

Final Project

Day 6 Task : Final Java Project Minikube Deployment

Minikube Output Images:

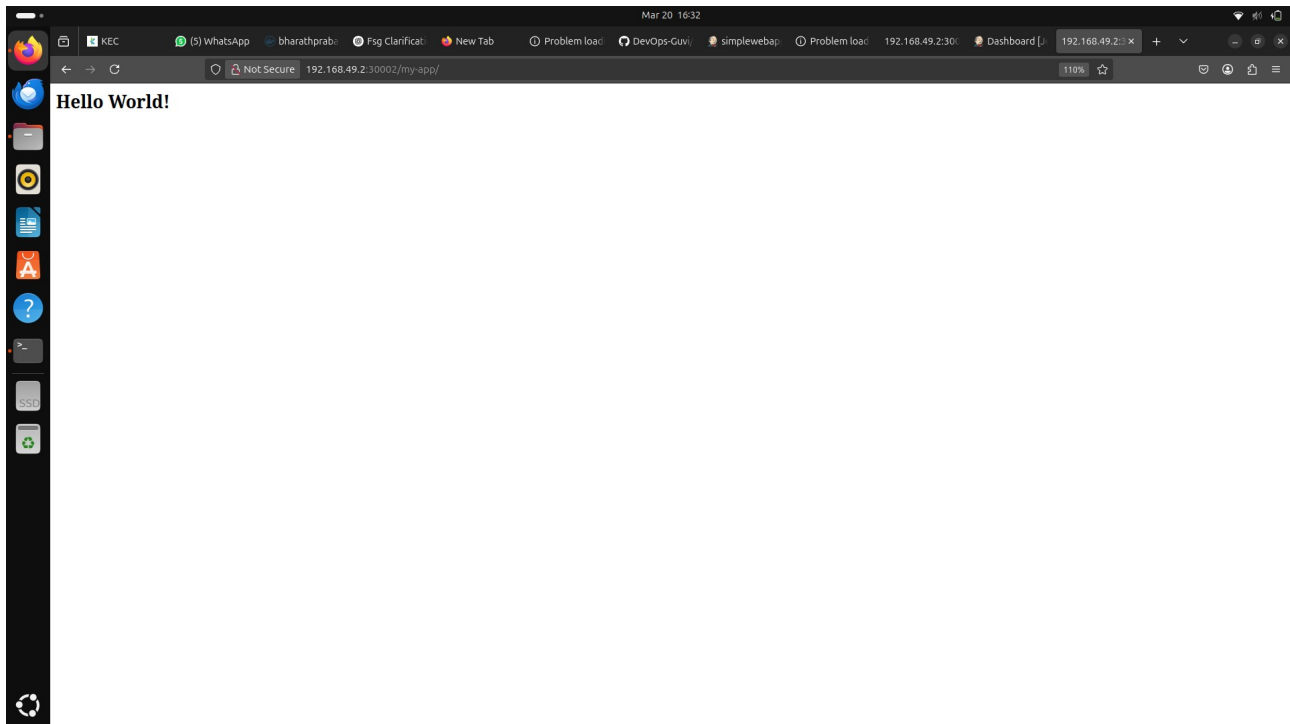
```
bharath-prabakaran@Dot:~$ ls
deploy.yml      Documents  Pictures  Public    Templates
Desktop         Downloads  pod-ns.yml rs-test.yml test-ns.yml
docker-compose.yml Music       pod.yml   snap      Videos

bharath-prabakaran@Dot:~$ cd Documents
bharath-prabakaran@Dot:~/Documents$ ls
Guvi
bharath-prabakaran@Dot:~/Documents$ Guvi
Command 'Guvi' not found, did you mean:
  command 'uvi' from snap uvi (1.0.0)
  command 'quvi' from deb quvi (0.9.5-0.2)
See 'snap info <snapname>' for additional versions.
bharath-prabakaran@Dot:~/Documents$ cd Guvi
bharath-prabakaran@Dot:~/Documents/Guvi$ ls
Clone  Github  Jenkins  kubernetes_cmds  minikube_cmds
bharath-prabakaran@Dot:~/Documents/Guvi$ cd Github
bharath-prabakaran@Dot:~/Documents/Guvi/Github$ >Docker_commands
bharath-prabakaran@Dot:~/Documents/Guvi/Github$ sudo nano Docker_commands
[sudo] password for bharath-prabakaran:
bharath-prabakaran@Dot:~/Documents/Guvi/Github$ >DockerCompose_commands
bharath-prabakaran@Dot:~/Documents/Guvi/Github$ sudo nano DockerCompose_commandsbharath-prabakaran@Dot:~/Documents/Guvi/Github$ >Kubernetes_commands
bharath-prabakaran@Dot:~/Documents/Guvi/Github$ sudo nano Kubernetes_commands
bharath-prabakaran@Dot:~/Documents/Guvi/Github$ cd
bharath-prabakaran@Dot:~$ minikube start
🐳 minikube v1.35.0 on Ubuntu 24.04
🔧 Using the docker driver based on existing profile
👉 Starting "minikube" primary control-plane node in "minikube" cluster
📶 Pulling base image v0.0.46 ...
🔄 Restarting existing docker container for "minikube" ...
🔧 Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
🔍 Verifying Kubernetes components...
   ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🌟 Enabled addons: storage-provisioner, default-storageclass
👉 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
bharath-prabakaran@Dot:~$ kubectl get pod
NAME                READY   STATUS    RESTARTS   AGE
my-deploy-d9b7f9cd-lb999    1/1     Running   2 (15h ago)    16h
bharath-prabakaran@Dot:~$ kubectl get node
NAME    STATUS   ROLES    AGE   VERSION
minikube Ready    control-plane  44h   v1.32.0
bharath-prabakaran@Dot:~$ kubectl get deploy
NAME    READY   UP-TO-DATE   AVAILABLE   AGE
my-deploy  1/1     1             1           16h
bharath-prabakaran@Dot:~$
```

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NAME    READY   UP-TO-DATE   AVAILABLE   AGE
my-deploy  1/1     1             1           16h
bharath-prabakaran@Dot:~$
```

```
bharath-prabakaran@Dot:~$ sudo nano deploy.yml
bharath-prabakaran@Dot:~$ minikube service my-service
-----
| NAMESPACE | NAME      | TARGET PORT | URL                |
|-----|-----|-----|-----|
| default   | my-service | 9000        | http://192.168.49.2:30002 |
|-----|-----|-----|-----|
🔗 Opening service default/my-service in default browser...
bharath-prabakaran@Dot:~$ Gtk-Message: 16:30:10.682: Not loading module "atk-bridge": The functionality is provided by GTK natively. Please try to not load it.
^C
```



Deploy.yml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-deploy
  labels:
    name: my-deploy
spec:
  replicas: 1
  selector:
    matchLabels:
      apptype: web-backend
  strategy:
    type: RollingUpdate
  template:
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
        - name: my-app
```

```
  image: bharathprabakaran/simplewebapp:latest
  ports:
  - containerPort: 9000
```

```
apiVersion: v1
kind: Service
metadata:
  name: my-service
  labels:
    app: my-service
spec:
  type: NodePort
  ports:
  - port: 9000
    targetPort: 8080
    nodePort: 30002
  selector:
    apptype: web-backend
```