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GitHub link: <https://github.com/yanchenglee98/OTOT-A2-A3>

Instructions (instructions denoted with a (number) are essential setup steps):

1. (1) create cluster: kind create cluster --name kind-1 --config k8s/kind/cluster-config.yaml
2. (2) load local image into k8 cluster: kind load docker-image yanchenglee/taska1 --name=kind-1
3. (3) at root folder OTOT-A2-A3, run this command to apply the deployment manifest: kubectl apply -f ./demo/a2/deployment.yaml
4. check if deployment is running fine with this command: kubectl get deployment/a2 --watch
5. check on status of pods: kubectl get po -lapp=a2 --watch
6. (4) create ingress controller by applying this manifest set: kubectl apply -f https://raw.githubusercontent.com/kubernetes/ingress-nginx/main/deploy/static/provider/kind/deploy.yaml
7. (5) create a service for deployment to allow ingress to expose a service: kubectl apply -f ./demo/a2/service.yaml
8. check that ingress controller is ready before applying ingress object: kubectl -n ingress-nginx get deploy
9. (6) create an ingress object: kubectl apply -f ./demo/a2/ingress.yaml
10. access the website at: <http://localhost/app/>

Screenshots:

Pods

Text

Description automatically generated

Nodes

Text

Description automatically generated

Ingress controller

Text

Description automatically generated

Deployment

Text

Description automatically generated

Service

Text

Description automatically generated

Ingress

Text

Description automatically generated

Webpage

A screenshot of a computer

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Video demo link: <https://drive.google.com/file/d/1LI9efI9_peSOteEwQRwC1cssJ45FLNnK/view?usp=sharing>

Demo does not show scaling as it takes a while to scale