
```

```yaml
apiVersion: v1
kind: Pod
metadata:
  name: big-request-pod
spec:
  containers:
  - name: busybox
    image: busybox
    command: ['sh', '-c', 'while true; do sleep 3600; done']
    resources:
      requests:
        cpu: "10000m"
        memory: "128Mi"
```

```
kubectl create -f big-request-pod.yml
```

Check the pod status. It should never leave the `Pending` state since no worker nodes have enough resources to meet the request.

```
kubectl get pod big-request-pod
```

Create a pod with resource requests and limits.

```
vi resource-pod.yml
```

```yaml
apiVersion: v1
kind: Pod
metadata:
  name: resource-pod
spec:
  containers:
  - name: busybox
    image: busybox
    command: ['sh', '-c', 'while true; do sleep 3600; done']
    resources:
      requests:
        cpu: "250m"
        memory: "128Mi"
      limits:
        cpu: "500m"
        memory: "256Mi"
```

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

Check the pod status.

```
kubectl get pods
```