

## TASK -3

### E-COMMERCE WEBSITE USING KUBERNETES

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Activities Terminal Mar 20 3:28 PM
root@ubuntu: /home/vboxuser/E-Commerce

vboxuser@ubuntu:~$ su
Password:
root@ubuntu: /home/vboxuser# cat Dockerfile
cat: Dockerfile: No such file or directory
root@ubuntu: /home/vboxuser# cd /home/vboxuser/E-Commerce
root@ubuntu: /home/vboxuser/E-Commerce# cat Dockerfile
FROM nginx:latest
# Copy the built files from the previous stage
COPY build/ /usr/share/nginx/html
# Expose port 80 (the default HTTP port)
EXPOSE 80
# Start Nginx and keep it running in the foreground
CMD ["nginx", "-g", "daemon off;"]
root@ubuntu: /home/vboxuser/E-Commerce# docker build -t ecommerce:latest
ERROR: docker: 'docker buildx build' requires 1 argument

Usage: docker buildx build [OPTIONS] PATH | URL | -

Run 'docker buildx build --help' for more information
root@ubuntu: /home/vboxuser/E-Commerce# docker build -t ecommerce:latest .
[+] Building 4.9s (7/7) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile              0.2s
=> => transferring dockerfile: 276B                             0.1s
=> [internal] load metadata for docker.io/library/nginx:latest  4.1s
=> [internal] load .dockerignore                                 0.1s
=> => transferring context: z8                                    0.0s
=> [internal] load build context                                0.2s
=> => transferring context: 837B                                 0.1s
=> [1/2] FROM docker.io/library/nginx:latest@sha256:124b44bfc9ccdf3cedf4b592d4d1e8b51ec2ed5056c52d3692baebc19 0.0s
=> CACHED [2/2] COPY build/ /usr/share/nginx/html               0.0s
=> exporting to image                                           0.1s
=> => exporting layers                                          0.0s
=> => writing image sha256:3e037946dda6d1291567655162334d976106827c53880967194d26a81a55954d 0.0s
=> => naming to docker.io/library/eccommerce:latest            0.0s
root@ubuntu: /home/vboxuser/E-Commerce# docker images
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
ecommerce            latest      3e037946dda6  31 minutes ago 195MB
harinin2405/my-app   latest      e231ecf36aca  23 hours ago   145MB
```

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root@ubuntu: /home/vboxuser/E-Commerce

root@ubuntu: /home/vboxuser/E-Commerce# docker images
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
ecommerce            latest      3e037946dda6  31 minutes ago 195MB
harinin2405/my-app   latest      e231ecf36aca  23 hours ago   145MB
ci-cdpipeline_app    latest      f8162338f1f7  23 hours ago   145MB
harinin2405/my-app    <none>      439617100edf  23 hours ago   145MB
harinin2405/my-app    <none>      78c5a76c6e3f  24 hours ago   145MB
harinin2405/my-app    <none>      d30eb1475a2d  24 hours ago   145MB
harinin2405/my-app    <none>      a9ea3c63276b  24 hours ago   145MB
harinin2405/my-app    <none>      0337dc4f2ecb  25 hours ago   145MB
harinin2405/my-app    <none>      6936541e1040  25 hours ago   145MB
harinin2405/my-app    <none>      4e0d5efb1cb   25 hours ago   145MB
harinin2405/my-app    <none>      b4ab8e0951b1  25 hours ago   145MB
harinin2405/my-app    <none>      5980e7308216  25 hours ago   145MB
harinin2405/my-app    <none>      b3c6ce9bf27c  25 hours ago   145MB
harinin2405/my-app    <none>      2dc35740675b  25 hours ago   145MB
harinin2405/my-app    <none>      2156cedc41c2  26 hours ago   145MB
harinin2405/my-app    <none>      022b7909c8d1  27 hours ago   145MB
postgres             alpine      0150e3200277  3 weeks ago    278MB
hello-world           latest      74cc54e27dc4  8 weeks ago    10.1kB
gcr.io/k8s-minikube/kicbase v0.0.46    e72c4cbe9b29  2 months ago   1.31GB
redis                 alpine      8f5c54441eb9  2 months ago   41.4MB

root@ubuntu: /home/vboxuser/E-Commerce# ls -lah
total 44K
drwxr-xr-x  4 vboxuser vboxuser 4.0K Mar 20 14:07 .
drwxr-xr-x 19 vboxuser vboxuser 4.0K Mar 20 14:07 ..
drwxr-xr-x  3 vboxuser vboxuser 4.0K Mar 20 14:07 build
-rwxr-xr-x  1 vboxuser vboxuser  35 Mar 20 14:07 build.sh
-rwxr-xr-x  1 vboxuser vboxuser 476 Mar 20 14:07 deployment.yml
-rwxr-xr-x  1 vboxuser vboxuser 187 Mar 20 14:07 deploy.sh
-rwxr-xr-x  1 vboxuser vboxuser  86 Mar 20 14:07 docker-compose.yml
-rwxr-xr-x  1 vboxuser vboxuser 237 Mar 20 14:07 Dockerfile
drwxr-xr-x  8 vboxuser vboxuser 4.0K Mar 20 14:15 .git
-rwxr-xr-x  1 vboxuser vboxuser 364 Mar 20 14:07 Jenkinsfile
-rwxr-xr-x  1 vboxuser vboxuser 412 Mar 20 14:07 Nodeport.yaml
root@ubuntu: /home/vboxuser/E-Commerce# cat deployment.yml
apiVersion: apps/v1
kind: Deployment
```

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Activities Terminal Mar 20 3:27 PM
root@ubuntu: /home/vboxuser/E-Commerce

root@ubuntu: /home/vboxuser/E-Commerce
root@ubuntu: /home/vboxuser

-rwxr-xr-x 1 vboxuser vboxuser 22 Mar 20 14:07 deploy.sh
-rwxr-xr-x 1 vboxuser vboxuser 476 Mar 20 14:07 deployment.yml
-rwxr-xr-x 1 vboxuser vboxuser 187 Mar 20 14:07 deploy.sh
-rwxr-xr-x 1 vboxuser vboxuser 86 Mar 20 14:07 docker-compose.yml
-rwxr-xr-x 1 vboxuser vboxuser 237 Mar 20 14:07 Dockerfile
drwxr-xr-x 8 vboxuser vboxuser 4.0K Mar 20 14:15 .git
-rwxr-xr-x 1 vboxuser vboxuser 364 Mar 20 14:07 Jenkinsfile
-rwxr-xr-x 1 vboxuser vboxuser 412 Mar 20 14:07 Nodeport.yaml
root@ubuntu: /home/vboxuser/E-Commerce# cat deployment.yml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: react-ecommerce-deployment
  labels:
    app: react-ecommerce
spec:
  replicas: 2
  selector:
    matchLabels:
      app: react-ecommerce
  template:
    metadata:
      labels:
        app: react-ecommerce
    spec:
      containers:
        - name: react-ecommerce
          image: ecommerce:latest
          imagePullPolicy: Never # Added a specific tag for better version control
          ports:
            - containerPort: 80
root@ubuntu: /home/vboxuser/E-Commerce# kubectl apply -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
root@ubuntu: /home/vboxuser/E-Commerce# docker ps -a
CONTAINER ID        IMAGE               COMMAND                  CREATED            STATUS              PORTS              NAMES
07f7afcc0241       gcr.io/k8s-minikube/kicbase:v0.0.46   "/usr/local/bin/entr..." 23 hours ago       Exited (255) 7 minutes ago    127.0.0.1:32768->22/tcp, 127.0.0.1:32769->2376/tcp, 127.0.0.1:32770->5000/tcp, 127.0.0.1:32771->8443/tcp, 127.0.0.1:32772->32443/tcp    minikube
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Activities Terminal Mar 20 3:27 PM
root@ubuntu: /home/vboxuser/E-Commerce

root@ubuntu: /home/vboxuser/E-Commerce
root@ubuntu: /home/vboxuser

th --validate=false
root@ubuntu: /home/vboxuser/E-Commerce# docker ps -a
CONTAINER ID        IMAGE               COMMAND                  CREATED            STATUS              PORTS              NAMES
07f7afcc0241       gcr.io/k8s-minikube/kicbase:v0.0.46   "/usr/local/bin/entr..." 23 hours ago       Exited (255) 7 minutes ago    127.0.0.1:32768->22/tcp, 127.0.0.1:32769->2376/tcp, 127.0.0.1:32770->5000/tcp, 127.0.0.1:32771->8443/tcp, 127.0.0.1:32772->32443/tcp    minikube
7f6041b8b5e8       ci-cdpipeline_app   "python app.py"          23 hours ago       Exited (255) 6 hours ago     0.0.0.0:5000->5000/tcp, [::]:5000->5000/tcp    ci-cdpi
pipeline_app_1     redis:alpine         "docker-entrypoint.s..." 23 hours ago       Up 7 minutes            6379/tcp        ci-cdpi
pipeline_redis_1   postgres:alpine      "docker-entrypoint.s..." 23 hours ago       Up 7 minutes            0.0.0.0:5432->5432/tcp, [::]:5432->5432/tcp    ci-cdpi
pipeline_db_1      hello-world          "/hello"                  26 hours ago       Exited (0) 26 hours ago                                wizardl
y_gould
root@ubuntu: /home/vboxuser/E-Commerce# docker start 07f7afcc0241
07f7afcc0241
root@ubuntu: /home/vboxuser/E-Commerce# kubectl apply -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: connection refused; if you choose to ignore these errors, turn validation off with --validate=false
root@ubuntu: /home/vboxuser/E-Commerce# kubectl get deployments
E0320 15:00:25.254311      5367 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://192.168.49.2:8443/api?timeout=32s\": dial tcp 192.168.49.2:8443: connect: connection refused"
E0320 15:00:25.257604      5367 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://192.168.49.2:8443/api?timeout=32s\": dial tcp 192.168.49.2:8443: connect: connection refused"
E0320 15:00:25.260119      5367 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://192.168.49.2:8443/api?timeout=32s\": dial tcp 192.168.49.2:8443: connect: connection refused"
E0320 15:00:25.262318      5367 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://192.168.49.2:8443/api?timeout=32s\": dial tcp 192.168.49.2:8443: connect: connection refused"
E0320 15:00:25.265598      5367 memcache.go:265] "Unhandled Error" err="couldn't get current server API group list: Get \"https://192.168.49.2:8443/api?timeout=32s\": dial tcp 192.168.49.2:8443: connect: connection refused"
The connection to the server 192.168.49.2:8443 was refused - did you specify the right host or port?
root@ubuntu: /home/vboxuser/E-Commerce# minikube start
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Activities Terminal Mar 20 3:27 PM
root@ubuntu: /home/vboxuser/E-Commerce

root@ubuntu: /home/vboxuser/E-Commerce x root@ubuntu: /home/vboxuser x v
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.stgs.k8s.io/docs/reference/drivers/none/
Tip: To remove this root owned cluster, run: sudo minikube delete
Exiting due to DRV_AS_ROOT: The "docker" driver should not be used with root privileges.

root@ubuntu: /home/vboxuser/E-Commerce# minikube start --force
minikube v1.35.0 on Ubuntu 22.04 (vbox/amd64)
minikube skips various validations when --force is supplied; this may lead to unexpected behavior
Using the docker driver based on existing profile
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.stgs.k8s.io/docs/reference/drivers/none/
Tip: To remove this root owned cluster, run: sudo minikube delete

Requested memory allocation 1968MB is more than your system limit 1966MB.
Suggestion: Start minikube with less memory allocated: 'minikube start --memory=1966mb'

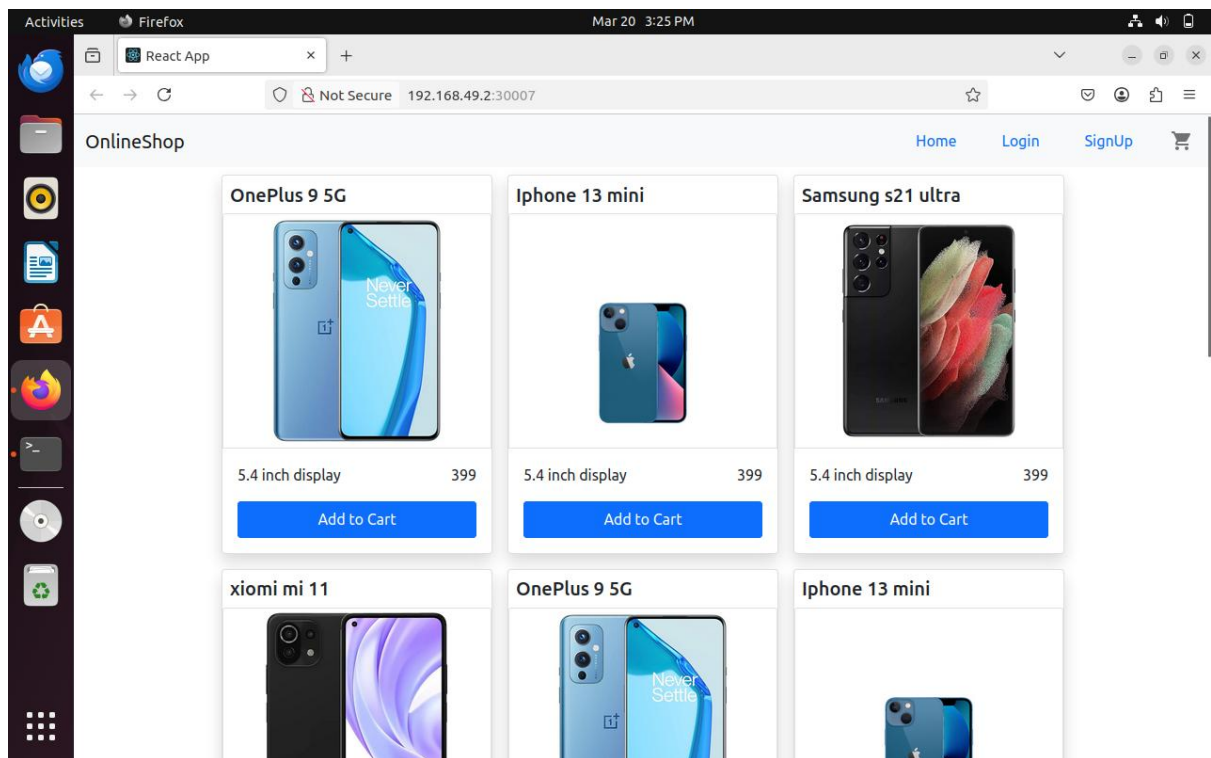
The requested memory allocation of 1968MiB does not leave room for system overhead (total system memory: 1966MiB). You may face
stability issues.
Suggestion: Start minikube with less memory allocated: 'minikube start --memory=1966mb'

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: default-storageclass, storage-provisioner
Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
root@ubuntu: /home/vboxuser/E-Commerce# kubectl apply -f deployment.yml
deployment.apps/react-e-commerce-deployment created
root@ubuntu: /home/vboxuser/E-Commerce# kubectl get deployments
NAME READY UP-TO-DATE AVAILABLE AGE
react-e-commerce-deployment 0/2 2 0 35s
root@ubuntu: /home/vboxuser/E-Commerce# kubectl get pods
```

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Activities Terminal Mar 20 3:26 PM
root@ubuntu: /home/vboxuser/E-Commerce

root@ubuntu: /home/vboxuser/E-Commerce x root@ubuntu: /home/vboxuser x v
NAME READY STATUS RESTARTS AGE
react-e-commerce-deployment-849768b4c6-lng2w 0/1 ErrImageNeverPull 0 85s
react-e-commerce-deployment-849768b4c6-mv5fq 0/1 ErrImageNeverPull 0 84s
root@ubuntu: /home/vboxuser/E-Commerce# minikube image load ecommerce:latest
Executing "docker container inspect minikube --format={{.State.Status}}" took an unusually long time: 2.216619098s
Restarting the docker service may improve performance.
root@ubuntu: /home/vboxuser/E-Commerce# kubectl get pods
NAME READY STATUS RESTARTS AGE
react-e-commerce-deployment-849768b4c6-lng2w 0/1 ErrImageNeverPull 0 2m47s
react-e-commerce-deployment-849768b4c6-mv5fq 0/1 ErrImageNeverPull 0 2m46s
root@ubuntu: /home/vboxuser/E-Commerce# minikube image load ecommerce:latest
Executing "docker container inspect minikube --format={{.State.Status}}" took an unusually long time: 2.639983945s
Restarting the docker service may improve performance.
root@ubuntu: /home/vboxuser/E-Commerce# kubectl get pods
NAME READY STATUS RESTARTS AGE
react-e-commerce-deployment-849768b4c6-lng2w 1/1 Running 0 9m25s
react-e-commerce-deployment-849768b4c6-mv5fq 1/1 Running 0 9m24s
root@ubuntu: /home/vboxuser/E-Commerce# kubectl apply -f Nodeport.yml
service/react-e-commerce-service created
root@ubuntu: /home/vboxuser/E-Commerce# minikube service react-e-commerce-service
-----|-----|-----|
NAMESPACE NAME TARGET PORT URL
-----|-----|-----|
default react-e-commerce-service 80 http://192.168.49.2:30007
-----|-----|-----|

Opening service default/react-e-commerce-service in default browser...
root@ubuntu: /home/vboxuser/E-Commerce# 2025/03/20 15:20:42.227965 cmd_run.go:1285: WARNING: cannot start document portal: read unix
@>/run/user/1000/bus: EOF
touch: cannot touch '/root/snap/firefox/common/.cache/desktop-runtime-date': No such file or directory
mkdir: cannot create directory '/run/user/0': Permission denied
Gtk-Message: 15:21:00.949: Not loading module "atk-bridge". The functionality is provided by GTK natively. Please try to not load it
[13004] Wayland Proxy [0x7c4848d61bd0] Error: CheckWaylandDisplay(): Failed to connect to Wayland display '/run/user/0/snap.firefox/
wayland-0' error: No such file or directory
Authorization required, but no authorization protocol specified
Error: we don't have any display, WAYLAND_DISPLAY='wayland-0' DISPLAY='0'
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