Kubernetes Assignment – 3

1. Create and use a Secret

```
pod/nginx-secret-pod created
 master@master-vm:~/Desktop$ kubectl get pods
 NAME
                                           READY
                                                              STATUS
                                                                                         RESTARTS
                                                                                                                              AGE
                                           1/1
nginx-pod
                                                              Running
                                                                                          1 (4m26s ago)
                                                                                                                               18h
 nginx-secret-pod
                                           1/1
                                                              Running
                                                                                                                               20s
  nginxpod 0/1 Completed 0<sup>H</sup> 18H
naster@master-vm:~/Desktop$ kubectl logs nginx-secret-pod
 nginxpod
                                                                                                                               18h
 /docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration /docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
 /docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sn: Sourcing /docker-entrypoint.d/15-local-resolvers.envsn /docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh /docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh /docker-entrypoint.sh: Configuration complete; ready for start up 2025/03/14 04:35:54 [notice] 1#1: using the "epoll" event method 2025/03/14 04:35:54 [notice] 1#1: nginx/1.27.4 2025/03/14 04:35:54 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14) 2025/03/14 04:35:54 [notice] 1#1: 05: Linux 5.15.0-134-generic 2025/03/14 04:35:54 [notice] 1#1: 05: Linux 5.15.0-134-generic
2025/03/14 04:35:54 [notice] 1#1: OS: Linux 5.15.0-134-generic

2025/03/14 04:35:54 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576

2025/03/14 04:35:54 [notice] 1#1: start worker processes

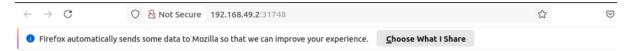
2025/03/14 04:35:54 [notice] 1#1: start worker process 29

2025/03/14 04:35:54 [notice] 1#1: start worker process 30

master@master-vm:~/Desktop$ kubectl delete -f nginx-secret-pod.yaml
 pod "nginx-secret-pod" deleted
 master@master-vm:~/Desktop$ kubectl delete secret db-secret
secret "db-secret" deleted
 master@master-vm:~/Desktop$
```

2. Create and expose a Service

```
master@master-vm:~/Desktop$ kubectl create deployment webapp --image=nginx
deployment.apps/webapp created
        master-vm:~/Desktop$ kubectl expose deployment webapp --type=NodePort --port=80
service/webapp exposed
master@master-vm:~/Desktop$ kubectl get svc webapp
                                      EXTERNAL-IP
NAME
          TYPE
                     CLUSTER-IP
                                                      PORT(S)
                                                                         AGE
webapp NodePort 10.106.23.128 <none> 80:3139
master@master-vm:~/Desktop$ minikube service webapp --url
                                                        80:31391/TCP
webapp
http://192.168.49.2:31391
master@master-vm:~/Desktop$ kubectl delete svc webapp
service "webapp" deleted
master@master-vm:~/Desktop$ kubectl delete deployment webapp
deployment.apps "webapp" del¶ted
master@master-vm:~/Desktop$
```



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to $\underline{nginx.org}.$ Commercial support is available at $\underline{nginx.com}.$

Thank you for using nginx.