

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
```

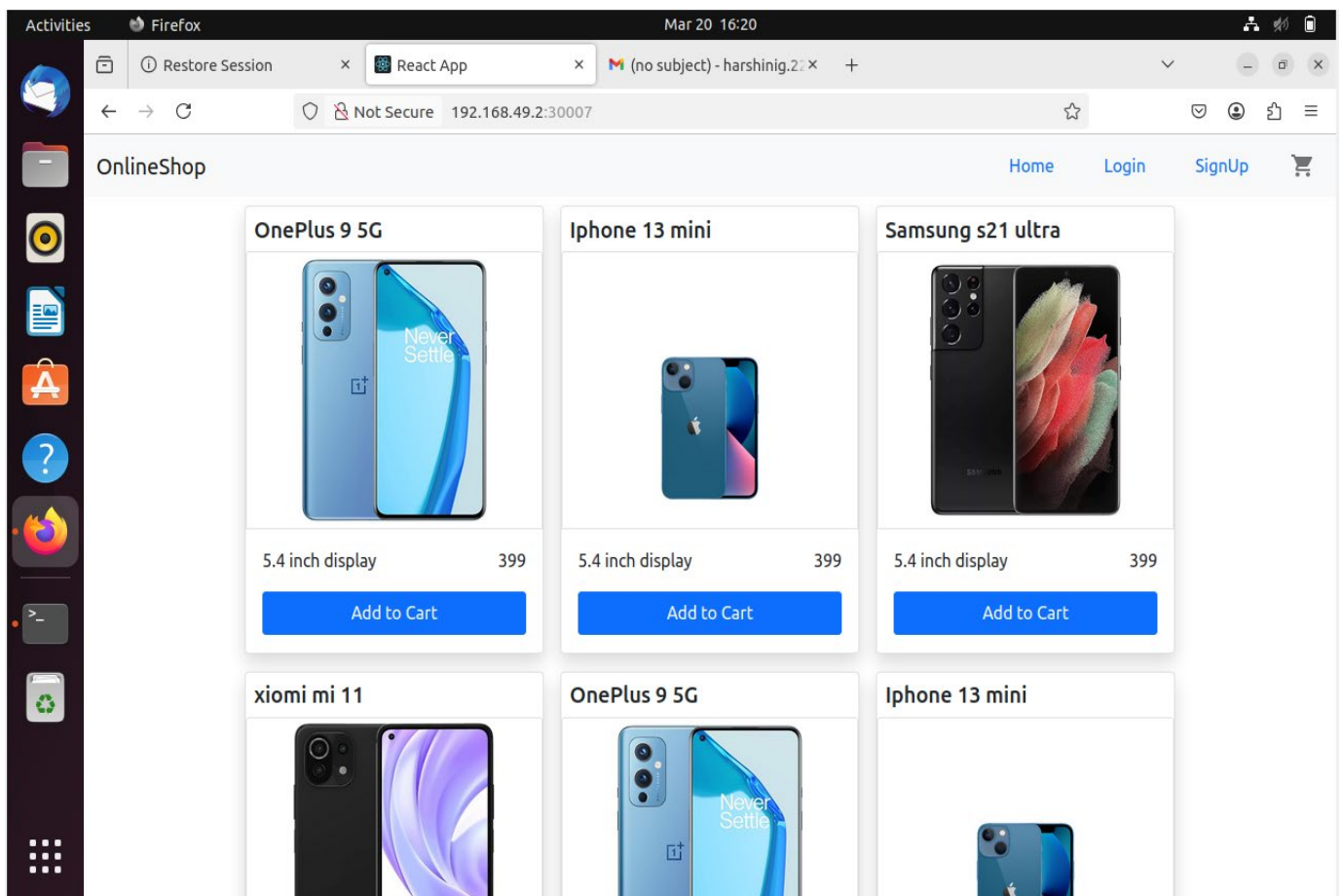
```
git add Dockerfile deployment.yml Nodeport.yaml
```

```
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 Terminal Mar 20 17:00 root@ubuntu: /home/vboxuser

180 git config --global user.email harshinig203@gmail.com
181 git branch -M main
182 git remote add origin https://github.com/Harshini-Gunasekar/jenkins.git
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-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...

(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 p
ipe
update.go:85: cannot change mount namespace according to change mount (/var/lib/snapd/hostfs/usr/local/share/doc /usr/local/share/do
c 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 "/v
ar/lib/snapd"
update.go:85: cannot change mount namespace according to change mount (/var/lib/snapd/hostfs/usr/share/javascript /usr/share/javascr
ipt none bind,ro 0 0): cannot write to "/var/lib/snapd/hostfs/usr/share/javascript" because it would affect the host in "/var/lib/sn
apd"
update.go:85: cannot change mount namespace according to change mount (/var/lib/snapd/hostfs/usr/share/sphinx_rtd_theme /usr/share/s
phinx_rtd_theme none bind,ro 0 0): cannot write to "/var/lib/snapd/hostfs/usr/share/sphinx_rtd_theme" because it would affect the ho
st 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/xubun
tu-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/w
ayland-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'
```