КИИИ Лаб 9

Class Assignment / Homework

- Create deployments and services for two Pods:
  - One for the app version 1.0 from the last homework
  - One for the app version 2.0 from the last homework
- Create ingress pointing to the two apps:
  - path based: localhost/ver1
  - path based: localhost/ver2
  - host based: ver1.<index>.com
  - host based: ver2.<index>.com
- Deploy manifests and ingress
- Access the four ingress rules in your local browser

STEP 1: Create manifests yaml

Deployment-1.yaml:

```yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-static-site-v1
spec:
  replicas: 5
  selector:
    matchLabels:
      app: my-static-site-v1
  template:
    metadata:
      labels:
        app: my-static-site-v1
    spec:
      containers:
      - name: my-static-site
        image: beratahmetaj/my-static-site:1.0
        ports:
        - containerPort: 80
```

Deployment-2.yaml:

```yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-static-site-v2
spec:
  replicas: 5
  selector:
    matchLabels:
      app: my-static-site-v2
```

```
  template:
    metadata:
      labels:
        app: my-static-site-v2
    spec:
      containers:
      - name: my-static-site
        image: beratahmetaj/my-static-site:2.0
        ports:
        - containerPort: 80
```

Step 2: Create 2 service manifests

service-v1.yaml:

```
apiVersion: v1
kind: Service
metadata:
  name: my-static-site-v1
spec:
  selector:
    app: my-static-site-v1
  ports:
    - protocol: TCP
      port: 80
      targetPort: 80
```

service-v2.yaml:

```
apiVersion: v1
kind: Service
```

```
metadata:
  name: my-static-site-v2
spec:
  selector:
    app: my-static-site-v2
  ports:
    - protocol: TCP
      port: 80
      targetPort: 80
```

STEP 3: Create Ingress yaml

```
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
  name: my-static-site-ingress
  annotations:
    nginx.ingress.kubernetes.io/rewrite-target: /
spec:
  rules:
  - host: "localhost"
    http:
      paths:
      - path: /ver1
        pathType: Prefix
        backend:
          service:
            name: my-static-site-v1
            port:
              number: 80
      - path: /ver2
        pathType: Prefix
        backend:
          service:
```

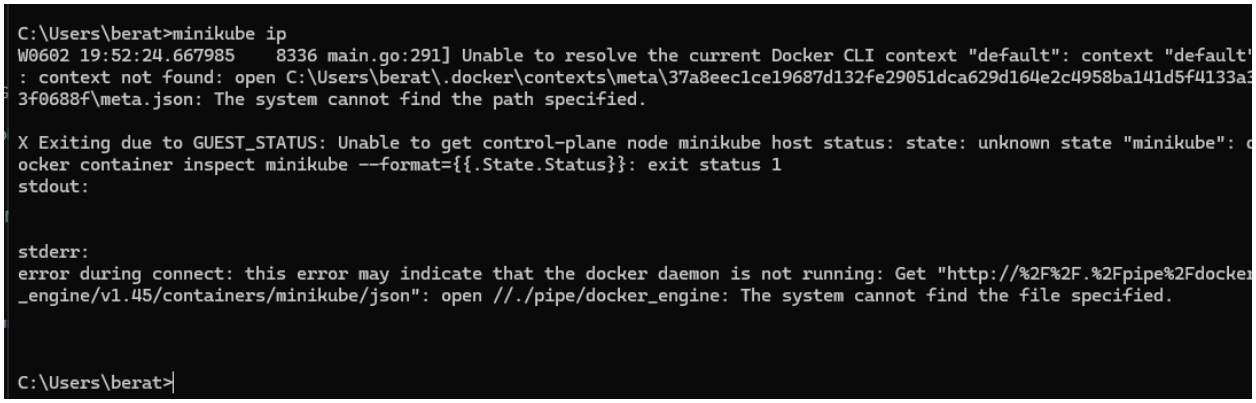
```
            name: my-static-site-v2
            port:
              number: 80
  - host: "ver1.<index>.com"
    http:
      paths:
      - path: /
        pathType: Prefix
        backend:
          service:
            name: my-static-site-v1
            port:
              number: 80
  - host: "ver2.<index>.com"
    http:
      paths:
      - path: /
        pathType: Prefix
        backend:
          service:
            name: my-static-site-v2
            port:
              number: 80
```

STEP 4: run

```
kubectl apply -f deployment-v1.yaml
kubectl apply -f deployment-v2.yaml
kubectl apply -f service-v1.yaml
kubectl apply -f service-v2.yaml
kubectl apply -f ingress.yaml
```

Ingress rule

```
minikube addons enable ingress
```



192.168.99.100 ver1.ver1.12345.com.com
192.168.99.100 ver2.ver1.12345.com.com