

TASK 3

Step 1: Clone the web application's repository to your local machine.

Step 2: Navigate to the project directory and build the Docker image using `cd E-Commerce` and `docker build -t ecommerce:latest .`

Step 3: Apply the Kubernetes deployment and service configuration files using `kubectl apply -f` to deploy the resources.

Step 4: Verify the status of deployments and pods using `kubectl get deployments` and `kubectl get pods`

Step 5: Load the locally built Docker image into Minikube using `minikube image load`

Step 6: Expose the application by applying a service configuration using `kubectl apply -f Nodeport.yml`

Step 7: Verify the deployed pods and services using `kubectl get pods`.

Step 8: Reapply the deployment configuration using `kubectl apply -f deployment.yml`

Step 9: Start the Minikube service to access the application using `minikube service react-ecommerce-service`

Step 10: Verify and re-expose the service.

ubuntu [Running] - Oracle VM VirtualBox

Activities Terminal Mar 20 15:58

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

```
root@ubuntu: /  
file or directory  
Authorization required, but no authorization protocol specified  
Error: we don't have any display, WAYLAND_DISPLAY='wayland-0' DISPLAY=':0'  
^C  
root@ubuntu:/home/vboxuser/E-Commerce# kubectl get svc  
NAME                                TYPE                CLUSTER-IP      EXTERNAL-IP      PORT(S)  
kubernetes                          ClusterIP           10.96.0.1        <none>            443/TCP  
react-ecommerce-service             NodePort            10.100.62.126    <none>            80:30007/TCP  
root@ubuntu:/home/vboxuser/E-Commerce# minikube service react-ecommerce-service  
|-----|-----|-----|-----|  
| NAMESPACE |          NAME          | TARGET PORT |          URL          |  
|-----|-----|-----|-----|  
| default   | react-ecommerce-service |          80  | http://192.168.49.2:30007 |  
|-----|-----|-----|-----|  
Opening service default/react-ecommerce-service in default browser...  
(gio open:19935): GLib-GIO-CRITICAL **: 15:17:03.631: g_dbus_connection_flush:  
assertion 'G_IS_DBUS_CONNECTION (connection)' failed  
2025/03/20 15:17:03.662331 cmd run.go:1053: WARNING: cannot start document port
```

Output:

