TASK – 3 MINIKUBE DEPLOYMENT TASK

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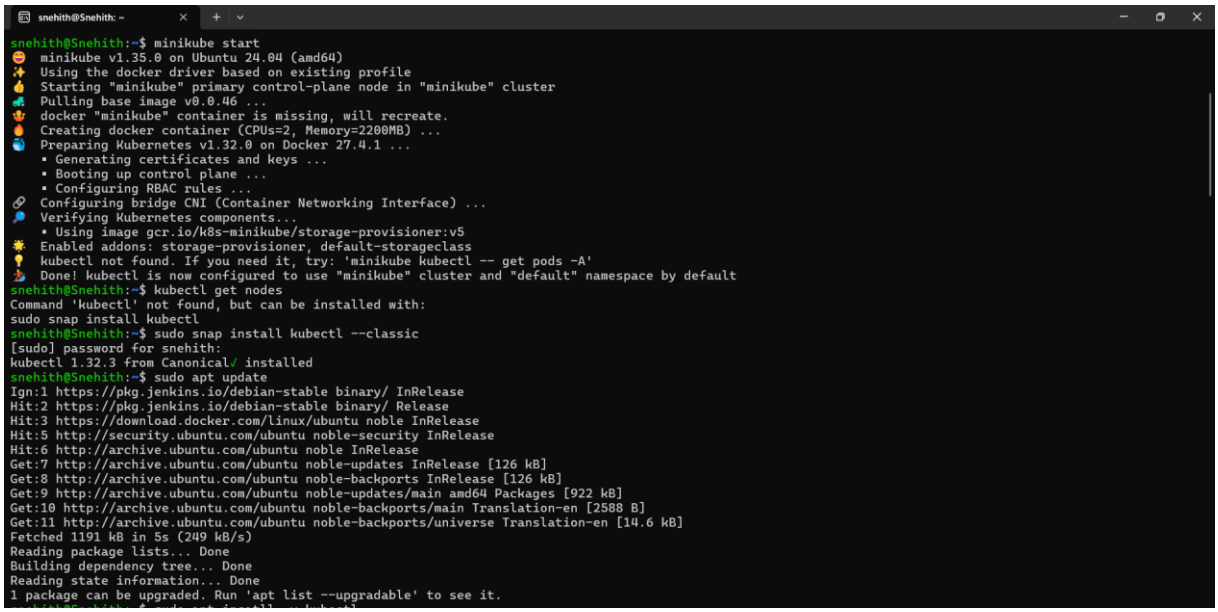
STEP 1: Start Minikube

Start the Minikube cluster using the following command:

minikube start



This initializes the Minikube cluster using Docker as the driver.

STEP 2: Install Kubectl

Since kubectl is not found,install it with the following command:

sudo snap install kubectl –classic

Alternatively, you can download it using curl:

curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl" sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl

STEP 3: Verify kubectl Installation

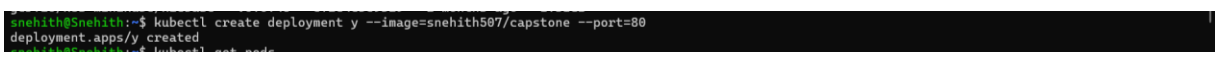
Check the client version to confirm successful installation:

Kubectl version -client

STEP 4: Create a Deployment

Create a deployment named `r1` with the image ‘sumithaapvr/newrepo1’:

kubectl create deployment r1 --image=sumithaapvr/newrepo1 --port=80



STEP 5: Expose the Deployment

Expose the deployment as a NodePort service:

kubectl expose deployment r1 --port=80 --type=NodePort

```
snehith@Snehith:~$ kubectl expose deployment y --port=80 --type=NodePort
service/y exposed
snehith@Snehith:~$ minikube service y
```

STEP 6: Verify the Pod

Check the running pods:

kubectl get pods

Step 7: Access the Service

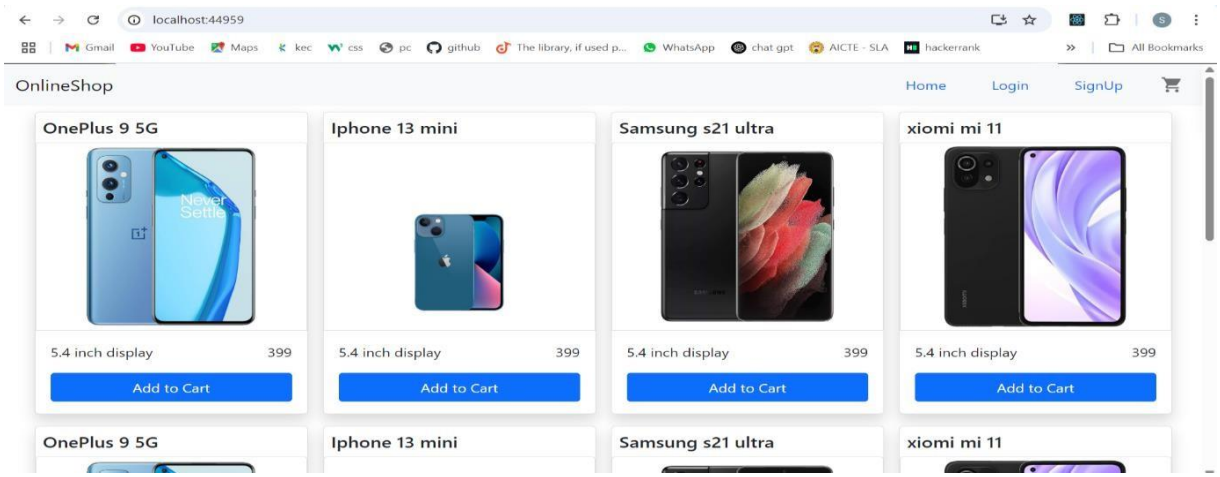
Expose the service using Minikube and get the URL:

minikube service r1

```
snehith@Snehith:~$ minikube service y
|-----------|------|-------------|---------------------------|
| NAMESPACE | NAME | TARGET PORT |            URL            |
|-----------|------|-------------|---------------------------|
| default   | y    |          80 | http://192.168.49.2:31087 |
|-----------|------|-------------|---------------------------|

X  Exiting due to SVC_UNREACHABLE: service not available: no running pod for service y found
```

STEP 8: Output in the Web Browser



Docker Hub: