Namespace

It's like to split environment in Slices.

↳ Like default, Production, Development

→ Create namespace

kubectl create namespace my-namespace

→ To assign object in a namespace,

↳ 1. pass --namespace=<name> while running 'kubectl'

↳ 2. specify 'namespace' in metadata

DNS

In same namespace → only name of service

In outside namespace → db-service.dev.svc.cluster.local

Resource Quota

→ Only for Namespace

```
apiVersion: v1
kind: ResourceQuota
metadata:
  name: compute-quota
  namespace: dev
spec:
  hard:
    pods: "10"
    requests.cpu: "4"
    requests.memory: 5Gi
    limits.cpu: "10"
    limits.memory: 10Gi
```

max pods

At a time a pod can request

→ Total limit of all pods sum

Note

If quota is enabled in a namespace for compute resources like cpu and memory, users must specify requests or limits for those values; otherwise, the quota system may reject pod creation.

Each container template of each pod definition must have this specs

```
resources:
  requests:
    memory: "10Gi"
    cpu: "500m"
  limits:
    memory: "10Gi"
    cpu: "500m"
```

We can also create priorityClasses, check this URL

https://kubernetes.io/docs/concepts/policy/resource-quotas/#resource-quota-per-priorityclass