102. Application - Commands & arguments

Commands & arguments in k8s pods

⇒ In the previous lecture, we created a simple docker image that sleeps for a given no.of.seconds, we named it "ubuntu-sleeper" & we ran it using the docker command

docker run --name ubuntu-sleeper ubuntu-sleeper

⇒ By default, it sleeps for 5 secs, but we can override it by passing a command line argument

⇒ we will now create a pod using this image

docker run --name ubuntu-sleeper ubuntu-sleeper 10

we start with a blank pod definition template

* Input the name of the pod
* Specify the image name

pod-definition.yaml

apiVersion: V1
Kind: Pod
metadata:
      name: ubuntu-sleeper-pod
spec:
      containers:
          -name: ubuntu-sleeper
when this pod is created, it creates a container
from the specified image   --name ubuntu-sleeper-pod
And the Container sleeps for 5 seconds before exiting
          image: ubuntu-sleeper
          args: ["10"]
Now, if you need the container to sleep for 10 seconds as in the 2nd command, how to specify the additional argument in the pod-definition-file?

Anything that is appended to the docker run command
will go into the args property of the pod-definition-file
in the form of array like this
          args: ["10"]

Lets try to relate to the docker file we created
earlier, the docker file has an `entry point` as well as
"cmd" instructions specified

The entry point is the command that is run
at startup & the cmd is the default parameter passed
to the command

```
FROM        Ubuntu
ENTRYPOINT    ["sleep"]
CMD        ["5"]
```

with the args option in the pod definition file,
we override the cmd instruction in the docker file

But, what if we need to override the entrypoint
from "sleep" to "imaginary sleep" "2.0" command

⇒In the docker world, we would run the
docker run command with the entry point option set
to the new command

        docker run --name ubuntu-sleeper \
        --entrypoint sleep2.0
        ubuntu-sleeper 10

The corresponding entry in the pod definition file
would be using a command field
        The command field corresponds to entrypoint
instructions in the docker file

Pod - definition.yml

```
apiVersion : v1
kind : Pod
metadata :
    name : ubuntu - sleeper - pod
spec :
    container :
        - name : ubuntu - sleeper
          image : ubuntu - sleeper
        → Command : [ "sleep 2.0" ]
        → args : [ "10" ]
```

To   Summarize :-

There   are   2   fields   that   correspond   to   2   instructions
in   the   docker   file

   command field   overrides   the   entry point   instructions
   Args field   overrides   the   command   instructions
in   the   docker   file

Remember :-

   It   is   not   the   command   field   that   overrides
the   cmd   instruction   in   the   docker   file

   To   command   to   run   a   container   to   sleep for   5000 seconds

command : ["sleep" , "5000"]

docker run command
the pod-definition-file

docker file we created
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pod definition file,
in the docker file
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