TASK 3

Step 1: Clone the Repository

git clone <your-repo-url>

cd <your-repo-folder>

Step 2: Build the Docker Image

docker build -t e-commerce-app .

Step 3: Start Minikube

minikube start --force

minikube status

Step 4: Load the Docker Image into Minikube

minikube image load e-commerce-app

Verify the image is loaded:

minikube image list # Ensure "e-commerce-app" is listed

Step 5: Deploy the Application

kubectl apply -f deployment.yml

kubectl get deployments

kubectl get pods

If you need a **NodePort service**, apply it:

kubectl apply -f Nodeport.yaml

Step 6: Fix Image Pull Issues (if necessary)

If Kubernetes tries to pull the image from a registry instead of using the local image, patch the deployment

kubectl patch deployment react-ecommerce-deployment --type='json' -p='[{"op": "replace", "path": "/spec/template/spec/containers/0/imagePullPolicy", "value": "Never"}]'

Step 7: Expose the Service & Access the App

minikube ip

minikube service react-ecommerce-service

Push to Git:

git init # If not already initialized

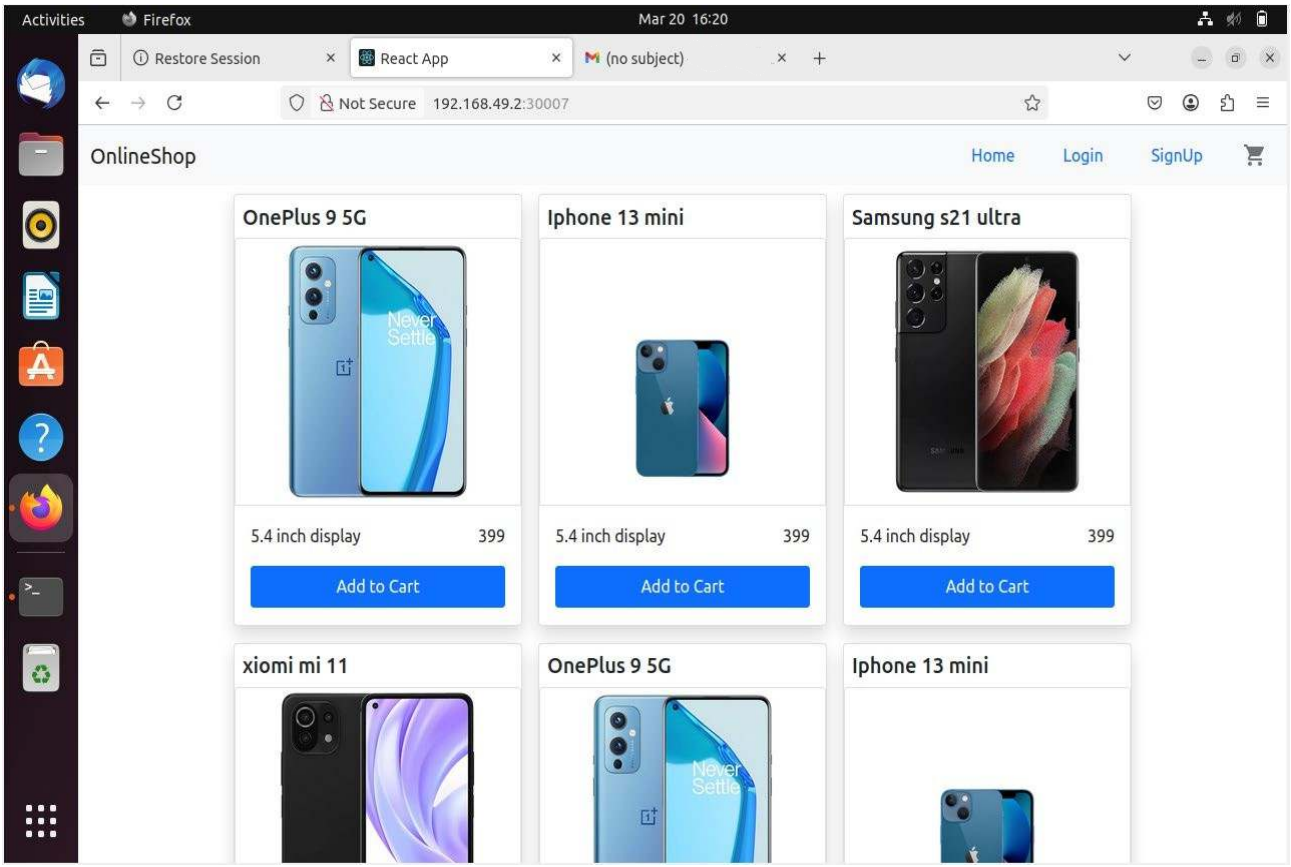
git add Dockerfile deployment.yml Nodeport.yaml

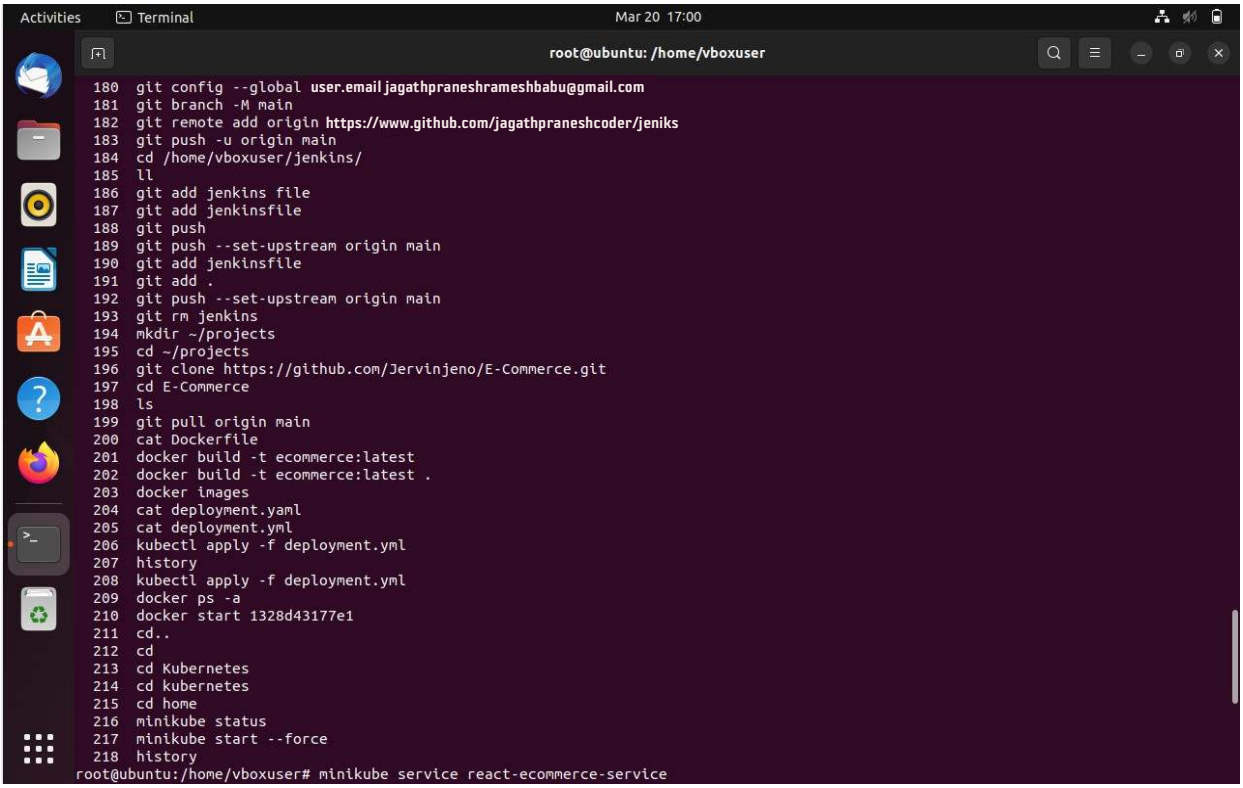
git commit -m "Kubernetes deployment for React e-commerce app"

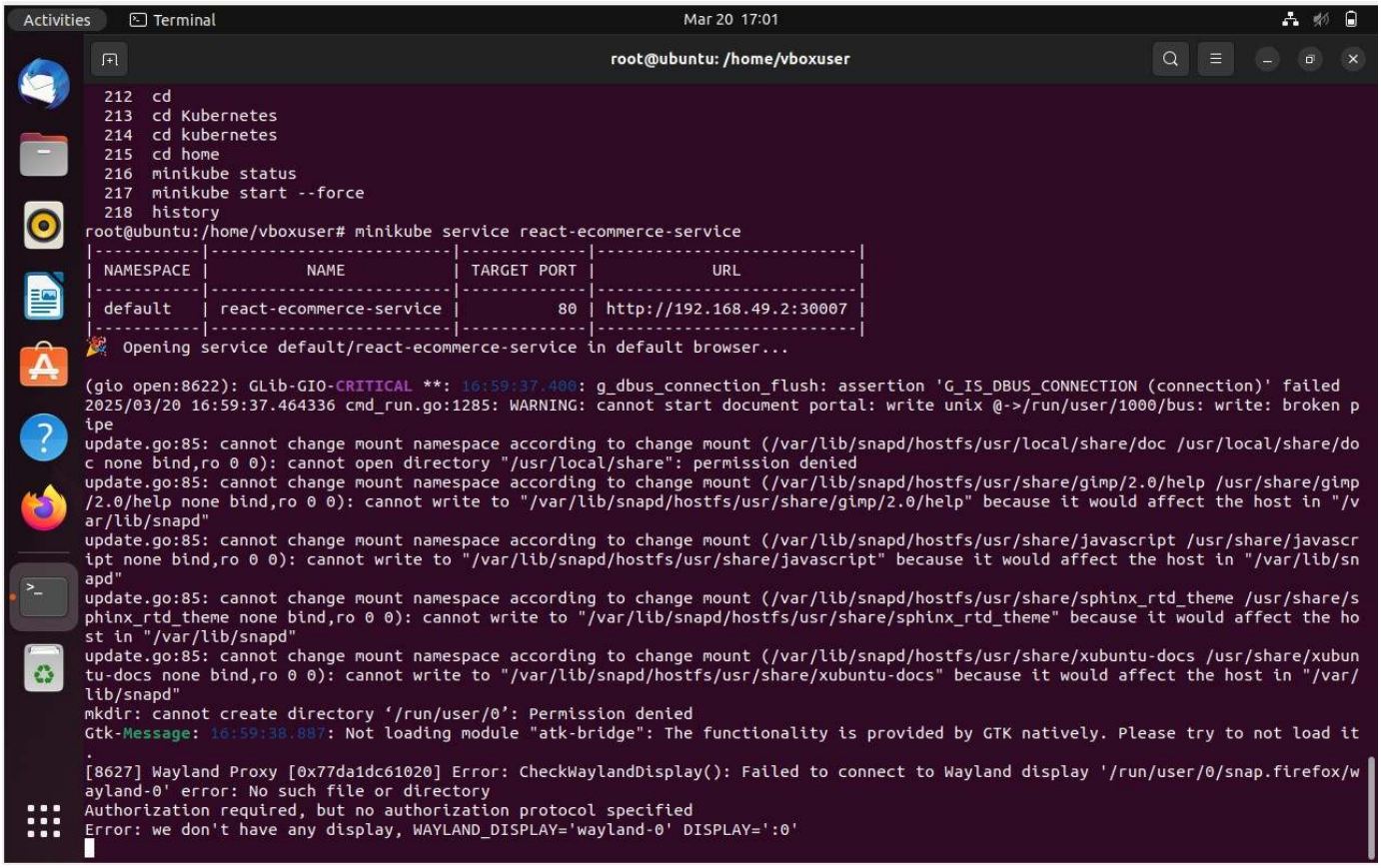
git remote add origin <your-repo-url>

git branch -M main

git push -u origin main


Activities
Firefox
Mar 20 16:20
Restore Session
React App
(no subject)
Not Secure
192.168.49.2:30007
OnlineShop
Home
Login
SignUp
OnePlus 9 5G
Never Settle
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
Never Settle
Iphone 13 mini


Activities
Terminal
Mar 20 17:00
root@ubuntu: /home/vboxuser
180 git config --global user.email jagathpraneshrameshbabu@gmail.com
181 git branch -M main
182 git remote add origin https://www.github.com/jagathpraneshcoder/jeniks
183 git push -u origin main
184 cd /home/vboxuser/jenkins/
185 ll
186 git add jenkins file
187 git add jenkinsfile
188 git push
189 git push --set-upstream origin main
190 git add jenkinsfile
191 git add .
192 git push --set-upstream origin main
193 git rm jenkins
194 mkdir ~/projects
195 cd ~/projects
196 git clone https://github.com/Jervinjeno/E-Commerce.git
197 cd E-Commerce
198 ls
199 git pull origin main
200 cat Dockerfile
201 docker build -t ecommerce:latest
202 docker build -t ecommerce:latest .
203 docker images
204 cat deployment.yaml
205 cat deployment.yml
206 kubectl apply -f deployment.yml
207 history
208 kubectl apply -f deployment.yml
209 docker ps -a
210 docker start 1328d43177e1
211 cd..
212 cd
213 cd Kubernetes
214 cd kubernetes
215 cd home
216 minikube status
217 minikube start --force
218 history
root@ubuntu:/home/vboxuser# minikube service react-ecommerce-service


Activities
Terminal
Mar 20 17:01
root@ubuntu: /home/vboxuser
212 cd
213 cd Kubernetes
214 cd kubernetes
215 cd home
216 minikube status
217 minikube start --force
218 history
root@ubuntu:/home/vboxuser# 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:8622): GLib-GIO-CRITICAL **: 16:59:37.400: g_dbus_connection_flush: assertion 'G_IS_DBUS_CONNECTION (connection)' failed
2025/03/20 16:59:37.464336 cmd_run.go:1285: WARNING: cannot start document portal: write unix @->/run/user/1000/bus: write: broken pipe
update.go:85: cannot change mount namespace according to change mount (/var/lib/snapd/hostfs/usr/local/share/doc /usr/local/share/doc none bind,ro 0 0): cannot open directory "/usr/local/share": permission denied
update.go:85: cannot change mount namespace according to change mount (/var/lib/snapd/hostfs/usr/share/gimp/2.0/help /usr/share/gimp/2.0/help none bind,ro 0 0): cannot write to "/var/lib/snapd/hostfs/usr/share/gimp/2.0/help" because it would affect the host in "/var/lib/snapd"
update.go:85: cannot change mount namespace according to change mount (/var/lib/snapd/hostfs/usr/share/javascript /usr/share/javascript none bind,ro 0 0): cannot write to "/var/lib/snapd/hostfs/usr/share/javascript" because it would affect the host in "/var/lib/snapd"
update.go:85: cannot change mount namespace according to change mount (/var/lib/snapd/hostfs/usr/share/sphinx_rtd_theme /usr/share/sphinx_rtd_theme none bind,ro 0 0): cannot write to "/var/lib/snapd/hostfs/usr/share/sphinx_rtd_theme" because it would affect the host in "/var/lib/snapd"
update.go:85: cannot change mount namespace according to change mount (/var/lib/snapd/hostfs/usr/share/xubuntu-docs /usr/share/xubuntu-docs none bind,ro 0 0): cannot write to "/var/lib/snapd/hostfs/usr/share/xubuntu-docs" because it would affect the host in "/var/lib/snapd"
mkdir: cannot create directory ‘/run/user/0’: Permission denied
Gtk-Message: 16:59:38.887: Not loading module "atk-bridge": The functionality is provided by GTK natively. Please try to not load it.
[8627] Wayland Proxy [0x77da1dc61020] 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'