Web Hosting

Phase 5 Practice Project Set 4

Name: C Balamanikandan

1. Create a pod

kkarthik520/d994804b5be4

```
C:\Users\Karthik>kubectl run spring-k8 --image=kkarthik520/d994804b5be4 --port=8083
pod/spring-k8 created
```

2. List of pods

```
C:\Users\Karthik>kubectl get pods
NAME        READY   STATUS    RESTARTS   AGE
spring-k8   1/1     Running   0          33s
```

Create a deployment
This command ensures that all the pods are running or not with this image.
If not running it makes the image active over the container

```
C:\Users\Karthik>kubectl create deployment spring-k8 --image=kkarthik520/d994804b5be4
deployment.apps/spring-k8 created

C:\Users\Karthik>kubectl get pods
NAME                         READY   STATUS    RESTARTS   AGE
spring-k8                    1/1     Running   0          3m36s
spring-k8-56bc844887-lhb7d   1/1     Running   0          4s
```

Create a service :
It starts the image over the container

```
C:\Users\Karthik>kubectl expose deployment spring-k8 --type LoadBalancer --port 8083 --target-port 8083
service/spring-k8 exposed
```

See the service

```
C:\Users\Karthik>kubectl get services
NAME         TYPE           CLUSTER-IP       EXTERNAL-IP   PORT(S)          AGE
kubernetes   ClusterIP      10.96.0.1        <none>        443/TCP          36m
spring-k8    LoadBalancer   10.107.216.125   localhost     8083:32180/TCP   65s

C:\Users\Karthik>kubectl logs spring-k8

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 :: Spring Boot ::                (v2.7.17)

2024-01-12 04:11:45.400  INFO 1 --- [           main] c.example.demo.SpringawsdemoApplication  : Starting SpringawsdemoApplication v0.0.1-SNAPSHOT using Java 1.8.0_342 on spring-k8 with PID 1 (/Springawsdemo-0.0
.1-SNAPSHOT.war started by root in /)
2024-01-12 04:11:45.419  INFO 1 --- [           main] c.example.demo.SpringawsdemoApplication  : No active profile set, falling back to 1 default profile: "default"
2024-01-12 04:11:50.099  INFO 1 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port(s): 8083 (http)
2024-01-12 04:11:50.154  INFO 1 --- [           main] o.apache.catalina.core.StandardService   : Starting service [Tomcat]
2024-01-12 04:11:50.155  INFO 1 --- [           main] org.apache.catalina.core.StandardEngine  : Starting Servlet engine: [Apache Tomcat/9.0.82]
2024-01-12 04:11:52.867  INFO 1 --- [           main] o.a.c.c.C.[Tomcat].[localhost].[/]       : Initializing Spring embedded WebApplicationContext
2024-01-12 04:11:52.868  INFO 1 --- [           main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 7145 ms
2024-01-12 04:11:56.497  INFO 1 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started on port(s): 8083 (http) with context path ''
2024-01-12 04:11:56.549  INFO 1 --- [           main] c.example.demo.SpringawsdemoApplication  : Started SpringawsdemoApplication in 13.596 seconds (JVM running for 17.884)
```