DEVOPS TASK – 4

```
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
```

```
         https://minikube.sigs.k8s.io/docs/reference/drivers/none/

    The requested memory allocation of 1967MiB does not leave room for system ov
erhead (total system memory: 1967MiB). You may face stability issues.
    Suggestion: Start minikube with less memory allocated: 'minikube start --mem
ory=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" name
space by default
root@Ubuntu2:/home/karthyayeni/capstone# kubectl create -f deployment.yml
service/react-ecommerce-service created
root@Ubuntu2:/home/karthyayeni/capstone#
```
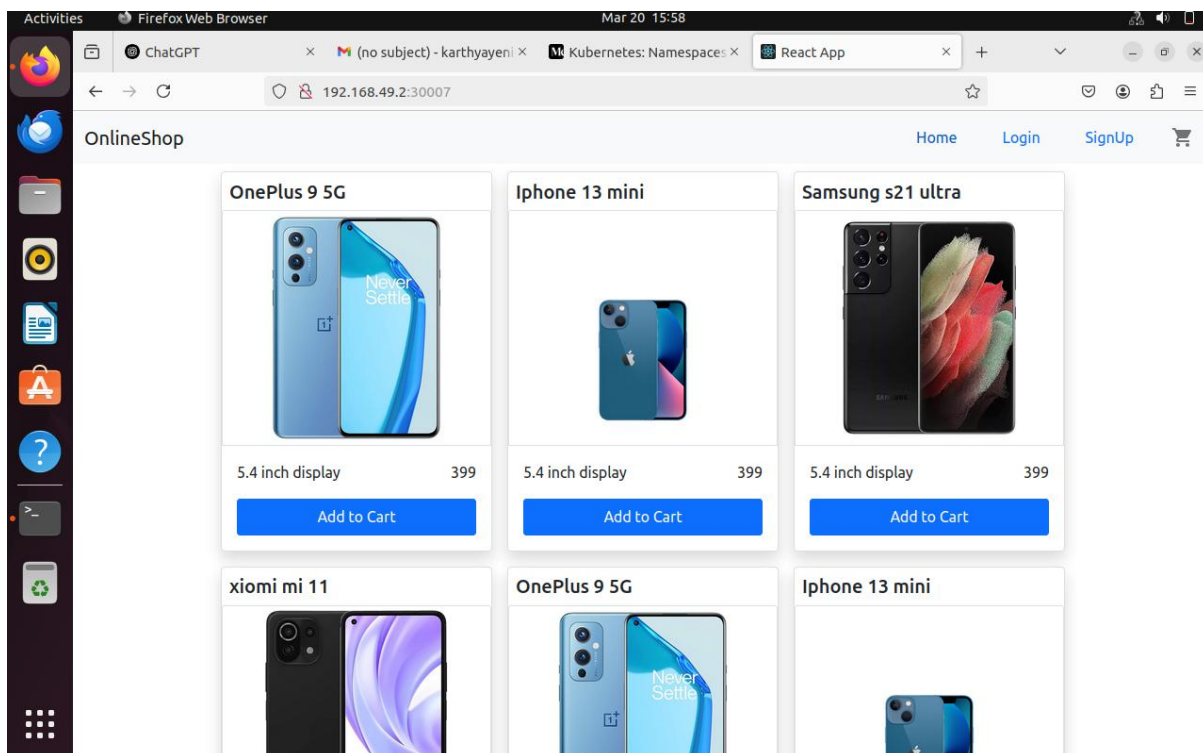
```
deployment.apps/react-ecommerce created
root@Ubuntu2:/home/karthyayeni# kubectl get pods
NAME                                 READY   STATUS    RESTARTS       AGE
nginx-deployment-58cdc7b878-4bf8s    1/1     Running   1 (69s ago)    37m
nginx-deployment-58cdc7b878-qq8kc    1/1     Running   1 (69s 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# minikube ip
192.168.49.2
root@Ubuntu2:/home/karthyayeni# curl 192.168.49.2:30007
<!doctype html><html lang="en"><head><meta charset="utf-8"/><link rel="icon" hre
f="/favicon.ico"/><meta name="viewport" content="width=device-width,initial-scal
e=1"/><meta name="theme-color" content="#000000"/><meta name="description" conte
nt="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="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6
jIW3" 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="/s
tatic/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/karthyayeni#
```

```
erhead (total system memory: 1967MiB). You may face stability issues.
💡  Suggestion: Start minikube with less memory allocated: 'minikube start --mem
ory=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#
```

```
root@Ubuntu2:/home/karthyayeni# kubectl delete pod nginx-deployment-58cdc7b878-4
bf8s
pod "nginx-deployment-58cdc7b878-4bf8s" deleted
root@Ubuntu2:/home/karthyayeni# kubectl get pods
NAME                                READY   STATUS             RESTARTS         A
                                                                                GE
nginx-deployment-58cdc7b878-frdsj   0/1     ContainerCreating  0                7
                                                                                s
nginx-deployment-58cdc7b878-qq8kc   1/1     Running            2 (9m9s ago)     6
                                                                                6m
nginx-deployment-58cdc7b878-xv9cd   1/1     Running            2 (9m9s ago)     6
                                                                                6m
react-ecommerce-59947785fd-9wv9d    1/1     Running            1 (9m9s ago)     2
                                                                                9m
react-ecommerce-59947785fd-txbr2    1/1     Running            1 (9m9s ago)     2
                                                                                9m
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#
```

```
s
nginx-deployment-58cdc7b878-qq8kc    1/1       Running           2 (9m9s ago)    6
6m
nginx-deployment-58cdc7b878-xv9cd    1/1       Running           2 (9m9s ago)    6
6m
react-ecommerce-59947785fd-9wv9d     1/1       Running           1 (9m9s ago)    2
9m
react-ecommerce-59947785fd-txbr2     1/1       Running           1 (9m9s ago)    2
9m
root@Ubuntu2:/home/karthyayeni# kubectl get pods
NAME                                 READY     STATUS     RESTARTS       AGE
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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 --repl
icas=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
```

```
    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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    Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
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    ■ 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/karthyayeni# kubectl set image deployment/nginx-deployment ng
inx-container=nginx:1.19
deployment.apps/nginx-deployment image updated
root@Ubuntu2:/home/karthyayeni#
```

```
<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>
```