

OUTPUT:

DEPLOY.YML

```
safrin@DESKTOP-MIEOGDP: ~
GNU nano 7.2 my-service.yml *
apiVersion: v1
kind: Namespace
metadata:
  name: my-service
---
apiVersion: v1
kind: Service
metadata:
  name: my-service
  namespace: my-service
spec:
  selector:
    app: my-app
  ports:
    - protocol: TCP
      port: 80
      targetPort: 80
  type: ClusterIP
```

NODES ON CONTROL PLANE

```
safrin@DESKTOP-MIEOGDP: ~
client-certificate: /home/safrin/.minikube/profiles/minikube/client.crt
client-key: /home/safrin/.minikube/profiles/minikube/client.key
safrin@DESKTOP-MIEOGDP:~$ kubectl get node
NAME        STATUS    ROLES    AGE   VERSION
minikube    Ready     control-plane  2d5h  v1.32.0
safrin@DESKTOP-MIEOGDP:~$
```

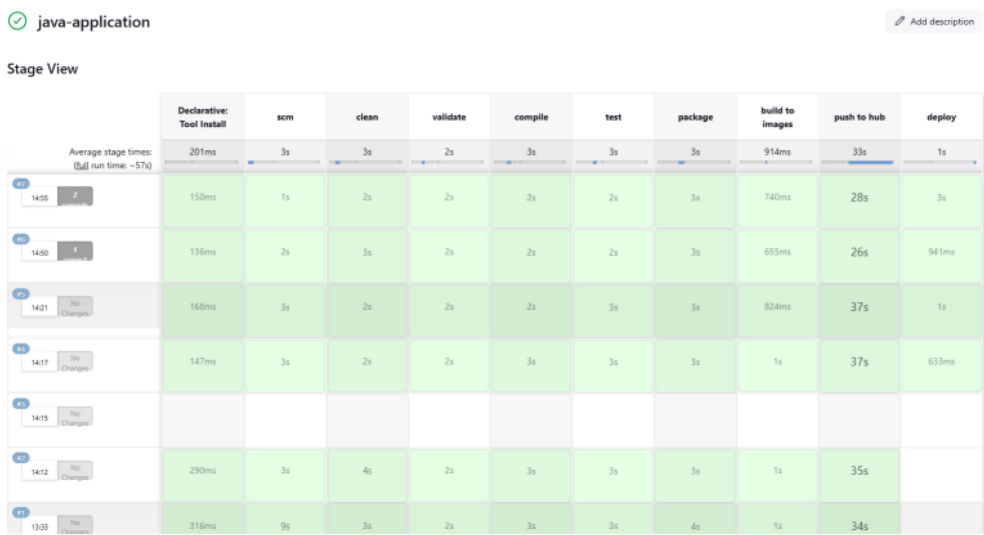
CONFIG FILE

```
safrin@DESKTOP-MIEOGDP: ~  
safrin@DESKTOP-MIEOGDP:~$ cat ~/.kube/config  
apiVersion: v1  
clusters:  
- cluster:  
  certificate-authority: /home/safrin/.minikube/ca.crt  
  extensions:  
  - extension:  
    last-update: Sun, 23 Mar 2025 14:00:57 UTC  
    provider: minikube.sigs.k8s.io  
    version: v1.35.0  
    name: cluster info  
  server: https://127.0.0.1:32769  
  name: minikube  
contexts:  
- context:  
  cluster: minikube  
  extensions:  
  - extension:  
    last-update: Sun, 23 Mar 2025 14:00:57 UTC  
    provider: minikube.sigs.k8s.io  
    version: v1.35.0  
    name: context info  
  namespace: default  
  user: minikube  
  name: minikube  
current-context: minikube  
kind: Config  
preferences: {}  
users:  
- name: minikube  
  user:  
    client-certificate: /home/safrin/.minikube/profiles/minikube/client.crt  
    client-key: /home/safrin/.minikube/profiles/minikube/client.key  
safrin@DESKTOP-MIEOGDP:~$
```

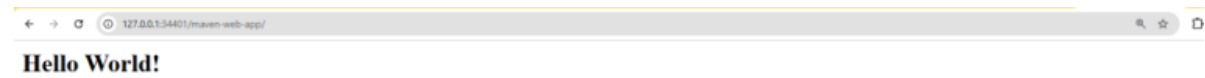
NODE ON SERVICE

```
safrin@DESKTOP-MIEOGDP: ~  
safrin@DESKTOP-MIEOGDP:~$ minikube service my-service -n my-service  
-----  
| NAMESPACE | NAME      | TARGET PORT | URL           |  
-----  
| my-service | my-service |              | No node port |  
-----  
[+] service my-service/my-service has no node port  
[+] Services [my-service/my-service] have type "ClusterIP" not meant to be exposed, however for local development minikube allows you to access this !  
[+] Starting tunnel for service my-service.  
-----  
| NAMESPACE | NAME      | TARGET PORT | URL           |  
-----  
| my-service | my-service |              | http://127.0.0.1:40847 |  
-----  
[+] Opening service my-service/my-service in default browser...  
[+] http://127.0.0.1:40847  
[+] Because you are using a Docker driver on linux, the terminal needs to be open to run it.
```

PIPELINE:



ON THE HOST:



DEPLOYMENT.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: safrinbaragna/my-app: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