Day 4

deploy.yml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-deploy
  labels:
    name: my-deploy
spec:
  replicas: 4
  selector:
    matchLabels:
      apptype: web-backend
  strategy:
    type: RollingUpdate
  template:
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
      - name: my-app
        image: bharathprabakaran/app:latest
        ports:
            - containerPort: 7070
```

---

kubernets_cmds

1. Create a pod using run command

$ kubectl run <pod-name> --image=<image-name> --port=<container-port>

$ kubectl run my-pod --image=nginx --port=80

2. View all the pods

(In default namespace)

$ kubectl get pods

(In All namespace)

$ kubectl get pods -A

For a specific namespace

$ kubectl get pods -n kube-system

For a specific type

$ kubectl get pods <pod-name>

$ kubectl get pods <pod-name> -o wide

$ kubectl get pods <pod-name> -o yaml

$ kubectl get pods <pod-name> -o json

3. Describe a pod (View Pod details)

$ kubectl describe pod <pod-name>

$ kubectl describe pod my-pod

4. View Logs of a pod

$ kubectl logs <pod-name>

$ kubectl logs my-pod

5. Execute any command inside Pod (Inside Pod OS)

$ kubectl exec <pod-name> -- <command>

ns-test.yml

```
apiVersion: v1
kind: Namespace
metadata:
  name: my-demo-ns
```

---

pod-ns.yml

```
apiVersion: v1
kind: Pod
metadata:
  name: my-deploy
  namespace: mydeploy
spec:
  containers:
  - name: my-container
    image: nginx:latest
```

---

pod.txt

Create a pod using run command

$ kubectl run <pod-name> --image=<image-name> --port=<container-port>

$ kubectl run my-pod --image=nginx --port=80

2. View all the pods

(In default namespace)

$ kubectl get pods

(In All namespace)

$ kubectl get pods -A

For a specific namespace

$ kubectl get pods -n kube-system

For a specific type

$ kubectl get pods <pod-name>

$ kubectl get pods <pod-name> -o wide

$ kubectl get pods <pod-name> -o yaml

$ kubectl get pods <pod-name> -o json

3. Describe a pod (View Pod details)

$ kubectl describe pod <pod-name>

$ kubectl describe pod my-pod

4. View Logs of a pod

$ kubectl logs <pod-name>

$ kubectl logs my-pod

$ kubectl exec <pod-name> -- <command>

---

pod.yml

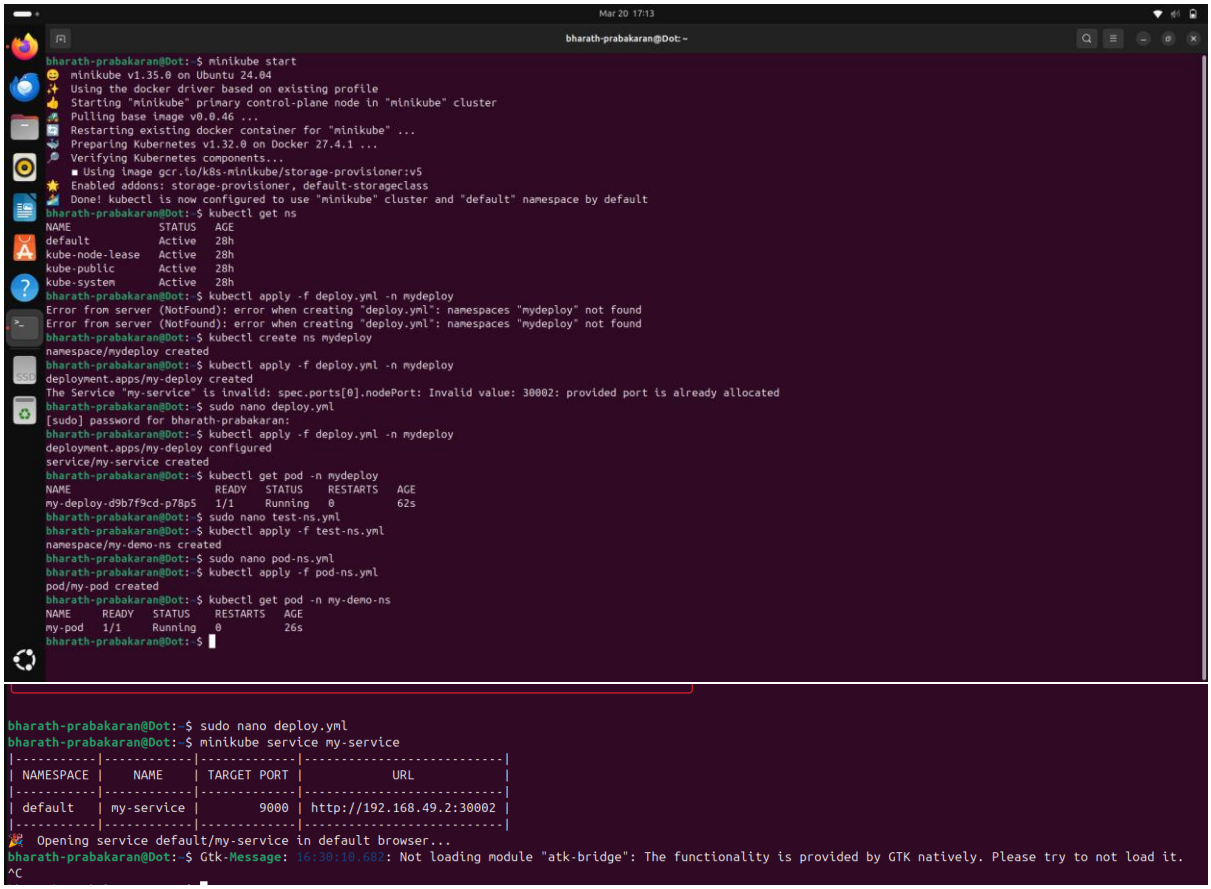
```
apiVersion: v1
kind: Pod
metadata:
  name: my-pod
  labels:
     app: my-web-app

spec:
  containers:
```

```
    - name: nginx-container
      image: bharathprabakaran/app:latest
      ports:
        - containerPort: 80
```

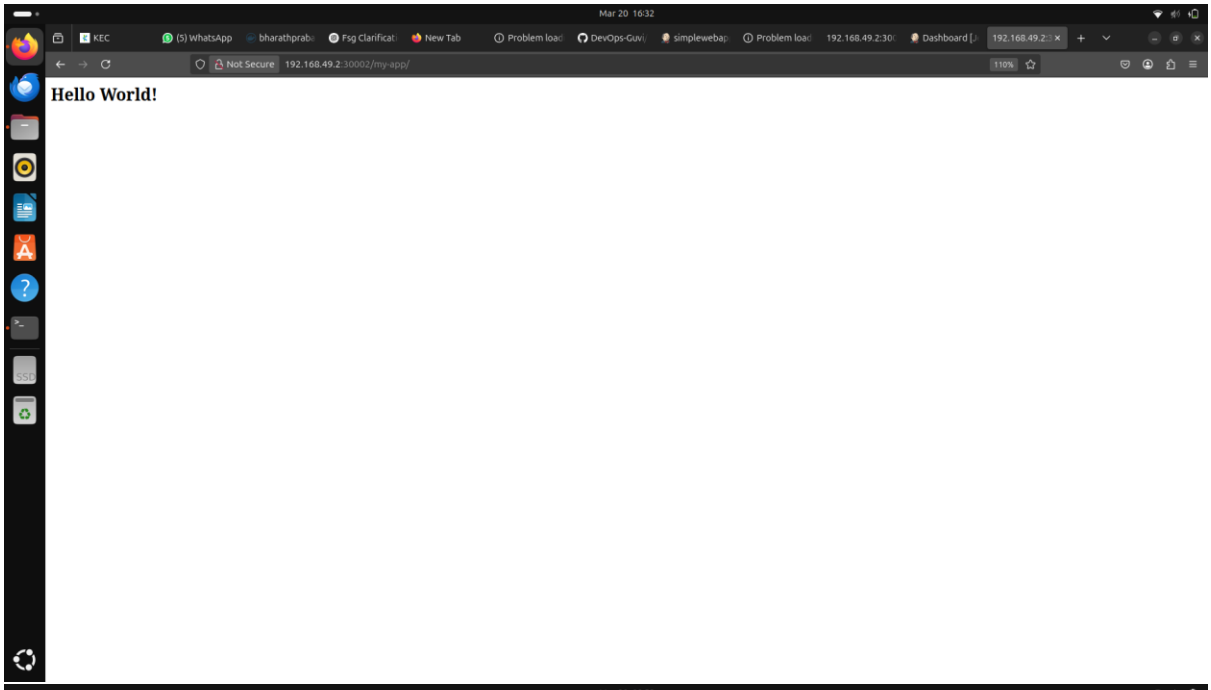
---

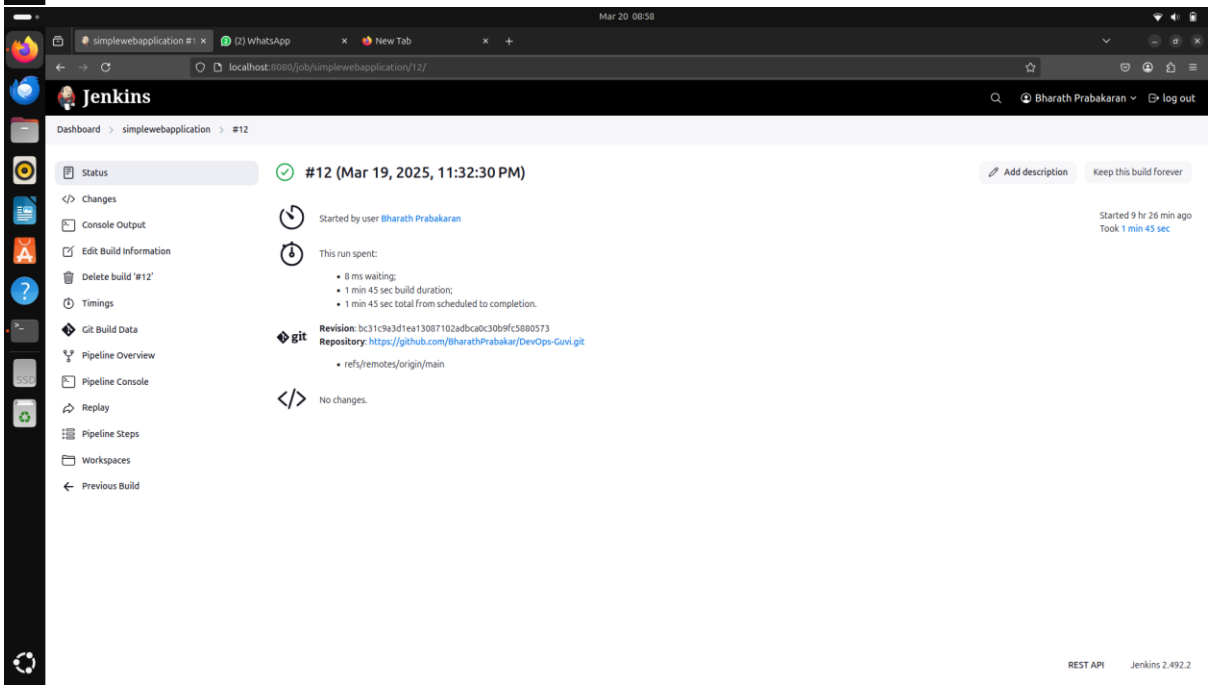
rs-test.yml

```
apiVersion: apps/v1
kind: ReplicaSet
metadata:
  name: my-rs
  labels:
    name: my-rs
spec:
  replicas: 4
  selector:
    matchLabels:
      apptype: web-backend
  template:
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
      - name: my-app
        image: BharathPrabakaran/app:latest
        ports:
          - containerPort: 8081
```




```
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
```


Mar 20 16:32
Not Secure
192.168.49.2:30002/my-app/
Hello World!


Mar 20 08:58
localhost:8080/job/simplewebapplication/12/
Jenkins
Bharath Prabakaran
log out
Dashboard
simplewebapplication
#12
Status
Changes
Console Output
Edit Build Information
Delete build '#12'
Timings
Git Build Data
Pipeline Overview
Pipeline Console
Replay
Pipeline Steps
Workspaces
Previous Build
#12 (Mar 19, 2025, 11:32:30 PM)
Add description
Keep this build forever
Started by user Bharath Prabakaran
Started 9 hr 26 min ago
Took 1 min 45 sec
This run spent:
8 ms waiting;
1 min 45 sec build duration;
1 min 45 sec total from scheduled to completion.
Revision: bc31c9a3d1ea13087102adbca0c30b9fc5880573
Repository: https://github.com/BharathPrabakar/DevOps-Guvi.git
refs/remotes/origin/main
No changes.
REST API
Jenkins 2.492.2