개인 프로젝트_2차

쿠버네티스 클러스터 (Kubernetes)

과　　정 : 클라우드 데브옵스(DevOps)
　　　　　엔지니어 및 관리자 양성과정
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목차

서버 구축

< master, worker1, worker2 구축 및 연동>

K8s Engine

```
[root@master ~ (kubernetes-admin@kubernetes:prometheus)]#systemctl status -l containerd
● containerd.service - containerd container runtime
   Loaded: loaded (/usr/lib/systemd/system/containerd.service; enabled; vendor preset: disabled)
   Active: active (running) since Fri 2023-03-24 13:47:51 KST; 2h 1min ago
     Docs: https://containerd.io
  Process: 975 ExecStartPre=/sbin/modprobe overlay (code=exited, status=0/SUCCESS)
 Main PID: 990 (containerd)
    Tasks: 323
   Memory: 1.3G
   CGroup: /system.slice/containerd.service
           ├─ 990 /usr/bin/containerd
```

< Containerd 방식으로 구축 확인 >

ⓒSaebyeol Yu. Saebyeol's PowerPoint

Voting-app Service 구현


```
[root@master01 nginx-13.2.13 (kubernetes-admin@kubernetes:default)]#k create ns nginx
namespace/nginx created
[root@master01 nginx-13.2.13 (kubernetes-admin@kubernetes:default)]#k ns nginx
Context "kubernetes-admin@kubernetes" modified.
Active namespace is "nginx".
```

```
[root@master01 nginx-13.2.13 (kubernetes-admin@kubernetes:nginx)]#helm install nginx -f my-values.yaml .
NAME: nginx
LAST DEPLOYED: Fri Mar 24 10:54:59 2023
NAMESPACE: nginx
STATUS: deployed
REVISION: 1
TEST SUITE: None
NOTES:
CHART NAME: nginx
CHART VERSION: 13.2.31
APP VERSION: 1.23.3
```
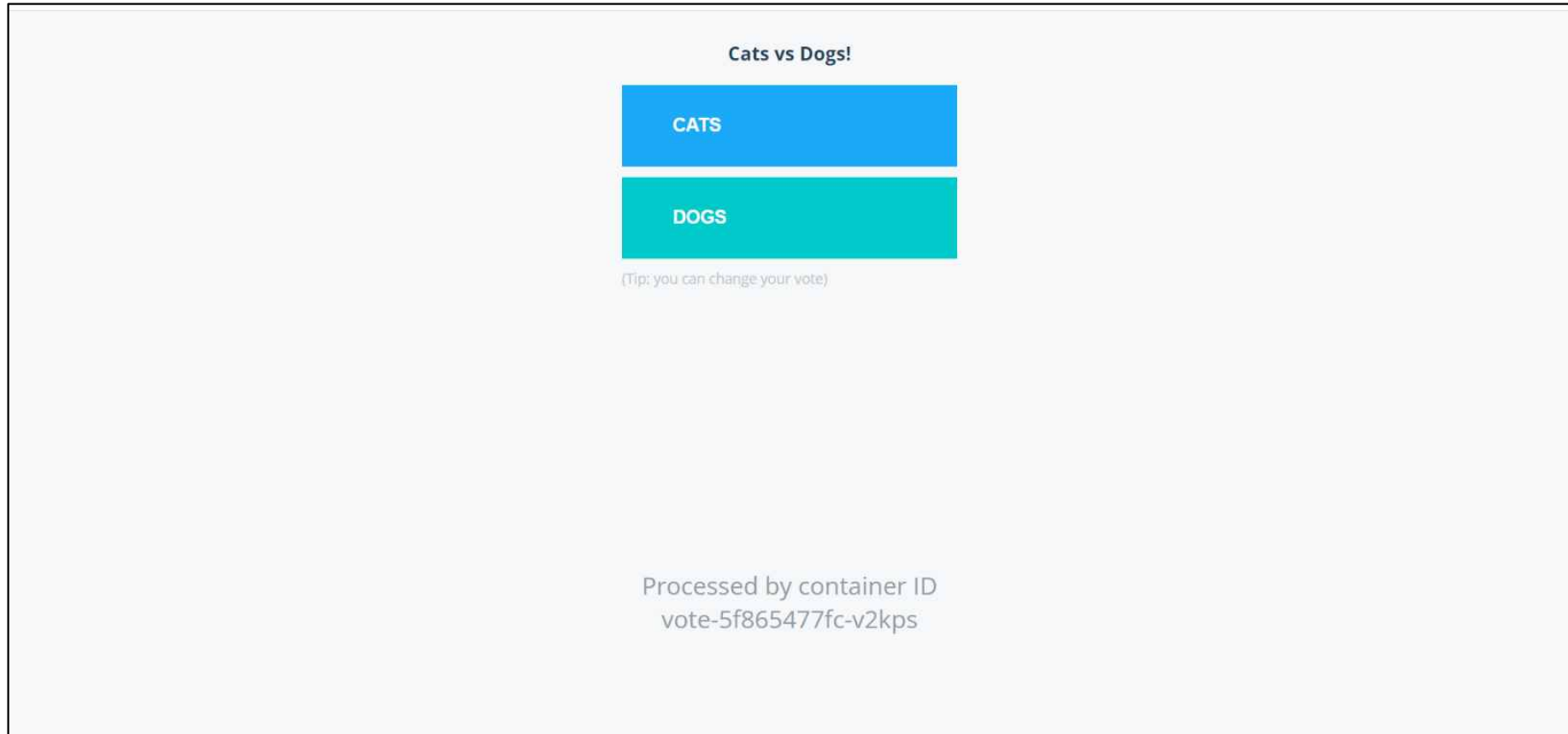
```
[root@k8s-kubectl example-voting-app (kubernetes-admin@kubernetes:vote)]#kgp
NAME                    READY   STATUS    RESTARTS   AGE    IP              NODE          NOMINATED NODE   READINESS GATES
db-989b6b476-hhw2x      1/1     Running   0          3m27s  172.16.194.66   k8s-worker1   <none>           <none>
redis-7fdbb9576f-62q4z  1/1     Running   0          3m27s  172.16.194.67   k8s-worker1   <none>           <none>
result-f9f4fbbc7-bxzs5  1/1     Running   0          3m27s  172.16.126.7    k8s-worker2   <none>           <none>
vote-5f865477fc-lgrsg   1/1     Running   0          3m27s  172.16.194.68   k8s-worker1   <none>           <none>
vote-5f865477fc-sc56w   1/1     Running   0          88s    172.16.194.69   k8s-worker1   <none>           <none>
vote-5f865477fc-v2kps   1/1     Running   0          88s    172.16.126.9    k8s-worker2   <none>           <none>
worker-667975666-srg2r  1/1     Running   0          3m27s  172.16.126.8    k8s-worker2   <none>           <none>
[root@k8s-kubectl example-voting-app (kubernetes-admin@kubernetes:vote)]#kg svc | grep vote
vote     LoadBalancer   10.98.190.214   192.168.255.20   80:31000/TCP   3m49s
[root@k8s-kubectl example-voting-app (kubernetes-admin@kubernetes:vote)]#for i in (1..10); do curl -s 192.168.255.20 | grep ID;
     4          Processed by container ID vote-5f865477fc-v2kps
     3          Processed by container ID vote-5f865477fc-sc56w
     3          Processed by container ID vote-5f865477fc-lgrsg
```

< Voting-app Service 구현 >

Voting-app Service 구현

< Voting-app Service 구현 >

Prometeus, Grafana

< 프로메테우스, 그라파나 구현>

END