

Practice3: Multi-container pods

1. Once finished you can try to create multi-container pod definition. Your multi-container pod should use redis and nginx containers with port 6379 and 80 published respectively. Label name should be app with value web

```
D: > kubernetes > ! multicontainer-pod.yaml
1  apiVersion: v1
2  kind: Pod
3  metadata:
4    name: multi-container-pod
5    labels:
6      app: web
7  spec:
8    containers:
9      - name: redis
10        image: redis:latest
11        ports:
12          - containerPort: 6379
13      - name: nginx
14        image: nginx:latest
15        ports:
16          - containerPort: 80
17
```

2. Deploy your multi-container pod. It should have running status. What is written under Ready column when you kubectl get the pods? Why your pod displays different values for ready

```
andrej@DESKTOP-8840HSK:/mnt/d/kubernetes$ kubectl get pods
NAME                READY   STATUS    RESTARTS   AGE
memcached-pod       1/1     Running   0           10m
multi-container-pod  2/2     Running   0           7s
nginx-pod            1/1     Running   0           23m
andrej@DESKTOP-8840HSK:/mnt/d/kubernetes$
```

The reason the "Ready" status is different for a multi-container pod compared to a single-container pod is that it takes into account the readiness of each individual container within the pod

3. Kubectl describe you new pod, and locate the containers section. How many containers are listed?

```
Containers:
  redis:
    Container ID:   containerd://82bb0b66f02363d7ec7501a6dbec123b5bbf69f055293407a3836a0e272345bc
    Image:          redis:latest
    Image ID:       docker.io/library/redis@sha256:7b83a0167532d4320a87246a815a134e19e31504d85e8e55f0bb5bb9edf70448
    Port:          6379/TCP
    Host Port:     0/TCP
    State:         Running
      Started:     Sun, 09 Apr 2023 20:47:15 +0200
    Ready:         True
    Restart Count:  0
    Environment:   <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-hqvqz (ro)
  nginx:
    Container ID:   containerd://5c66e7e2c7d4936815ffe4a31c5414e83d110b4cd41cdd47debc9376dc167e4
    Image:          nginx:latest
    Image ID:       docker.io/library/nginx@sha256:2ab30d6ac53580a6db8b657abf0f68d75360ff5cc1670a85acb5bd85ba1b19c0
    Port:          80/TCP
    Host Port:     0/TCP
    State:         Running
      Started:     Sun, 09 Apr 2023 20:47:15 +0200
    Ready:         True
    Restart Count:  0
    Environment:   <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-hqvqz (ro)
Conditions:
```

---There are two containers (redis, nginx)

4. Delete all the pods under the default namespace.

```
andrej@DESKTOP-8840HSK:/mnt/d/kubernetes$ kubectl delete pods --all -n default
pod "memcached-pod" deleted
pod "multi-container-pod" deleted
pod "nginx-pod" deleted
andrej@DESKTOP-8840HSK:/mnt/d/kubernetes$
```