```
⊗ simarchawla@Simars-MacBook-Air docker-ethereum % cd..
  zsh: command not found: cd..
● simarchawla@Simars-MacBook-Air docker-ethereum % cd ..
● simarchawla@Simars-MacBook-Air lab4 % cd docker-ethereum
● simarchawla@Simars-MacBook-Air docker-ethereum % kompose convert -f docker-compose.yml
  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
⊗ simarchawla@Simars-MacBook-Air docker-ethereum % $ kubectl apply -f .
  zsh: command not found: $
⊗ simarchawla@Simars-MacBook-Air docker-ethereum % kubectl apply -f .
  The connection to the server 127.0.0.1:61600 was refused - did you specify the right host or port?
⊗ simarchawla@Simars-MacBook-Air docker-ethereum % minikube start
  😄  minikube v1.32.0 on Darwin 14.2.1 (arm64)
  ✨  Using the docker driver based on existing profile

  🤦  Exiting due to PROVIDER_DOCKER_NOT_RUNNING: "docker version --format <no value>-<no value>:<no value>" exit status 1: Cannot co
nnect to the Docker daemon at unix:///Users/simarchawla/.docker/run/docker.sock. Is the docker daemon running?
  💡  Suggestion: Start the Docker service
  📄  Documentation: https://minikube.sigs.k8s.io/docs/drivers/docker/

○ simarchawla@Simars-MacBook-Air docker-ethereum % █
```
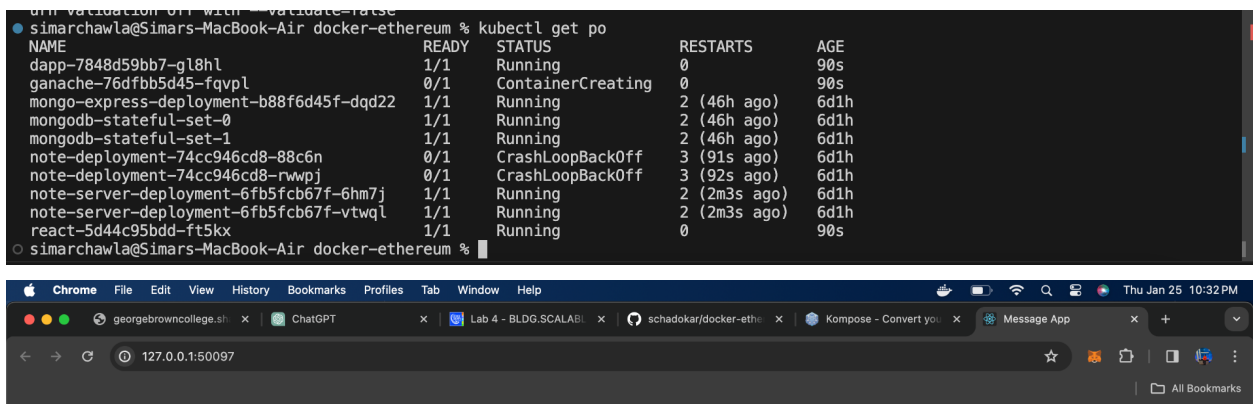
```
    minikube
    type: Control Plane
    host: Nonexistent
    kubelet: Nonexistent
    apiserver: Nonexistent
    kubeconfig: Nonexistent

⊗ simarchawla@Simars-MacBook-Air docker-ethereum % kubectl apply -f .
  The connection to the server 127.0.0.1:61600 was refused - did you specify the right host or port?
● simarchawla@Simars-MacBook-Air docker-ethereum % minikube start
  😄  minikube v1.32.0 on Darwin 14.2.1 (arm64)
  ✨  Using the docker driver based on existing profile
  👍  Starting control plane node minikube in cluster minikube
  🚜  Pulling base image ...
  🔄  Restarting existing docker container for "minikube" ...
  🐳  Preparing Kubernetes v1.28.3 on Docker 24.0.7 ...
  🔗  Configuring bridge CNI (Container Networking Interface) ...
  🔎  Verifying Kubernetes components...
      ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
      ▪ Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
      ▪ Using image docker.io/kubernetesui/dashboard:v2.7.0
  💡  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
⊗ simarchawla@Simars-MacBook-Air docker-ethereum % kubectl apply -f .
  deployment.apps/dapp created
  service/dapp created
  deployment.apps/ganache created
  service/ganache created
  deployment.apps/react created
  service/react created
```
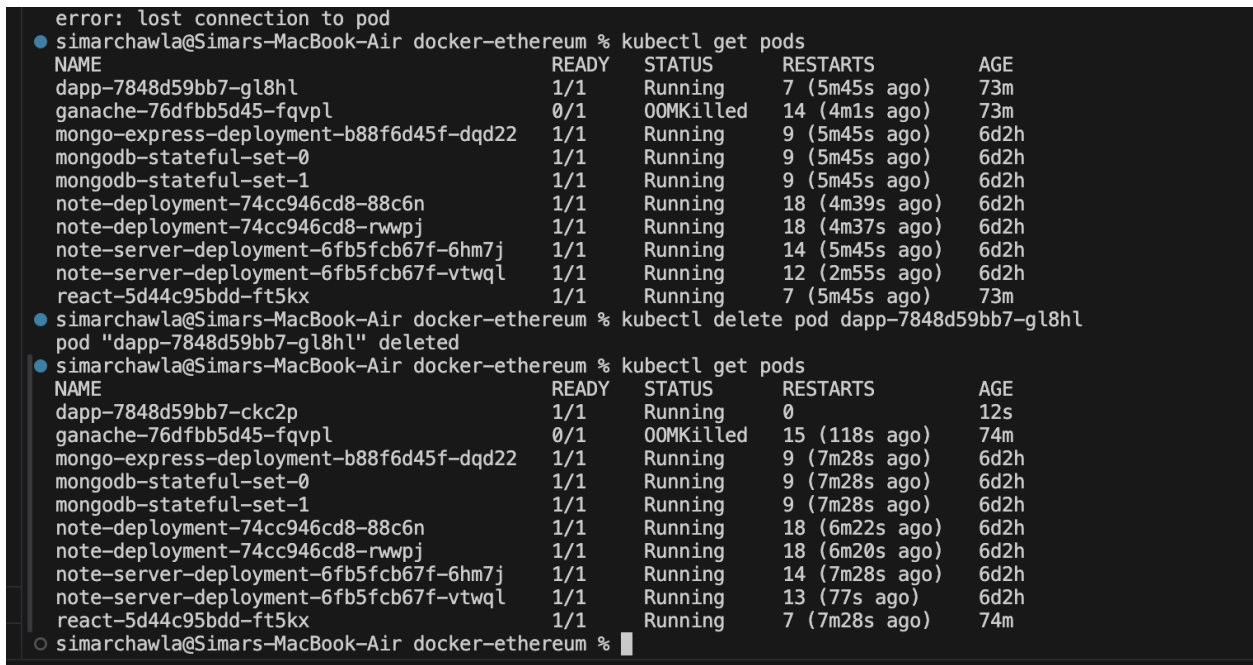
```
urn validation off with --validate=false
simarchawla@Simars-MacBook-Air docker-ethereum % kubectl get po
NAME                                          READY   STATUS              RESTARTS       AGE
dapp-7848d59bb7-gl8hl                          1/1    Running             0              90s
ganache-76dfbb5d45-fqvpl                       0/1    ContainerCreating   0              90s
mongo-express-deployment-b88f6d45f-dqd22       1/1    Running             2 (46h ago)    6d1h
mongodb-stateful-set-0                         1/1    Running             2 (46h ago)    6d1h
mongodb-stateful-set-1                         1/1    Running             2 (46h ago)    6d1h
note-deployment-74cc946cd8-88c6n               0/1    CrashLoopBackOff    3 (91s ago)    6d1h
note-deployment-74cc946cd8-rwwpj               0/1    CrashLoopBackOff    3 (92s ago)    6d1h
note-server-deployment-6fb5fcb67f-6hm7j        1/1    Running             2 (2m3s ago)   6d1h
note-server-deployment-6fb5fcb67f-vtwql        1/1    Running             2 (2m3s ago)   6d1h
react-5d44c95bdd-ft5kx                         1/1    Running             0              90s
simarchawla@Simars-MacBook-Air docker-ethereum %
```

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● ● ● georgebrowncollege.s× | ChatGPT × | Lab 4 - BLDG.SCALABI × | schadokar/docker-ethe × | Kompose - Convert you × | Message App × +

← → C ⓘ 127.0.0.1:50097   ☆   All Bookmarks

set message

Set Message
Get Message
Compile Contract
Deploy Contract

Contract compiled successfully!

```
error: lost connection to pod
simarchawla@Simars-MacBook-Air docker-ethereum % kubectl get pods
NAME                                          READY   STATUS      RESTARTS        AGE
dapp-7848d59bb7-gl8hl                          1/1    Running     7 (5m45s ago)   73m
ganache-76dfbb5d45-fqvpl                       0/1    OOMKilled   14 (4m1s ago)   73m
mongo-express-deployment-b88f6d45f-dqd22       1/1    Running     9 (5m45s ago)   6d2h
mongodb-stateful-set-0                         1/1    Running     9 (5m45s ago)   6d2h
mongodb-stateful-set-1                         1/1    Running     9 (5m45s ago)   6d2h
note-deployment-74cc946cd8-88c6n               1/1    Running     18 (4m39s ago)  6d2h
note-deployment-74cc946cd8-rwwpj               1/1    Running     18 (4m37s ago)  6d2h
note-server-deployment-6fb5fcb67f-6hm7j        1/1    Running     14 (5m45s ago)  6d2h
note-server-deployment-6fb5fcb67f-vtwql        1/1    Running     12 (2m55s ago)  6d2h
react-5d44c95bdd-ft5kx                         1/1    Running     7 (5m45s ago)   73m
simarchawla@Simars-MacBook-Air docker-ethereum % kubectl delete pod dapp-7848d59bb7-gl8hl
pod "dapp-7848d59bb7-gl8hl" deleted
simarchawla@Simars-MacBook-Air docker-ethereum % kubectl get pods
NAME                                          READY   STATUS      RESTARTS        AGE
dapp-7848d59bb7-ckc2p                          1/1    Running     0               12s
ganache-76dfbb5d45-fqvpl                       0/1    OOMKilled   15 (118s ago)   74m
mongo-express-deployment-b88f6d45f-dqd22       1/1    Running     9 (7m28s ago)   6d2h
mongodb-stateful-set-0                         1/1    Running     9 (7m28s ago)   6d2h
mongodb-stateful-set-1                         1/1    Running     9 (7m28s ago)   6d2h
note-deployment-74cc946cd8-88c6n               1/1    Running     18 (6m22s ago)  6d2h
note-deployment-74cc946cd8-rwwpj               1/1    Running     18 (6m20s ago)  6d2h
note-server-deployment-6fb5fcb67f-6hm7j        1/1    Running     14 (7m28s ago)  6d2h
note-server-deployment-6fb5fcb67f-vtwql        1/1    Running     13 (77s ago)    6d2h
react-5d44c95bdd-ft5kx                         1/1    Running     7 (7m28s ago)   74m
simarchawla@Simars-MacBook-Air docker-ethereum %
```

```
    pod "dapp-7848d59bb7-ckc2p" deleted
● simarchawla@Simars-MacBook-Air docker-ethereum % kubectl get pods
    NAME                                             READY   STATUS             RESTARTS         AGE
    dapp-57fb7cd8c7-xxqnd                            1/1     Running            0                95s
    ganache-76dfbb5d45-fqvpl                         0/1     CrashLoopBackOff   18 (63s ago)     94m
    mongo-express-deployment-b88f6d45f-dqd22         1/1     Running            10 (7m34s ago)   6d2h
    mongodb-stateful-set-0                           1/1     Running            10 (7m33s ago)   6d2h
    mongodb-stateful-set-1                           1/1     Running            10 (7m33s ago)   6d2h
    note-deployment-74cc946cd8-88c6n                 1/1     Running            20 (7m5s ago)    6d2h
    note-deployment-74cc946cd8-rwwpj                 1/1     Running            20 (7m7s ago)    6d2h
    note-server-deployment-6fb5fcb67f-6hm7j          1/1     Running            17 (2m49s ago)   6d2h
    note-server-deployment-6fb5fcb67f-vtwql          1/1     Running            15 (7m49s ago)   6d2h
    react-5d44c95bdd-ft5kx                           1/1     Running            8 (7m33s ago)    94m
● simarchawla@Simars-MacBook-Air docker-ethereum % kubectl exec dapp-57fb7cd8c7-xxqnd -- env
    HOME=/root
    YARN_VERSION=1.9.4
    NODE_VERSION=8.12.0
    NOTE_SERVICE_PORT_3000_TCP_ADDR=10.103.220.129
    NOTE_SERVICE_PORT=tcp://10.103.220.129:3000
    KUBERNETES_PORT_443_TCP=tcp://10.96.0.1:443
    REACT_PORT=tcp://10.96.111.61:3000
    NOTE_SERVICE_PORT_3000_TCP_PORT=3000
    GANACHE_PORT=tcp://10.101.113.179:8545
    DAPP_PORT_4000_TCP=tcp://10.99.179.132:4000
    REACT_SERVICE_HOST=10.96.111.61
    NOTE_SERVER_SERVICE_PORT_5000_TCP_PROTO=tcp
    MONGO_EXPRESS_SERVICE_SERVICE_PORT=8081
    DAPP_PORT_4000_TCP_ADDR=10.99.179.132
    DAPP_PORT_4000_TCP_PROTO=tcp
    NOTE_SERVER_SERVICE_SERVICE_PORT=5000
    MONGODB_SERVICE_SERVICE_PORT=27017
    KUBERNETES_PORT=tcp://10.96.0.1:443
    GANACHE_PORT_8545_TCP_PORT=8545
    DAPP_SERVICE_PORT=4000
    NOTE_SERVER_SERVICE_SERVICE_HOST=10.102.206.156
    MONGO_EXPRESS_SERVICE_PORT_8081_TCP_ADDR=10.100.43.119
    MONGO_EXPRESS_SERVICE_PORT=tcp://10.100.43.119:8081
    GANACHE_SERVICE_PORT=8545
    MONGO_EXPRESS_SERVICE_PORT_8081_TCP=tcp://10.100.43.119:8081
    MONGO_EXPRESS_SERVICE_SERVICE_HOST=10.100.43.119
```

```
NOTE_SERVER_SERVICE_PORT=tcp://10.102.206.156:5000
NOTE_SERVICE_PORT_3000_TCP=tcp://10.103.220.129:3000
NOTE_SERVICE_SERVICE_PORT=3000
KUBERNETES_PORT_443_TCP_PROTO=tcp
GANACHE_SERVICE_PORT_8545=8545
REACT_PORT_3000_TCP_PROTO=tcp
DAPP_SERVICE_PORT_4000=4000
DAPP_SERVICE_HOST=10.99.179.132
MONGODB_SERVICE_PORT=tcp://10.99.49.139:27017
MONGO_EXPRESS_SERVICE_PORT_8081_TCP_PROTO=tcp
KUBERNETES_PORT_443_TCP_PORT=443
NOTE_SERVER_SERVICE_PORT_5000_TCP=tcp://10.102.206.156:5000
NOTE_SERVICE_SERVICE_HOST=10.103.220.129
MONGODB_SERVICE_PORT_27017_TCP_PORT=27017
REACT_SERVICE_PORT_3000=3000
NOTE_SERVER_SERVICE_PORT_5000_TCP_ADDR=10.102.206.156
GANACHE_SERVICE_HOST=10.101.113.179
REACT_PORT_3000_TCP=tcp://10.96.111.61:3000
KUBERNETES_SERVICE_HOST=10.96.0.1
GANACHE_PORT_8545_TCP_PROTO=tcp
GANACHE_PORT_8545_TCP=tcp://10.101.113.179:8545
REACT_PORT_3000_TCP_PORT=3000
NOTE_SERVICE_PORT_3000_TCP_PROTO=tcp
MONGODB_SERVICE_PORT_27017_TCP_PROTO=tcp
KUBERNETES_PORT_443_TCP_ADDR=10.96.0.1
DAPP_PORT_4000_TCP_PORT=4000
DAPP_PORT=tcp://10.99.179.132:4000
NOTE_SERVER_SERVICE_PORT_5000_TCP_PORT=5000
MONGODB_SERVICE_PORT_27017_TCP_ADDR=10.99.49.139
MONGODB_SERVICE_SERVICE_HOST=10.99.49.139
MONGO_EXPRESS_SERVICE_PORT_8081_TCP_PORT=8081
KUBERNETES_SERVICE_PORT_HTTPS=443
GANACHE_PORT_8545_TCP_ADDR=10.101.113.179
REACT_PORT_3000_TCP_ADDR=10.96.111.61
MONGODB_SERVICE_PORT_27017_TCP=tcp://10.99.49.139:27017
KUBERNETES_SERVICE_PORT=443
NODE_PORT=8080
HOSTNAME=dapp-57fb7cd8c7-xxqnd
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
simarchawla@Simars-MacBook-Air docker-ethereum % []
```

```
simarchawla@Simars-Air lab4 % cd docker-ethereum
simarchawla@Simars-Air docker-ethereum % openssl genpkey -algorithm RSA -out test-user.key
.............................................................................++++
.................++++
simarchawla@Simars-Air docker-ethereum % openssl req -new -key test-user.key -out test-user.csr -subj "/CN=test
ser/O=group1"
simarchawla@Simars-Air docker-ethereum % openssl x509 -req -in test-user.csr -CA ~/.minikube/ca.crt -CAkey ~/.m
ikube/ca.key -CAcreateserial -out test-user.crt -days 500
Signature ok
subject=/CN=test-user/O=group1
Getting CA Private Key
simarchawla@Simars-Air docker-ethereum % kubectl config set-credentials test-user --client-certificate=test-use
crt --client-key=test-user.key
User "test-user" set.
simarchawla@Simars-Air docker-ethereum % █
```

```
        ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
        ▪ Using image docker.io/kubernetesui/dashboard:v2.7.0
    💡  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
●  simarchawla@Simars-Air docker-ethereum % kubectl create role example-role --verb=get,list,watch --resource=pods
    role.rbac.authorization.k8s.io/example-role created
⊗  simarchawla@Simars-Air docker-ethereum % kubectl create rolebinding example-binding --role=example-role --user=
    st-user
    error: failed to create rolebinding: Timeout: request did not complete within requested timeout - context deadl
    e exceeded
●  simarchawla@Simars-Air docker-ethereum % kubectl create rolebinding example-binding --role=example-role --user=
    st-user
    rolebinding.rbac.authorization.k8s.io/example-binding created
○  simarchawla@Simars-Air docker-ethereum % ▮
```

```
●  simarchawla@Simars-Air docker-ethereum % minikube addons enable metrics-server
    💡  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
●  simarchawla@Simars-Air docker-ethereum % kubectl apply -f dapp-hpa.yaml
    horizontalpodautoscaler.autoscaling/dapp-hpa created
```

```
●  simarchawla@Simars-Air docker-ethereum % kubectl apply -f frontend-hpa.yaml
    horizontalpodautoscaler.autoscaling/frontend-hpa created
●  simarchawla@Simars-Air docker-ethereum % kubectl get hpa
    NAME            REFERENCE           TARGETS         MINPODS   MAXPODS   REPLICAS   AGE
    dapp-hpa        Deployment/dapp     <unknown>/50%   1         5         1          2m48s
    frontend-hpa    Deployment/react    <unknown>/50%   1         5         0          20s
○  simarchawla@Simars-Air docker-ethereum % ▮
```