Pre-requisite :-

Docker

Kind cluster

1. **if you are running this project on local kind cluster note down these points: -**

**you must give nodeport service port number in config yaml file.**

kind: Cluster

apiVersion: kind.x-k8s.io/v1alpha4

nodes:

- role: control-plane

image: kindest/node:v1.31.2

- role: worker

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extraPortMappings:

- containerPort: 80

hostPort: 80

protocol: TCP

- containerPort: 443

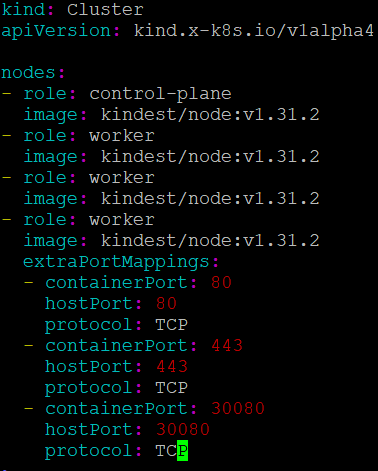
hostPort: 443

protocol: TCP

- containerPort: 30080

hostPort: 30080

protocol: TCP



1. **clone both repositories :-**

git clone <https://github.com/krunalp1908/Multi-Tier-BankApp-CI.git>

git clone <https://github.com/krunalp1908/Multi-Tier-BankApp-CD.git>

1. **pre-requisite before build jar package : -**

before mvn clean package you must run mysql database for in docker for saving data.

Command for docker running mysql as per application.properties : -

docker run --name mysql-bankapp \

-e MYSQL\_ROOT\_PASSWORD=Test@123 \

-e MYSQL\_DATABASE=bankappdb \

-p 3306:3306 \

-d mysql:8.0

1. **check the database that it’s running or not : -**

docker exec -it <docker-continer-id> bash

mysql -u root -p -h 127.0.0.1 -P 3306

# Enter: Test@123

Show databases;

1. **now building the jar file: -**

mvn clean package

1. **building docker image : -**

docker build -t <dockerhubuser/imagename:tag> .

1. **pushing docker image to dockehub : -**

docker login -u <docker hub username>

password : - { docker hub personal access tokens }

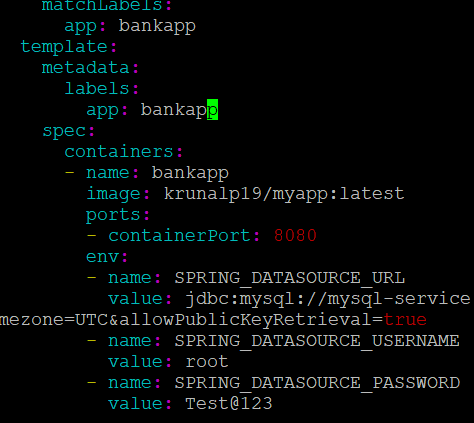
1. **cd Multi-Tier-Bankapp-CD: -**

cd databse

kubectl apply -f databse.yml

1. **cd Multi-Tier-Bankapp-CI**

change the image name to your username with docker name and tag in yaml file of bankapp.



Kubectl apply -f bankapp.yml

Note : - if service is not accessible try to add nodeport port in firewall-cmd.