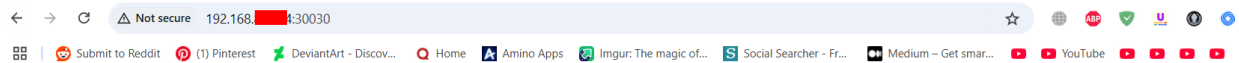


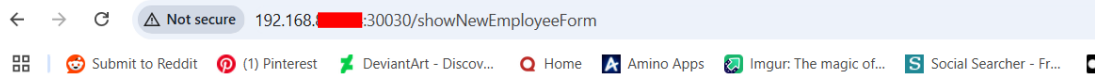
Spring boot CRUD (Docker & k8s)



Employees List

[Add Employee](#)

Employee First Name	Employee Last Name	Employee Email	Actions
Adham	Abdein	adh@outlook.com	Update Delete

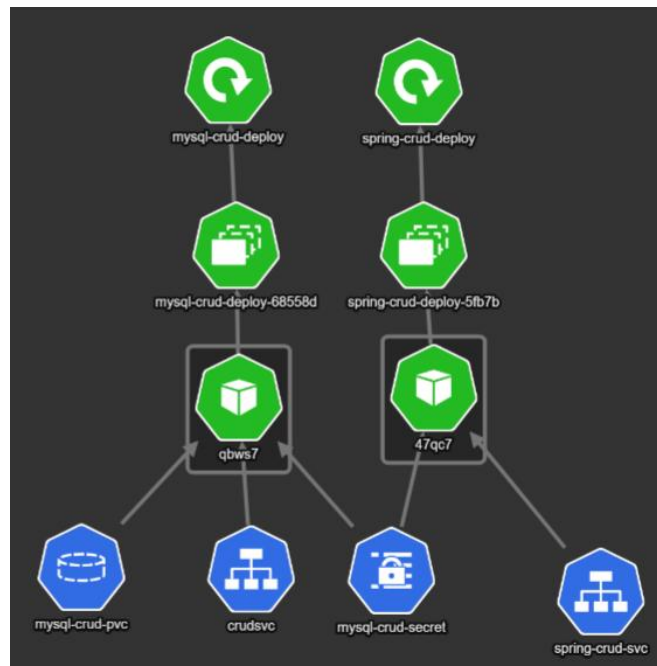


Employee Management System

Save Employee

[Save Employee](#)

[Back to Employee List](#)



```
FROM maven:3.8.4-openjdk-17-slim

WORKDIR /app

COPY mvnw .
#COPY .mvn .mvn
COPY pom.xml .
COPY src ./src

RUN mvn clean package -DskipTests

EXPOSE 8080

ENTRYPOINT ["java", "-jar", "target/springboot-thymeleaf-crud-web-app-0.0.1-SNAPSHOT.jar"]
```

```
apiVersion: v1
kind: PersistentVolume
metadata:
  name: mysql-crud-pv
spec:
  capacity:
    storage: 2Gi
  accessModes:
    - ReadWriteMany
  hostPath:
    path: "/adhamjenkins"
```

```
apiVersion: v1
kind: PersistentVolumeClaim
metadata:
  name: mysql-crud-pvc
spec:
  volumeName: mysql-crud-pv
  accessModes:
    - ReadWriteMany
  resources:
    requests:
      storage: 2Gi
```

```
apiVersion: v1
kind: Secret
metadata:
  name: mysql-crud-secret
type: Opaque
data:
  MYSQL_PASSWORD: cm9vdA==
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: mysql-crud-deploy
  labels:
    crud: mysql
spec:
  replicas: 1
  selector:
    matchLabels:
      crud: mysql
  template:
    metadata:
      labels:
        crud: mysql
    spec:
      containers:
        - name: cont-crud
          image: mysql:8.0
          ports:
            - containerPort: 3306
          env:
            - name: MYSQL_DATABASE
              value: "crud_db"
            - name: MYSQL_ROOT_PASSWORD
              valueFrom:
                secretKeyRef:
                  name: mysql-crud-secret
                  key: MYSQL_PASSWORD
          volumeMounts:
            - name: crud-vol
              mountPath: /data
      volumes:
        - name: crud-vol
          persistentVolumeClaim:
            claimName: mysql-crud-pvc
```

```
apiVersion: v1
kind: Service
metadata:
  name: crudsvc
spec:
  type: ClusterIP
  selector:
    crud: mysql
  ports:
    - protocol: TCP
      port: 3306
      targetPort: 3306
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: spring-crud-deploy
  labels:
    crud: spring
spec:
  replicas: 1
  selector:
    matchLabels:
      crud: spring
  template:
    metadata:
      name: pod-crud
      labels:
        crud: spring
    spec:
      containers:
        - name: cont-crud
          image: adhmabdein/crud
          ports:
            - containerPort: 8080
          env:
            - name: SPRING_DATASOURCE_URL
              value: "jdbc:mysql://crudsvc:3306/crud_db?useSSL=false&serverTimezone=UTC&useLegacyDatetimeCode=false"
            - name: SPRING_DATASOURCE_USERNAME
              value: "root"
            - name: SPRING_DATASOURCE_PASSWORD
              valueFrom:
                secretKeyRef:
                  name: mysql-crud-secret
                  key: MYSQL_PASSWORD
```


```
apiVersion: v1
kind: Service
metadata:
  name: spring-crud-svc
spec:
  type: NodePort
  selector:
    crud: spring
  ports:
    - protocol: TCP
      port: 8080
      nodePort: 30030
      targetPort: 8080
```

```
# DATASOURCE (DataSourceAutoConfiguration & DataSourceProperties)
spring.datasource.url=jdbc:mysql://crudsvc:3306/crud_db?allowPublicKeyRetrieval=true&useSSL=false&serverTimezone=UTC&useLegacyDatetimeCode=false
spring.datasource.username=root
spring.datasource.password=root
# Hibernate



# The SQL dialect makes Hibernate generate better SQL for the chosen database
spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.MySQLDialect


# Hibernate ddl auto (create, create-drop, validate, update)
spring.jpa.hibernate.ddl-auto = update


logging.level.org.hibernate.SQL=DEBUG
logging.level.org.hibernate.type=TRACE
```


 **spring-crud** Public


Pin Unwatch 1

 **master** 

 **1 Branch**

 **0 Tags**

Add file 

Code 

 **root** initial commit

53e0a97 · 50 minutes ago  **16 Commits**

```
pipeline{
  agent {label 'node2'}

  environment {
    docker_img_name = 'adhmabdein/crud'
  }

  stages{
    stage('pull code from github'){
      steps{
        script{
          git "https://github.com/AdhmAbdein/spring-crud.git"
        }
      }
    }
    stage('log in to docker hub'){
      steps{
        script{
          withCredentials ([usernamePassword(credentialsId:'docker_hub', usernameVariable:'d_hub_usr', passwordVariable:'d_hub_pass')]){
            sh 'docker login -u ${d_hub_usr} -p ${d_hub_pass}'
          }
        }
      }
    }
  }
}
```

```

stage('CI - Build docker image'){
  steps{
    script{
      sh 'docker build -t ${docker_img_name} -f Dockerfile .'
    }
  }
}
stage('push image to docker hub'){
  steps{
    script{
      sh 'docker push ${docker_img_name}'
    }
  }
}
stage('CD - Deploy in k8s'){
  steps{
    script{
      sh 'kubectl apply -f k8s-mysql-pv.yml'
      sh 'kubectl apply -f k8s-mysql-pvc.yml'
      sh 'kubectl apply -f k8s-mysql-secret.yml'
      sh 'kubectl apply -f k8s-mysql-deploy.yml'
      sh 'kubectl apply -f k8s-mysql-svc.yml'

      sh 'kubectl apply -f k8s-spring-deploy.yml'
      sh 'kubectl apply -f k8s-spring-svc.yml'
    }
  }
}
}

```

S	W	Name ↓	Last Success	Last Failure	Last Duration	
✓	☁	spring-crud	47 min #13	53 min #12	25 sec	▶

adham@node2:~\$ kubectl get pods

NAME	READY	STATUS	RESTARTS	AGE
mysql-crud-deploy-68558dbc74-qbws7	1/1	Running	0	22m
mysql-dream-deploy-5c8c79bc88-ljl59	1/1	Running	0	22m
mysql-spring-deploy-7f4886486c-268x9	1/1	Running	0	22m
mysql-spring-deploy-7f4886486c-52cgr	1/1	Running	0	22m
spring-app-56b4845f99-ztlcd	1/1	Running	0	22m
spring-crud-deploy-5fb7bdd99-47qc7	1/1	Running	6 (3m44s ago)	22m
spring-dream-deploy-65676b8946-82lvn	1/1	Running	1 (8m52s ago)	22m

adham@node2:~\$


```

adham@node2:~$ kubectl get pv
NAME          CAPACITY  ACCESS MODES  RECLAIM POLICY  STATUS  CLAIM                      STORAGECLASS
VOLUMEATTRIBUTESCLASS  REASON  AGE
mysql-crud-pv  2Gi       RWX           Retain          Bound   default/mysql-crud-pvc
<unset>
mysql-dream-pv  2Gi       RWX           Retain          Bound   default/mysql-dream-pvc
<unset>
mysql-movie-pv  2Gi       RW0           Retain          Bound   default/mysql-movie-pvc
<unset>
mysql-spring-pv  2Gi       RWX           Retain          Bound   default/mysql-spring-pvc
<unset>
adham@node2:~$ kubectl get pvc
NAME          STATUS  VOLUME          CAPACITY  ACCESS MODES  STORAGECLASS  VOLUMEATTRIBUTESCLASS
AGE
mysql-crud-pvc  Bound   mysql-crud-pv    2Gi       RWX
120m
mysql-dream-pvc  Bound   mysql-dream-pv    2Gi       RWX
27h
mysql-movie-pvc  Bound   mysql-movie-pv    2Gi       RW0
34h
mysql-spring-pvc  Bound   mysql-spring-pv    2Gi       RWX
3d1h

```

```

adham@node2:~$ kubectl get svc
NAME          TYPE        CLUSTER-IP  EXTERNAL-IP  PORT(S)          AGE
crudsvc       ClusterIP   10.96.1.1    <none>        3306/TCP         117m
k8s-dream-shop-svc  ClusterIP   10.11.1.1    <none>        3306/TCP         27h
kubernetes    ClusterIP   10.96.0.1    <none>        443/TCP          3d23h
movie-svc     NodePort    10.10.1.1    <none>        8080:30013/TCP   32h
mysql-service-movie  ClusterIP   10.10.1.1    <none>        3306/TCP         32h
mysqlservice   ClusterIP   10.11.1.1    <none>        3306/TCP         3d1h
spring-crud-svc  NodePort    10.10.1.1    <none>        8080:30030/TCP   117m
spring-dream-svc  NodePort    10.10.1.1    <none>        9191:30015/TCP   27h

```

```

adham@node2:~$ kubectl get secret
NAME          TYPE  DATA  AGE
mysql-crud-secret  Opaque  1      119m
mysql-dream-secret  Opaque  1      27h
mysql-movie-secret  Opaque  1      46h
adham@node2:~$

```

```

adham@node2:~$ kubectl get deploy
NAME          READY  UP-TO-DATE  AVAILABLE  AGE
mysql-crud-deploy  1/1    1            1          41m
mysql-dream-deploy  1/1    1            1          25h
mysql-spring-deploy  2/2    2            2          3d
spring-app        1/1    1            1          3d
spring-crud-deploy  1/1    1            1          41m
spring-dream-deploy  1/1    1            1          25h

```

```
adham@master:~$ kubectl exec -it mysql-crud-deploy-68558dbc74-qbws7 -- /bin/bash
bash-5.1# mysql -uroot -proot
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 29
Server version: 8.0.40 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| crud_db  |
| information_schema |
| mysql    |
| performance_schema |
| sys      |
+-----+
5 rows in set (0.18 sec)

mysql> USE crud_db;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
```

```
mysql> USE crud_db;  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A
```

Database changed

```
mysql> SHOW TABLES;
```

```
+-----+  
| Tables_in_crud_db |  
+-----+  
| employees          |  
+-----+  
1 row in set (0.01 sec)
```

```
mysql> SELECT * FROM employees;
```

```
+---+-----+-----+-----+  
| id | email                | first_name | last_name |  
+---+-----+-----+-----+  
|  1 | adhm@outlook.com    | Adham      | Abdein    |  
+---+-----+-----+-----+  
1 row in set (0.00 sec)
```