Guaranteed

Pod that has an equal amount of request and limit resources. These are the highest-priority Pods and guaranteed not to be killed before Best-Effort and Burstable Pods.

So the resource characteristics you define or omit for the containers have a direct impact on its QoS and define the relative importance of the Pod in the event of resource starvation. Define your Pod resource requirements with this consequence in mind.

Pod Priority

We explained how container resource declarations also define Pods' OoS and affect the order in which the Kubelet kills the container in a Pod in case of resource starvation. Another related feature that is still in beta at the time of this writing is Pod Priority and Preemption. Pod priority allows indicating the importance of a Pod relative to other Pods, which affects the order in which Pods are scheduled. Let's see that in action in Example 2-4.

Example 2-4. Pod priority

```
apiVersion: scheduling.k8s.io/v1beta1
kind: PriorityClass
metadata:
 name: high-priority
value: 1000
globalDefault: false
description: This is a very high priority Pod class
apiVersion: v1
kind: Pod
metadata:
 name: random-generator
 labels:
    env: random-generator
spec:
 containers:
  - image: k8spatterns/random-generator:1.0
    name: random-generator
 priorityClassName: high-priority
```

- The name of the priority class object
- The priority value of the object
- The priority class to use with this Pod, as defined in Priority Class resource