

## LAB4 OUTPUTS

Install the latest PowerShell for new features and improvements! <https://aka.ms/PSWindows>

```
PS E:\Amaan Vahora\BCDV-4032\Lab4> minikube start
W0128 22:01:40.849501 20584 main.go:291] Unable to resolve the current Docker CLI context "default": context "default" not found
ell\docker\contexts\meta\37a8eecd19687d132fe29051dca629d164e2c4958ba141d5f4133a33f0688f\meta.json: The system cannot find the file specified
🐳 minikube v1.32.0 on Microsoft Windows 11 Home Single Language 10.0.22621.3007 Build 22621.3007
🔥 Using the docker driver based on existing profile
👉 Starting control plane node minikube in cluster minikube
🔄 Pulling base image ...
🌟 Updating the running docker "minikube" container ...
📦 Preparing Kubernetes v1.28.3 on Docker 24.0.7 ...
🔗 Configuring bridge CNI (Container Networking Interface) ...
🔍 Verifying Kubernetes components...
  ▪ Using image docker.io/kubernetes/dashboard:v2.7.0
  ▪ Using image docker.io/kubernetes/metrics-scraper:v1.0.8
  ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
💡 Some dashboard features require the metrics-server addon. To enable all features please run:

    minikube addons enable metrics-server

🌟 Enabled addons: storage-provisioner, default-storageclass, dashboard
👉 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
PS E:\Amaan Vahora\BCDV-4032\Lab4> kompose convert
INFO Kubernetes file "dapp-service.yaml" created
INFO Kubernetes file "ganache-service.yaml" created
INFO Kubernetes file "react-service.yaml" created
INFO Kubernetes file "dapp-deployment.yaml" created
INFO Kubernetes file "ganache-deployment.yaml" created
INFO Kubernetes file "react-deployment.yaml" created
```

```
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f ganache-deployment.yaml
deployment.apps/ganache configured
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f ganache-service.yaml
service/ganache configured
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f dapp-deployment.yaml
deployment.apps/dapp configured
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f dapp-service.yaml
service/dapp created
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f react-deployment.yaml
deployment.apps/react configured
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f react-service.yaml
service/react configured
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl get pods
NAME                                READY   STATUS              RESTARTS   AGE
dapp-65fdc95c66-q89rc               1/1     Running            2 (97m ago)  27h
dapp-7dbc4b9bb5-nlcn5               0/1     Pending            0           57s
ganache-68fcbf4785-4jbjj            0/1     Pending            0           90s
ganache-7fc8fbfbc4-dgvb6            1/1     Running            3 (97m ago)  27h
mongo-express-deployment-b88f6d45f-wwm4d  0/1     CreateContainerConfigError 0           6d23h
mongodb-stateful-set-0              0/1     CreateContainerConfigError 0           7d1h
nginx-deployment-5f4f55f467-6v9dh    1/1     Running            5 (97m ago)  7d1h
nginx-deployment-5f4f55f467-mbxr7    1/1     Running            5 (97m ago)  7d1h
nginx-deployment-5f4f55f467-wv5rl    1/1     Running            5 (97m ago)  7d1h
nginx-nvpv2                         1/1     Running            5 (97m ago)  7d1h
note-deployment-74cc946cd8-2hc6d     1/1     Running            12 (97m ago) 6d23h
note-deployment-74cc946cd8-88rm2     1/1     Running            10 (97m ago) 7d
note-server-deployment-6fb5fcb67f-2qhdm 0/1     CreateContainerConfigError 0           7d
note-server-deployment-6fb5fcb67f-xncg7 0/1     CreateContainerConfigError 0           7d
react-689f46c46c-ffwht              1/1     Running            2 (97m ago)  27h
react-78495dbb48-hblnm              0/1     Pending            0           23s
web-0                                0/1     Pending            0           7d1h
```

```
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl get services
NAME                                TYPE           CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
dapp                               ClusterIP      10.102.68.25    <none>           4000/TCP         81s
ganache                            ClusterIP      10.106.248.20   <none>           8545/TCP         27h
kubernetes                         ClusterIP      10.96.0.1       <none>           443/TCP          7d2h
mongo-express-service              LoadBalancer  10.106.82.114   <pending>        8081:30648/TCP   6d23h
mongodb-service                    ClusterIP      10.108.145.224  <none>           27017/TCP        7d
note-server-service                 ClusterIP      10.108.249.251  <none>           5000/TCP         7d
note-service                       LoadBalancer  10.110.51.39    <pending>        3000:31125/TCP   7d
react                              ClusterIP      10.103.40.245   <none>           3000/TCP         27h
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl port-forward service/dapp 4000:4000
Forwarding from 127.0.0.1:4000 -> 4000
Forwarding from [::1]:4000 -> 4000
```

```

PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl describe deployment dapp
Name: dapp
Namespace: default
CreationTimestamp: Sat, 27 Jan 2024 18:35:35 -0500
Labels: io.kompose.service=dapp
Annotations: deployment.kubernetes.io/revision: 2
             kompose.cmd: C:\ProgramData\chocolatey\lib\kubernetes-kompose\tools\kompose.exe convert
             kompose.version: 1.32.0 (765fde254)
Selector: io.kompose.service=dapp
Replicas: 1 desired | 1 updated | 2 total | 1 available | 1 unavailable
StrategyType: RollingUpdate
MinReadySeconds: 0
RollingUpdateStrategy: 25% max unavailable, 25% max surge
Pod Template:
  Labels: io.kompose.network/lab4-default=true
          io.kompose.service=dapp
  Annotations: kompose.cmd: C:\ProgramData\chocolatey\lib\kubernetes-kompose\tools\kompose.exe convert
                kompose.version: 1.32.0 (765fde254)
  Containers:
    dapp:
      Image: schadokar/eth-server:1.0.0
      Port: 4000/TCP
      Host Port: 4000/TCP
      Environment: <none>
      Mounts: <none>
      Volumes: <none>
  Conditions:
    Type           Status  Reason
    ----           -
    Available      True    MinimumReplicasAvailable
    Progressing    False   ProgressDeadlineExceeded
OldReplicaSets: dapp-65fdc95c66 (1/1 replicas created)
NewReplicaSet:  dapp-7dbc4b9bb5 (1/1 replicas created)
Events:
  Type     Reason             Age   From          Message
  ----     -
  Normal   ScalingReplicaSet  27h   deployment-controller Scaled up replica set dapp-65fdc95c66 to 1
  Normal   ScalingReplicaSet  17m   deployment-controller Scaled up replica set dapp-7dbc4b9bb5 to 1

```

```

PS E:\Amaan Vahora\BCDV-4032\Lab4> minikube addons enable metrics-server
W0128 22:31:18.755453 32856 main.go:291] Unable to resolve the current Docker CLI context "default": context "default": context not found
ell\docker\contexts\meta\37a8eec1ce19687d132fe29051dca629d164e2c4958ba141d5f4133a33f0688f\meta.json: The system cannot find the path specified.
⚠ metrics-server is an addon maintained by Kubernetes. For any concerns contact minikube on GitHub.
You can view the list of minikube maintainers at: https://github.com/kubernetes/minikube/blob/master/OWNERS
  ▪ Using image registry.k8s.io/metrics-server/metrics-server:v0.6.4
  ✨ The 'metrics-server' addon is enabled
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f dapp-hpa.yaml
horizontalpodautoscaler.autoscaling/dapp-hpa created
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f frontend-hpa.yaml
error: the path "frontend-hpa.yaml" does not exist
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl get hpa
NAME      REFERENCE          TARGETS   MINPODS   MAXPODS   REPLICAS   AGE
dapp-hpa  Deployment/dapp    <unknown>/50%  1         5         1         22s
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f frontend-hpa.yaml
error: the path "frontend-hpa.yaml" does not exist
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl apply -f frontend-hpa.yaml
horizontalpodautoscaler.autoscaling/frontend-hpa created
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl get hpa
NAME      REFERENCE          TARGETS   MINPODS   MAXPODS   REPLICAS   AGE
dapp-hpa  Deployment/dapp    <unknown>/50%  1         5         1         3m43s
frontend-hpa  Deployment/react  <unknown>/50%  1         5         0         3s
PS E:\Amaan Vahora\BCDV-4032\Lab4>

```

```
PS E:\Amaan Vahora\BCDV-4032\Lab4> kubectl exec dapp-7dbc4b9bb5-m69c7 -- env
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
HOSTNAME=dapp-7dbc4b9bb5-m69c7
GANACHE_PORT_8545_TCP=tcp://10.106.248.20:8545
GANACHE_PORT_8545_TCP_PORT=8545
REACT_PORT_3000_TCP_ADDR=10.103.40.245
KUBERNETES_SERVICE_PORT=443
KUBERNETES_SERVICE_PORT_HTTPS=443
MONGODB_SERVICE_PORT=tcp://10.108.145.224:27017
KUBERNETES_PORT=tcp://10.96.0.1:443
KUBERNETES_PORT_443_TCP_PROTO=tcp
GANACHE_SERVICE_PORT=8545
GANACHE_PORT_8545_TCP_PROTO=tcp
REACT_PORT_3000_TCP_PROTO=tcp
DAPP_SERVICE_PORT=4000
DAPP_SERVICE_PORT_4000=4000
KUBERNETES_SERVICE_HOST=10.96.0.1
NOTE_SERVER_SERVICE_SERVICE_HOST=10.108.249.251
GANACHE_SERVICE_HOST=10.106.248.20
MONGO_EXPRESS_SERVICE_PORT_8081_TCP_ADDR=10.106.82.114
NOTE_SERVICE_PORT_3000_TCP=tcp://10.110.51.39:3000
NOTE_SERVICE_PORT_3000_TCP_PORT=3000
NOTE_SERVICE_SERVICE_PORT=3000
REACT_PORT_3000_TCP=tcp://10.103.40.245:3000
REACT_PORT_3000_TCP_PORT=3000
GANACHE_PORT_8545_TCP_ADDR=10.106.248.20
MONGO_EXPRESS_SERVICE_PORT=tcp://10.106.82.114:8081
MONGODB_SERVICE_SERVICE_PORT=27017
NOTE_SERVER_SERVICE_PORT_5000_TCP_ADDR=10.108.249.251
GANACHE_SERVICE_PORT_8545=8545
MONGO_EXPRESS_SERVICE_SERVICE_PORT=8081
DAPP_PORT_4000_TCP_PROTO=tcp
NOTE_SERVER_SERVICE_SERVICE_PORT=5000
MONGO_EXPRESS_SERVICE_SERVICE_HOST=10.106.82.114
NOTE_SERVICE_PORT=tcp://10.110.51.39:3000
NOTE_SERVER_SERVICE_PORT_5000_TCP_PROTO=tcp
GANACHE_PORT=tcp://10.106.248.20:8545
REACT_SERVICE_PORT=3000
MONGODB_SERVICE_PORT_27017_TCP_PROTO=tcp
MONGO_EXPRESS_SERVICE_PORT_8081_TCP_PORT=8081
MONGODB_SERVICE_SERVICE_HOST=10.108.145.224
NOTE_SERVER_SERVICE_PORT_5000_TCP=tcp://10.108.249.251:5000
REACT_SERVICE_HOST=10.103.40.245
DAPP_PORT=tcp://10.102.68.25:4000
DAPP_PORT_4000_TCP_PORT=4000
KUBERNETES_PORT_443_TCP=tcp://10.96.0.1:443
NOTE_SERVER_SERVICE_PORT=tcp://10.108.249.251:5000
NOTE_SERVICE_SERVICE_HOST=10.110.51.39
REACT_PORT=tcp://10.103.40.245:3000
MONGODB_SERVICE_PORT_27017_TCP=tcp://10.108.145.224:27017
NOTE_SERVER_SERVICE_PORT_5000_TCP_PORT=5000
MONGO_EXPRESS_SERVICE_PORT_8081_TCP_PROTO=tcp
NOTE_SERVICE_PORT_3000_TCP_PROTO=tcp
DAPP_PORT_4000_TCP=tcp://10.102.68.25:4000
MONGODB_SERVICE_PORT_27017_TCP_PORT=27017
MONGO_EXPRESS_SERVICE_PORT_8081_TCP=tcp://10.106.82.114:8081
REACT_SERVICE_PORT_3000=3000
DAPP_SERVICE_HOST=10.102.68.25
DAPP_PORT_4000_TCP_ADDR=10.102.68.25
KUBERNETES_PORT_443_TCP_ADDR=10.96.0.1
KUBERNETES_PORT_443_TCP_PORT=443
MONGODB_SERVICE_PORT_27017_TCP_ADDR=10.108.145.224
NODE_VERSION=8.12.0
YARN_VERSION=1.9.4
HOME=/root
PS E:\Amaan Vahora\BCDV-4032\Lab4> |
```



set message

Set Message
Get Message
Compile Contract
Deploy Contract

set message

Set Message
Get Message
Compile Contract
Deploy Contract

Contract compiled successfully!

set message

Set Message
Get Message
Compile Contract
Deploy Contract

0x9573D395b773De57140d11dFc190252Ae1149E50

Hello Amaan here !

Set Message
Get Message
Compile Contract
Deploy Contract

0x7c3848b8993f4b3d77d48ff9b1ff0f6dab317a7dcb5ecceebb33f39a469b0b9f

Hello Amaan here !

Set Message
Get Message
Compile Contract
Deploy Contract

Hello Amaan here !