

DEVOPS TASK – 4

```
root@Ubuntu2: /home/karthyayeni/capstone
65eff41cd24520d414818388799ddeda2fa4efd8bb0f0893aad90dee83c92619
root@Ubuntu2: /home/karthyayeni/capstone# docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
karthyayeni/ecommerce latest       a7a181611fad     19 hours ago    195MB
karthyayeni/kavya    2           4fd2a29ab149     25 hours ago    149MB
gcr.io/k8s-minikube/kicbase v0.0.46     e72c4cbe9b29     2 months ago    1.31GB
root@Ubuntu2: /home/karthyayeni/capstone# nano deployment.yml
root@Ubuntu2: /home/karthyayeni/capstone# ls
build  build.sh  deploy.sh  docker-compose.yml  Dockerfile  Jenkinsfile
root@Ubuntu2: /home/karthyayeni/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 | 197.00 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
root@Ubuntu2: /home/karthyayeni/capstone# nano deployment.yml
root@Ubuntu2: /home/karthyayeni/capstone#
```

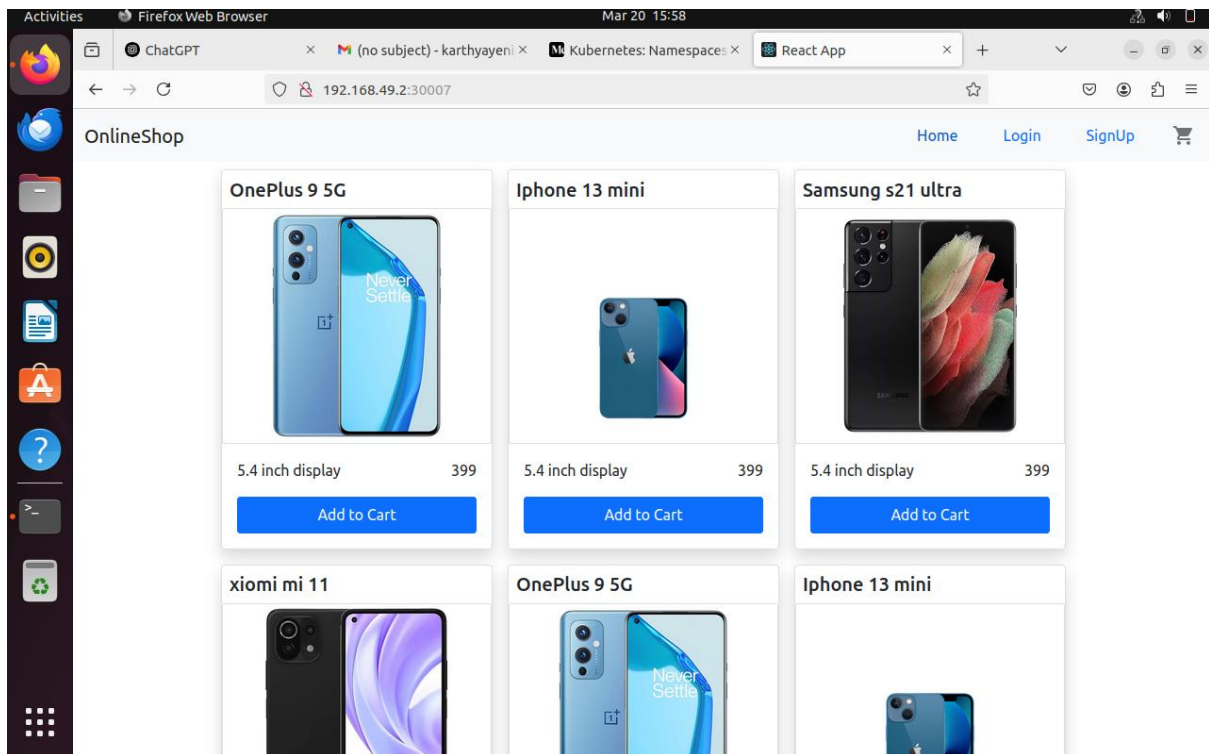
```
Activities Terminal Mar 20 14:44
root@Ubuntu2: /home/karthyayeni/capstone
https://minikube.sigs.k8s.io/docs/reference/drivers/none/

The requested memory allocation of 1967MiB does not leave room for system overhead (total system memory: 1967MiB). You may face stability issues.
💡 Suggestion: Start minikube with less memory allocated: 'minikube start --memory=1967mb'

Using Docker driver with root privileges
Starting "minikube" primary control-plane node in "minikube" cluster
Pulling base image v0.0.46 ...
Creating docker container (CPUs=2, Memory=1967MB) ...
Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
  ■ Generating certificates and keys ...
  ■ Booting up control plane ...
  ■ Configuring RBAC rules ...
Configuring bridge CNI (Container Networking Interface) ...
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
root@Ubuntu2: /home/karthyayeni/capstone# kubectl create -f deployment.yml
service/react-ecommerce-service created
root@Ubuntu2: /home/karthyayeni/capstone#
```

```
root@Ubuntu2: /home/karthayayeni
karthayayeni@Ubuntu2:~$ su --
Password:
root@Ubuntu2:/home/karthayayeni# sudo nano deployment.yaml
root@Ubuntu2:/home/karthayayeni# nano deployment.yml
root@Ubuntu2:/home/karthayayeni# sudo nano deployment.yaml
root@Ubuntu2:/home/karthayayeni# kubectl apply -f deployment.yaml
deployment.apps/nginx-deployment created
root@Ubuntu2:/home/karthayayeni#
```

```
root@Ubuntu2: /home/karthayayeni
deployment.apps/react-ecommerce created
root@Ubuntu2:/home/karthayayeni# kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
nginx-deployment-58cdc7b878-4bf8s   1/1     Running   1 (69s ago) 37m
nginx-deployment-58cdc7b878-qq8kc   1/1     Running   1 (69s ago) 37m
nginx-deployment-58cdc7b878-xv9cd   1/1     Running   1 (69s ago) 37m
react-ecommerce-59947785fd-9wv9d    1/1     Running   0           25s
react-ecommerce-59947785fd-txbr2    1/1     Running   0           25s
root@Ubuntu2:/home/karthayayeni# minikube ip
192.168.49.2
root@Ubuntu2:/home/karthayayeni# curl 192.168.49.2:30007
<!doctype html><html lang="en"><head><meta charset="utf-8"/><link rel="icon" href="/favicon.ico"/><meta name="viewport" content="width=device-width,initial-scale=1"/><meta name="theme-color" content="#000000"/><meta name="description" content="Web site created using create-react-app"/><link rel="apple-touch-icon" href="/logo192.png"/><link rel="manifest" href="/manifest.json"/><link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3" crossorigin="anonymous"><link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-icons@1.10.5/font/bootstrap-icons.css"><title>React App</title><script defer="defer" src="/static/js/main.f1c48542.js"></script><link href="/static/css/main.cf5c13c5.css" rel="stylesheet"></head><body><noscript>You need to enable JavaScript to run this app.</noscript><div id="root"></div></body></html>
root@Ubuntu2:/home/karthayayeni#
```



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root@Ubuntu2: /home/karthyayeni
erhead (total system memory: 1967MiB). You may face stability issues.
💡 Suggestion: Start minikube with less memory allocated: 'minikube start --memory=1967mb'

👍 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: storage-provisioner, default-storageclass
🌟 Done! kubectl is now configured to use "minikube" cluster and "default" name
space by default
root@Ubuntu2:/home/karthyayeni# kubectl create deployment react-ecommerce --imag
e=karthyayeni/ecommerce:latest --replicas=2
deployment.apps/react-ecommerce created
root@Ubuntu2:/home/karthyayeni# kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
nginx-deployment-58cdc7b878-4bf8s   1/1     Running   1 (69s ago) 37m
nginx-deployment-58cdc7b878-qq8kc   1/1     Running   1 (69s ago) 37m
nginx-deployment-58cdc7b878-xv9cd   1/1     Running   1 (69s ago) 37m
react-ecommerce-59947785fd-9wv9d    1/1     Running   0           25s
react-ecommerce-59947785fd-txbr2    1/1     Running   0           25s
root@Ubuntu2:/home/karthyayeni#

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Activities Terminal Mar 20 16:02
root@Ubuntu2: /home/karthyayeni
root@Ubuntu2:/home/karthyayeni# kubectl delete pod nginx-deployment-58cdc7b878-4bf8s
pod "nginx-deployment-58cdc7b878-4bf8s" deleted
root@Ubuntu2:/home/karthyayeni# kubectl get pods
NAME                                READY   STATUS              RESTARTS   AGE
nginx-deployment-58cdc7b878-frdsj   0/1     ContainerCreating   0           7s
nginx-deployment-58cdc7b878-qq8kc   1/1     Running             2 (9m9s ago) 6m
nginx-deployment-58cdc7b878-xv9cd   1/1     Running             2 (9m9s ago) 6m
react-ecommerce-59947785fd-9wv9d   1/1     Running             1 (9m9s ago) 2m
react-ecommerce-59947785fd-txbr2   1/1     Running             1 (9m9s ago) 2m
root@Ubuntu2:/home/karthyayeni# kubectl get pods
NAME                                READY   STATUS      RESTARTS   AGE
nginx-deployment-58cdc7b878-frdsj   1/1     Running     0           66s
nginx-deployment-58cdc7b878-qq8kc   1/1     Running     2 (10m ago) 67m
nginx-deployment-58cdc7b878-xv9cd   1/1     Running     2 (10m ago) 67m
react-ecommerce-59947785fd-9wv9d   1/1     Running     1 (10m ago) 30m
react-ecommerce-59947785fd-txbr2   1/1     Running     1 (10m ago) 30m
root@Ubuntu2:/home/karthyayeni#
```

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Activities Terminal Mar 20 16:17
root@Ubuntu2: /home/karthyayeni
s
nginx-deployment-58cdc7b878-qq8kc   1/1     Running     2 (9m9s ago) 6m
nginx-deployment-58cdc7b878-xv9cd   1/1     Running     2 (9m9s ago) 6m
react-ecommerce-59947785fd-9wv9d   1/1     Running     1 (9m9s ago) 2m
react-ecommerce-59947785fd-txbr2   1/1     Running     1 (9m9s ago) 2m
root@Ubuntu2:/home/karthyayeni# kubectl get pods
NAME                                READY   STATUS      RESTARTS   AGE
nginx-deployment-58cdc7b878-frdsj   1/1     Running     0           66s
nginx-deployment-58cdc7b878-qq8kc   1/1     Running     2 (10m ago) 67m
nginx-deployment-58cdc7b878-xv9cd   1/1     Running     2 (10m ago) 67m
react-ecommerce-59947785fd-9wv9d   1/1     Running     1 (10m ago) 30m
react-ecommerce-59947785fd-txbr2   1/1     Running     1 (10m ago) 30m
root@Ubuntu2:/home/karthyayeni# kubectl scale deployment nginx-deployment --replicas=5
deployment.apps/nginx-deployment scaled
root@Ubuntu2:/home/karthyayeni# kubectl get deployments
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
nginx-deployment    5/5     5            5           83m
react-ecommerce     2/2     2            2           45m
root@Ubuntu2:/home/karthyayeni#
```



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Activities Terminal Mar 20 16:30
root@Ubuntu2: /home/karthayayeni

The "docker" driver should not be used with root privileges. If you wish to
continue as root, use --force.
If you are running minikube within a VM, consider using --driver=none:
https://minikube.sigs.k8s.io/docs/reference/drivers/none/
Tip: To remove this root owned cluster, run: sudo minikube delete

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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" name
space by default
root@Ubuntu2:/home/karthayayeni# kubectl set image deployment/nginx-deployment ng
inx-container=nginx:1.19
deployment.apps/nginx-deployment image updated
root@Ubuntu2:/home/karthayayeni#
```

```
Activities Terminal Mar 20 17:23
root@Ubuntu2: /home/karthayayeni

<head>
<title>Welcome to nginx!</title>
<style>
  body {
    width: 35em;
    margin: 0 auto;
    font-family: Tahoma, Verdana, Arial, sans-serif;
  }
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
<p>If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.</p>

<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>

<p><em>Thank you for using nginx.</em></p>
</body>
</html>
root@Ubuntu2:/home/karthayayeni#
```

