

# Task A2

## Submission Information

Option	Description
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Link to GitHub Repository	<a href="https://github.com/capeguy/cs3219-otot/OTOT_Task_A2/">https://github.com/capeguy/cs3219-otot/OTOT_Task_A2/</a>
Instructions	<a href="#">Below</a>
Other Relevant Learnings	null

## Kubectl Commands

### Deploy Image

```
kubectl apply -f nginx-deployment.yml
```

```
→ OTOT_Task_A2 git:(master) ✗ cat nginx-deployment.yml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-deployment
spec:
  selector:
    matchLabels:
      run: nginx-deployment
  replicas: 2
  template:
    metadata:
      labels:
        run: nginx-deployment
    spec:
      containers:
        - name: nginx-custom
          image: capeguy/task_a:latest
          imagePullPolicy: Always
          ports:
            - containerPort: 80
→ OTOT_Task_A2 git:(master) ✗ kubectl apply -f nginx-deployment.yml
deployment.apps/nginx-deployment created
```

### Configure Service

```
kubectl apply -f nginx-service.yml
```

```
→ OTOT_Task_A2 git:(master) ✗ cat nginx-service.yml
apiVersion: v1
kind: Service
metadata:
  name: nginx-service
labels:
```

```
labels:
  run: nginx-service
spec:
  type: NodePort
  ports:
  - port: 80
    targetPort: 80
    protocol: TCP
  selector:
    run: nginx-deployment
→ OTOT_Task_A2 git:(master) ✕ kubectl apply -f nginx-service.yml
service/nginx-service created
```

## Access Deployed Image Through Service

Port Forward to service

```
kubectl port-forward service/nginx-service 8002:80
```

```
→ OTOT_Task_A2 git:(master) ✕ kubectl port-forward service/nginx-service 8002:80
Forwarding from 127.0.0.1:8002 -> 80
Forwarding from [::1]:8002 -> 80
```

Navigate to <http://localhost:8002> on a Web Browser

A screenshot of a web browser's address bar. It shows navigation icons (back, forward, refresh) on the left, followed by a lock icon and the text 'localhost:8002'.

**Hello! This is the HTML page served from NGINX.**