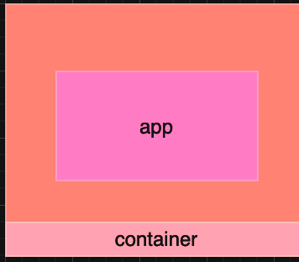
Why pods ?

We see on docker app has been containerized inside container that works on isolated file system on /var/lib/docker/containers/container\_id but share with host kernel.

But what happens if container fails ? or if container failed and we didn’t notice that ?



We need so kind of orchestration and self-healing so that if container fails we need some kind on monitoring and automation to provision new containers from themselves no need for human interface.-----🡪 solution is k8s.

What is pods? ----🡪 k8s object that has single instance of application.

Pod can be --🡪

1. Single container pod
2. Multi-container pod (but not for same app)

Each pod has ip that is dynamic.

Pod is smallest object we can create on k8s.

A screen shot of a computer

Description automatically generated

Pods are running on worker nodes on k8s cluster.

How to create pod ?

kubectl run pod\_name --image image\_name

image is pulled from docker hub registery.

Create pod from yml file?

How to create pod (declarative) ?

apiVersion: v1 ------🡪apiVersion for k8s api for creating object

kind: Pod. ------🡪 object kind we’re trying to create

metadata: --------🡪 info about object

name: pod\_name

spec:

containers: # list of container pod can be multi-container pod

- name: c1

image: image\_name

$ kubectl appy -f filename.yml

Each yaml file on k8s has main for component ?

1\_ apiVersion

2\_. kind

3\_. metadata ------🡪 info about object we’re trying to create (name,namespace ,labels)

4\_. spec -----🡪 specification for object

How to list pods ?

$ kubectl get pods

Create a new pod with the nginx image.?

$ kubectl run pod1 --image nginx

Get detailed info about pod?

$ kubectl describe pod pod\_name

To get which node that pod deployed on?

$ kubectl get pods pod\_name -o wide

How to delete pod?

$ kubectl delete pod pod\_name