*Lab - What is Namespaces and Resource Quota in Kubernetes

Wednesday, December 8, 2021   09:10 PM

```
=============================NAMESPACES=============================
======
apiVersion: v1
kind: Namespace
metadata:
  name: dev
  labels:
    name: dev


===============================to create a pod================
vi pod.yml


kind: Pod
apiVersion: v1
metadata:
  name: testpod
spec:
  containers:
   - name: c00
     image: ubuntu
     command: ["/bin/bash", "-c", "while true; do echo Technical Guftgu; sleep 5 ; done"]
  restartPolicy: Never
====================================================================
======================

$ kubectl config set-context $(kubectl config current-context) --namespace=dev
$ kubectl config view | grep namespace:
====================================================================
======================
apiVersion: v1
kind: Pod
metadata:
  name: resources
spec:
  containers:
  - name: resource
    image: centos
    command: ["/bin/bash", "-c", "while true; do echo Technical-Guftgu; sleep 5 ; done"]
    resources:
     requests:
       memory: "64Mi"
       cpu: "100m"
     limits:
       memory: "128Mi"
       cpu: "200m"

===========RESOURCEQUOTA=============================
```

```yaml
apiVersion: v1
kind: ResourceQuota
metadata:
  name: myquota
spec:
  hard:
    limits.cpu: "400m"
    limits.memory: "400Mi"
    requests.cpu: "200m"
    requests.memory: "200Mi"
```

===

```yaml
kind: Deployment
apiVersion: apps/v1
metadata:
  name: deployments
spec:
  replicas: 3
  selector:
    matchLabels:
     objtype: deployment
  template:
    metadata:
      name: testpod8
      labels:
        objtype: deployment
    spec:
     containers:
       - name: c00
         image: ubuntu
         command: ["/bin/bash", "-c", "while true; do echo Technical-Guftgu; sleep 5 ; done"]
         resources:
           requests:
             cpu: "200m"
```

===

```yaml
apiVersion: v1
kind: LimitRange
metadata:
  name: cpu-limit-range
spec:
  limits:
  - default:
      cpu: 1
    defaultRequest:
      cpu: 0.5
    type: Container
```

==============cpu2.yml======================================
```yaml
apiVersion: v1
kind: Pod
metadata:
  name: default-cpu-demo-2
```

```
spec:
  containers:
  - name: default-cpu-demo-2-ctr
    image: nginx
    resources:
      limits:
        cpu: "1"


==============================================================

apiVersion: v1
kind: Pod
metadata:
  name: default-cpu-demo-3
spec:
  containers:
  - name: default-cpu-demo-3-ctr
    image: nginx
    resources:
      requests:
        cpu: "0.75"
```