

# DEVOPS

## Task 4

```
indhuja@indhuja-VMware-Virtual-Platform: ~/capstone
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ nano deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ ls
build  build.sh  deploy.sh  docker-compose.yml  Dockerfile  Jenkinsfile
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 1.16 KiB | 296.00 KiB/s, done.
From https://github.com/kannancloud001/capstone
 221ba5b..6bf238e  main    -> origin/main
Updating 221ba5b..6bf238e
Fast-forward
 deployment.yml | 37 ++++++
 1 file changed, 37 insertions(+)
 create mode 100644 deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ ls
build  deployment.yml  docker-compose.yml  Jenkinsfile
build.sh  deploy.sh      Dockerfile
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ nano deployment.yml
```

```
indhuja@indhuja-VMware-Virtual-Platform: ~/capstone
3: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
   link/ether ce:08:c8:4e:43:a4 brd ff:ff:ff:ff:ff:ff
   inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
       valid_lft forever preferred_lft forever
4: br-378ffb03dbd7: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
   link/ether d2:f3:88:0a:cf:58 brd ff:ff:ff:ff:ff:ff
   inet 192.168.49.1/24 brd 192.168.49.255 scope global br-378ffb03dbd7
       valid_lft forever preferred_lft forever
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ kubectl create -f deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ kubectl create -f deployment.yml
error: error validating "deployment.yml": error validating data: failed to download openapi: Get "https://192.168.49.2:8443/openapi/v2?timeout=32s": dial tcp 192.168.49.2:8443: connect: no route to host; if you choose to ignore these errors, turn validation off with --validate=false
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ minikube start
minikube v1.35.0 on Ubuntu 24.04
Using the docker driver based on existing profile
Starting "minikube" primary control-plane node in "minikube" cluster
Pulling base image v0.0.46 ...
Restarting existing docker container for "minikube" ...
Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
Verifying Kubernetes components...
  Using image gcr.io/k8s-minikube/storage-provisioner:v5
Enabled addons: default-storageclass, storage-provisioner
Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ kubectl create -f deployment.yml
service/react-e-commerce-service created
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$
```

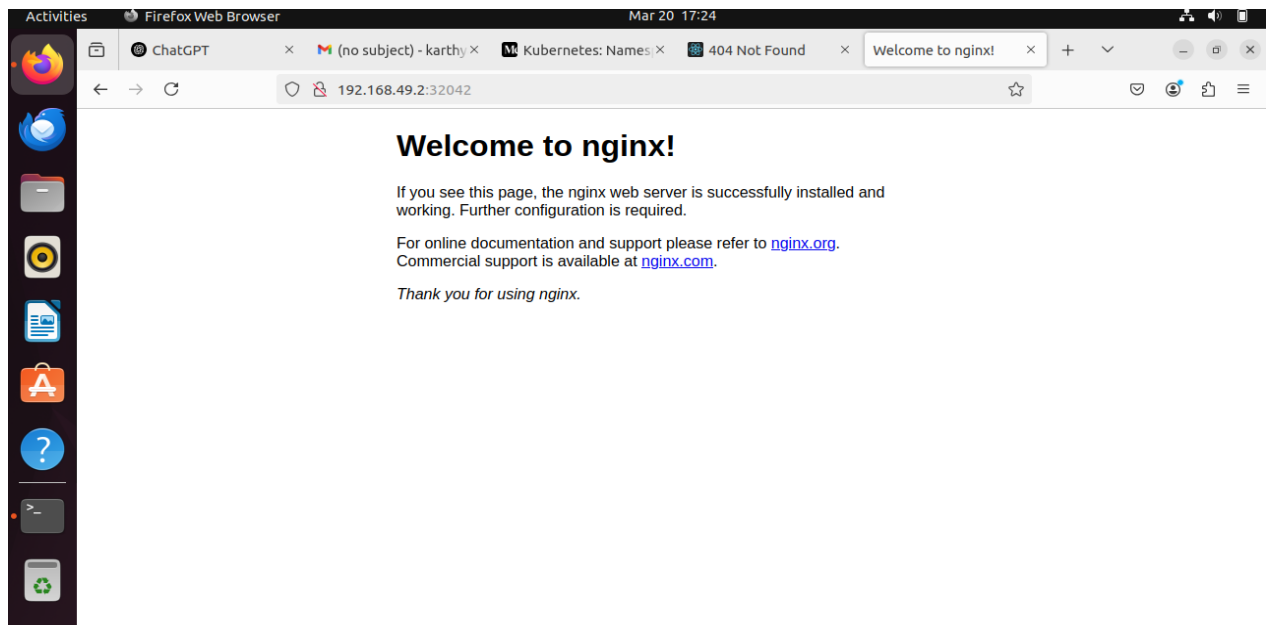
```
indhuja@indhuja-VMware-Virtual-Platform: ~
command 'qube' from deb avogadro-utils (1.98.1-2)
See 'snap info <snapname>' for additional versions.
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
nginx-deployment-58cdc7b878-2q59s   1/1     Running   0           54m
nginx-deployment-58cdc7b878-r985j   1/1     Running   0           54m
nginx-deployment-58cdc7b878-vd6nw   1/1     Running   0           54m
react-ecommerce-57c5b48d9-4m7k5     1/1     Running   0           46m
react-ecommerce-57c5b48d9-c7fwr     1/1     Running   0           46m
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl delete pod nginx-deployment-58cdc7b878-2q59s
pod "nginx-deployment-58cdc7b878-2q59s" deleted
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
nginx-deployment-58cdc7b878-b9hqp    1/1     Running   0           42s
nginx-deployment-58cdc7b878-r985j    1/1     Running   0           58m
nginx-deployment-58cdc7b878-vd6nw    1/1     Running   0           58m
react-ecommerce-57c5b48d9-4m7k5     1/1     Running   0           49m
react-ecommerce-57c5b48d9-c7fwr     1/1     Running   0           49m
indhuja@indhuja-VMware-Virtual-Platform:~$ curl 192.168.49.2:30007
curl: (7) Failed to connect to 192.168.49.2 port 30007 after 0 ms: Couldn't connect to server
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl scale deployment nginx-deployment --replicas=5
deployment.apps/nginx-deployment scaled
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl get deployments
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment    5/5     5             5           69m
react-ecommerce     2/2     2             2           60m
indhuja@indhuja-VMware-Virtual-Platform:~$
```

```
indhuja@indhuja-VMware-Virtual-Platform: ~/capstone
indhuja@indhuja-VMware-Virtual-Platform:~$ docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS          NAMES
indhuja@indhuja-VMware-Virtual-Platform:~$ nano deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ nano deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ ls
build  build.sh  deploy.sh  docker-compose.yml  Dockerfile  Jenkinsfile
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ git pull
remote: Enumerating objects: 4, done.
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create mode 100644 deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ ls
build  deployment.yml  docker-compose.yml  Jenkinsfile
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ nano deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ nano deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 00:0c:29:94:ed:15 brd ff:ff:ff:ff:ff:ff
    altname enp2s1
    inet 192.168.164.130/24 brd 192.168.164.255 scope global dynamic noprefixroute ens33
        valid_lft 1486sec preferred_lft 1486sec
    inet6 fe80::20c:29ff:fe94:ed15/64 scope link
        valid_lft forever preferred_lft forever
3: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
    link/ether ce:08:c8:4e:43:a4 brd ff:ff:ff:ff:ff:ff
    inet 172.17.0.1/16 brd 172.17.255.255 scope global docker0
        valid_lft forever preferred_lft forever
4: br-378ffb03dbd7: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
    link/ether d2:f3:88:0a:cf:58 brd ffff:ffff:ffff:ffff
    inet 192.168.49.1/24 brd 192.168.49.255 scope global br-378ffb03dbd7
        valid_lft forever preferred_lft forever
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ kubectl create -f deployment.yml
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$
```

```
indhuja@indhuja-VMware-Virtual-Platform: ~  
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ kubectl create -f deployment.yml  
The Service "react-ecommerce-service" is invalid: spec.ports[0].nodePort: Invalid value: 30007: provided port is already allocated  
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ kubectl get deployments  
No resources found in default namespace.  
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$  
indhuja@indhuja-VMware-Virtual-Platform:~/capstone$ cd  
indhuja@indhuja-VMware-Virtual-Platform:~$ sudo nano deployment.yaml  
[sudo] password for indhuja:  
indhuja@indhuja-VMware-Virtual-Platform:~$ nano deployment.yml  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl apply -f deployment.yaml  
deployment.apps/nginx-deployment created  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl create deployment react-ecommerce --image=indhuja12/ecommerce:latest --replicas=2  
deployment.apps/react-ecommerce created  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl get deployments  
NAME                READY   UP-TO-DATE   AVAILABLE   AGE  
nginx-deployment     3/3     3            3           9m6s  
react-ecommerce      2/2     2            2           48s  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl get pods  
NAME                                READY   STATUS    RESTARTS   AGE  
nginx-deployment-58cdc7b878-2q59s   1/1     Running   0           20m  
nginx-deployment-58cdc7b878-r985j   1/1     Running   0           20m  
nginx-deployment-58cdc7b878-vd6nw   1/1     Running   0           20m  
react-ecommerce-57c5b48d9-4m7k5     1/1     Running   0           11m  
react-ecommerce-57c5b48d9-c7fwr     1/1     Running   0           11m  
indhuja@indhuja-VMware-Virtual-Platform:~$
```

```
indhuja@indhuja-VMware-Virtual-Platform: ~  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl expose deployment nginx-deployment --type=NodePort --port=30484  
service/nginx-deployment exposed  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl get services  
NAME                TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)          AGE  
kubernetes           ClusterIP   10.96.0.1       <none>        443/TCP          19h  
nginx-deployment     NodePort    10.105.217.199  <none>        80:30484/TCP     14s  
react-ecommerce-service NodePort    10.108.153.86   <none>        80:30007/TCP     5h31m  
indhuja@indhuja-VMware-Virtual-Platform:~$ minikube ip  
192.168.49.2  
indhuja@indhuja-VMware-Virtual-Platform:~$ curl 192.168.49.2:30484  
curl: (7) Failed to connect to 192.168.49.2 port 30484 after 0 ms: Couldn't connect to server  
indhuja@indhuja-VMware-Virtual-Platform:~$ minikube start  
🐳 minikube v1.35.0 on Ubuntu 24.04  
🌟 Using the docker driver based on existing profile  
👍 Starting "minikube" primary control-plane node in "minikube" cluster  
📡 Pulling base image v0.0.46 ...  
🔄 Updating the running docker "minikube" container ...  
🔧 Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...  
🔍 Verifying Kubernetes components...  
   ■ Using image gcr.io/k8s-minikube/storage-provisioner:v5  
🌟 Enabled addons: storage-provisioner, default-storageclass  
🏁 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default  
indhuja@indhuja-VMware-Virtual-Platform:~$ curl 192.168.49.2:30484  
curl: (7) Failed to connect to 192.168.49.2 port 30484 after 0 ms: Couldn't connect to server  
indhuja@indhuja-VMware-Virtual-Platform:~$
```

```
indhuja@indhuja-VMware-Virtual-Platform: ~  
NAME                                READY   STATUS    RESTARTS   AGE  
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nginx-deployment-58cdc7b878-vd6nw  1/1     Running   0           54m  
react-ecommerce-57c5b48d9-4m7k5    1/1     Running   0           46m  
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indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl delete pod nginx-deployment-58cdc7b878-2q59s  
pod "nginx-deployment-58cdc7b878-2q59s" deleted  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl get pods  
NAME                                READY   STATUS    RESTARTS   AGE  
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nginx-deployment-58cdc7b878-vd6nw  1/1     Running   0           58m  
react-ecommerce-57c5b48d9-4m7k5    1/1     Running   0           49m  
react-ecommerce-57c5b48d9-c7fwr    1/1     Running   0           49m  
indhuja@indhuja-VMware-Virtual-Platform:~$ curl 192.168.49.2:30007  
curl: (7) Failed to connect to 192.168.49.2 port 30007 after 0 ms: Couldn't connect to server  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl scale deployment nginx-deployment --replicas=5  
deployment.apps/nginx-deployment scaled  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl get deployments  
NAME                READY   UP-TO-DATE   AVAILABLE   AGE  
nginx-deployment    5/5     5            5           69m  
react-ecommerce     2/2     2            2           60m  
indhuja@indhuja-VMware-Virtual-Platform:~$ kubectl set image deployment/nginx-deployment nginx:containe  
r=nginx:1.19  
deployment.apps/nginx-deployment image updated  
indhuja@indhuja-VMware-Virtual-Platform:~$
```



Activities

Firefox Web Browser

Mar 20 15:58


ChatGPT × (no subject) - karthayeni × Kubernetes: Namespaces × React App ×

192.168.49.2:30007

OnlineShop

Home Login SignUp


OnePlus 9 5G



5.4 inch display 399

Add to Cart


Iphone 13 mini



5.4 inch display 399

Add to Cart


Samsung s21 ultra




5.4 inch display 399

Add to Cart

xiomi mi 11



OnePlus 9 5G



Iphone 13 mini

