Practical-7

AIM: Setting Up Local Kubernetes Cluster – minikube

Command:

STEP 1: Create a dockerfile

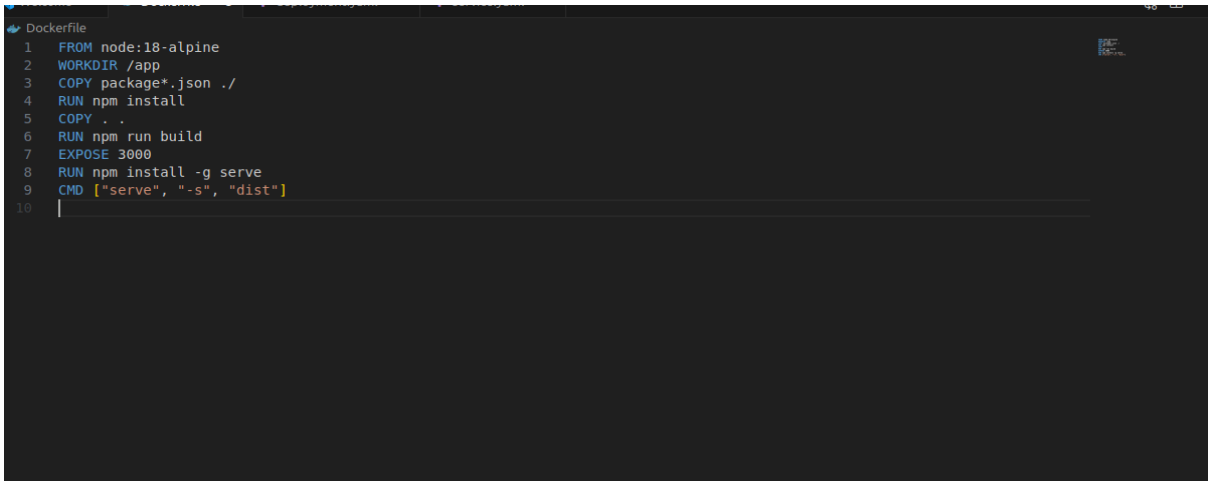

Figure 1:Created dockerfile

STEP 2: Create deployment file

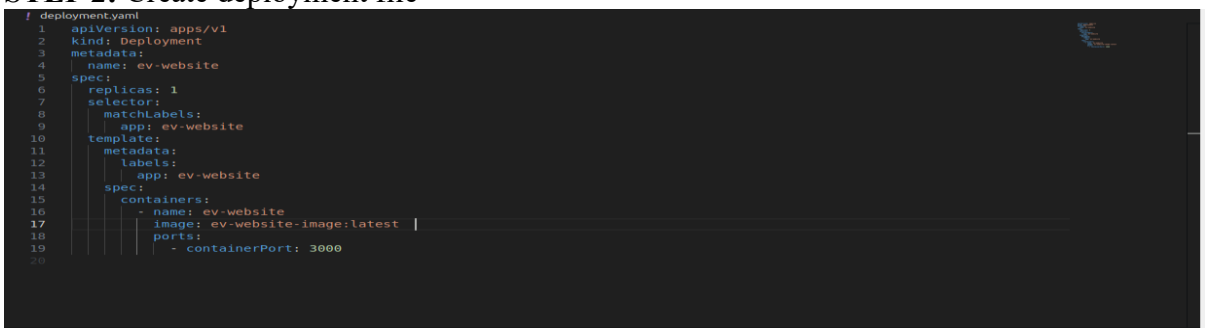

Figure 2:Created deployment.yaml file

STEP 3: Create a Service YAML

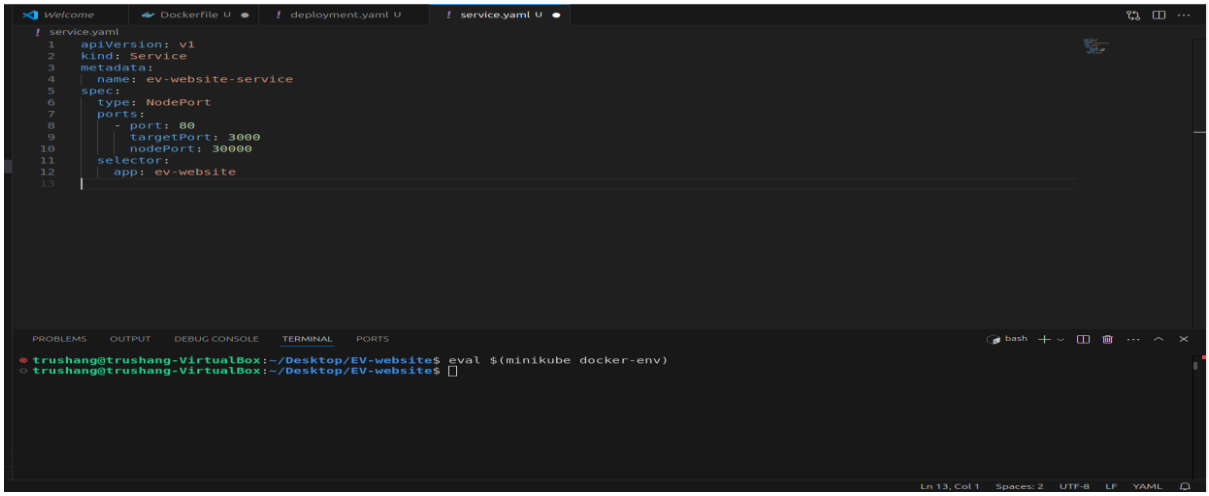

Figure 3:Created service.yaml file

STEP 4: Build the Docker image.

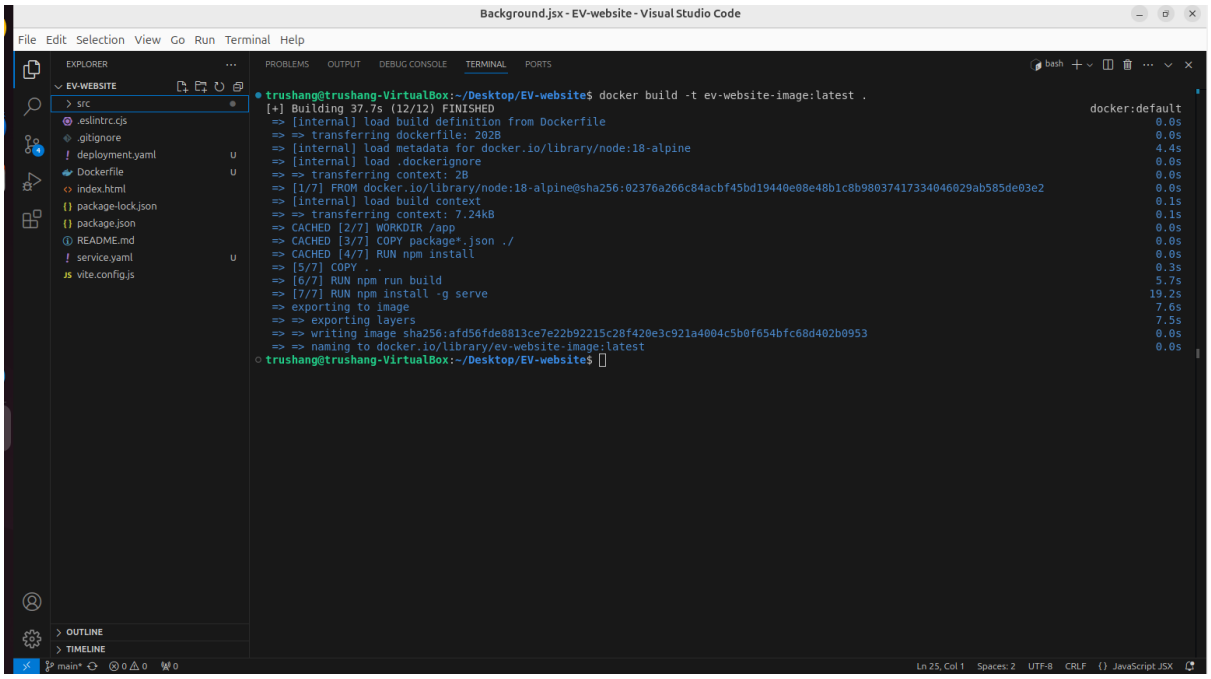

Figure 4:Created docker image

STEP 5: Login in your docker account

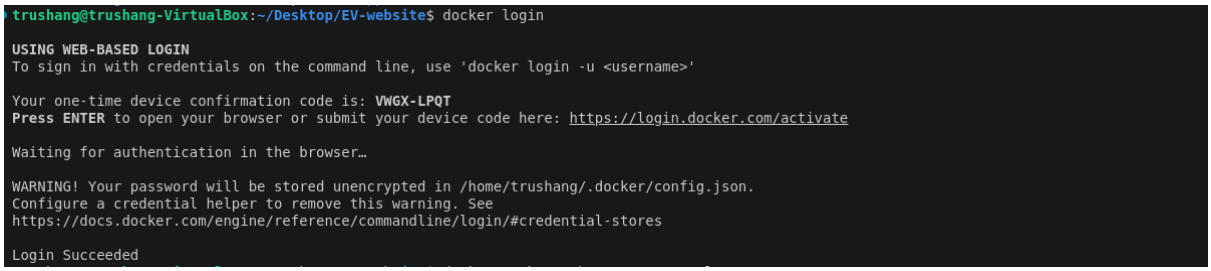

Figure 5:Login into docker

STEP 6: Push docker image

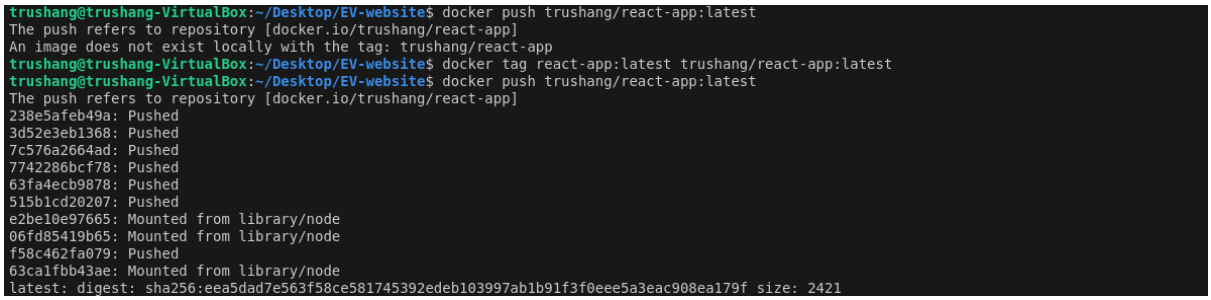

Figure 6:Push docker image

STEP 7: Apply the Deployment & service manifest to Kubernetes cluster

```
trushang@trushang-VirtualBox:~/Desktop/EV-website$ kubectl apply -f deployment.yaml
deployment.apps/ev-website unchanged
trushang@trushang-VirtualBox:~/Desktop/EV-website$ kubectl apply -f deployment.yaml
deployment.apps/ev-website unchanged
trushang@trushang-VirtualBox:~/Desktop/EV-website$ kubectl apply -f service.yaml
service/ev-website-service unchanged
```

Figure 7:Apply Deployment and Service manifest to Kubernetes cluster

STEP 8: Access React App

```
trushang@trushang-VirtualBox:~/Desktop/EV-website$ minikube service react-app-service --url

❌  Exiting due to SVC_NOT_FOUND: Service 'react-app-service' was not found in 'default' namespace.
You may select another namespace by using 'minikube service react-app-service -n <namespace>'. Or list out all the services using 'minikube s
ervice list'

trushang@trushang-VirtualBox:~/Desktop/EV-website$ kubectl get services
NAME                TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)        AGE
ev-website-service  NodePort    10.110.211.195   <none>        80:30000/TCP   7h37m
kubernetes          ClusterIP   10.96.0.1        <none>        443/TCP        7h39m
trushang@trushang-VirtualBox:~/Desktop/EV-website$ minikube service ev-website-service --url
http://192.168.49.2:30000

❌  Exiting due to SVC_UNREACHABLE: service not available: no running pod for service ev-website-service found


    😿  If the above advice does not help, please let us know:
    👉  https://github.com/kubernetes/minikube/issues/new/choose

    Please run `minikube logs --file=logs.txt` and attach logs.txt to the GitHub issue.
    Please also attach the following file to the GitHub issue:
    - /tmp/minikube_service_e8678537d0f6a7ca9a48f2112e1c2c9ed63f0d4a_0.log
```

Figure 8:Access the react app