

```
$ mkdir projet-react-kub-react
```

```
$ cd projet-react-kub-react
```

```
$ git clone https://github.com/lholmquist/react-web-app.git
Cloning into 'react-web-app'...
remote: Enumerating objects: 82, done.
remote: Total 82 (delta 0), reused 0 (delta 0), pack-reused 82
Receiving objects: 100% (82/82), 215.65 KiB | 788.00 KiB/s, done.
Resolving deltas: 100% (31/31), done.
```

```
D:\projet-react-kub-react\react-web-app>npm install -g npm@7.0.12
```

Création de Dockerfile :

```
FROM node:current-slim
WORKDIR /usr/src/app
COPY package.json .
RUN npm install
EXPOSE 3000
COPY . ./
CMD [ "npm", "start" ]
```

```
D:\projet-react-kub-react\react-web-app> docker build --tag testreact-kub-dock:1.0 .
```

```
D:\projet-react-kub-react\react-web-app> docker run --publish 8989:3000 --detach --name
testreact 809560b83a0c
```

```
D:\projet-react-kub-react\react-web-app>docker stop 8de387be0ce7
```

```
D:\projet-react-kub-react\react-web-app>docker rm 8de387be0ce7
```

```
docker tag testreact-kub-dock:1.0 eylidal/react-kub-dock:1.0
```

```
docker push eylidal/react-kub-dock:1.0
```

```
gcloud container clusters get-credentials cluster-1 --zone europe-west1-b --project
academic-oasis-296111
```

```
gcloud container clusters list
```

```
sim roux1@cloudshell:~ (academic-oasis-296111)$ kubectl cluster-info
Kubernetes master is running at https://35.205.68.244
GLBCDefaultBackend is running at https://35.205.68.244/api/v1/namespaces/kube-system/services/default-http-backend:http/proxy
KubeDNS is running at https://35.205.68.244/api/v1/namespaces/kube-system/services/kube-dns:dns/proxy
Metrics-server is running at https://35.205.68.244/api/v1/namespaces/kube-system/services/https:metrics-server:/proxy
```

```
sim_roux1@cloudshell:~ (academic-oasis-296111)$ kubectl get all --all-namespaces
```

```
sim_roux1@cloudshell:~ (academic-oasis-296111)$ kubectl get all --all-namespaces -o wide
```

NAMESPACE	NAME	NOMINATED NODE	READINESS GATES	READY	STATUS	RESTARTS	AGE	IP	NODE
kube-system	pod/event-exporter-gke-77cccd97c6-gdh59			2/2	Running	0	23m	10.0.0.6	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/fluentd-gke-lxsrp			2/2	Running	0	22m	10.132.0.5	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/fluentd-gke-scaler-54796dcbf7-d2k6s			1/1	Running	0	23m	10.0.0.2	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/gke-metrics-agent-8pwkj			1/1	Running	0	23m	10.132.0.5	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/kube-dns-7bb4975665-hmljx			4/4	Running	0	23m	10.0.0.5	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/kube-dns-autoscaler-645f7d66cf-zfbrj			1/1	Running	0	23m	10.0.0.3	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/kube-proxy-gke-cluster-1-default-pool-1d64f476-hs5t			1/1	Running	0	23m	10.132.0.5	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/l7-default-backend-678889f899-w8spf			1/1	Running	0	23m	10.0.0.10	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/metrics-server-v0.3.6-64655c969-g4sls			2/2	Running	0	23m	10.0.0.8	gke-cluster-1-default-pool-1d64
f476-hs5t	<none>	<none>							
kube-system	pod/prometheus-to-sd-jb28g			1/1	Running	0	23m	10.132.0.5	gke-cluster-1-default-pool-1d64

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: deployment-react
  labels:
    deployment: react
spec:
  replicas: 3
  selector:
    matchLabels:
      pod: react
  template:
    metadata:
      labels:
        pod: react
    spec:
      containers:
        - name: reactGKE
          image: eylidal/react-kub-dock:1.0
          ports:
            - containerPort: 3000
```

```
deployment
replica set
pod
container
```

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl apply -f deployment.yml
```

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl get deployments
NAME                READY    UP-TO-DATE    AVAILABLE    AGE
deploymentreact     3/3      3             3            2m5s
```

apiVersion: v1

kind: Service

metadata:

name: my-service

spec:

selector:

pod: react

ports:

- protocol: TCP

port: 8989

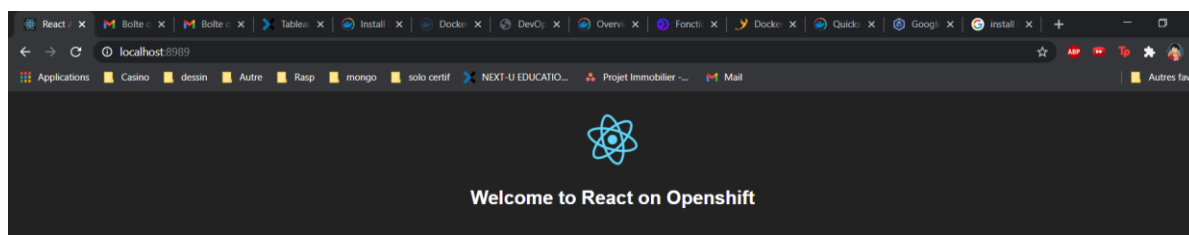
targetPort: 3000

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl apply -f deployment.yml
deployment.apps/deploymentreact configured
```

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl get pod
NAME                                READY    STATUS    RESTARTS    AGE
deploymentreact-6bc4cb4dc5-d84mf    1/1      Running   0            19m
deploymentreact-6bc4cb4dc5-khlth    1/1      Running   0            19m
deploymentreact-6bc4cb4dc5-pjnmk    1/1      Running   0            19m
```

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ ^C
```

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl port-forward deploymentreact-6bc4cb4dc5-d84mf 8989:3000
Forwarding from 127.0.0.1:8989 -> 3000
Forwarding from [::1]:8989 -> 3000
Handling connection for 8989
Handling connection for 8989
Handling connection for 8989
Handling connection for 8989
```



To get started, edit src/App.js and save to reload.

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl apply -f service.yml
service/my-service created
```

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl get service
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.4.0.1	<none>	443/TCP	147m
my-service	ClusterIP	10.4.8.128	<none>	8989/TCP	39s

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl get service
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.4.0.1	<none>	443/TCP	3h2m
my-service	ClusterIP	10.4.8.128	<none>	8989/TCP	35m

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ |
```

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl apply -f ingress.yml
ingress.networking.k8s.io/my-ingress unchanged

simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl get service
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.4.0.1	<none>	443/TCP	16h
my-service	LoadBalancer	10.4.8.128	35.205.47.102	80:30213/TCP	14h

```
simro@DESKTOP-JPR6KRG MINGW64 /d/projet-react-kub-react/react-web-app (master)
$ kubectl get hpa
```

NAME	REFERENCE	TARGETS	MINPODS	MAXPODS	REPLICAS	AGE
my-hpa	Deployment/deploymentreact	0%/65%	3	50	3	49s