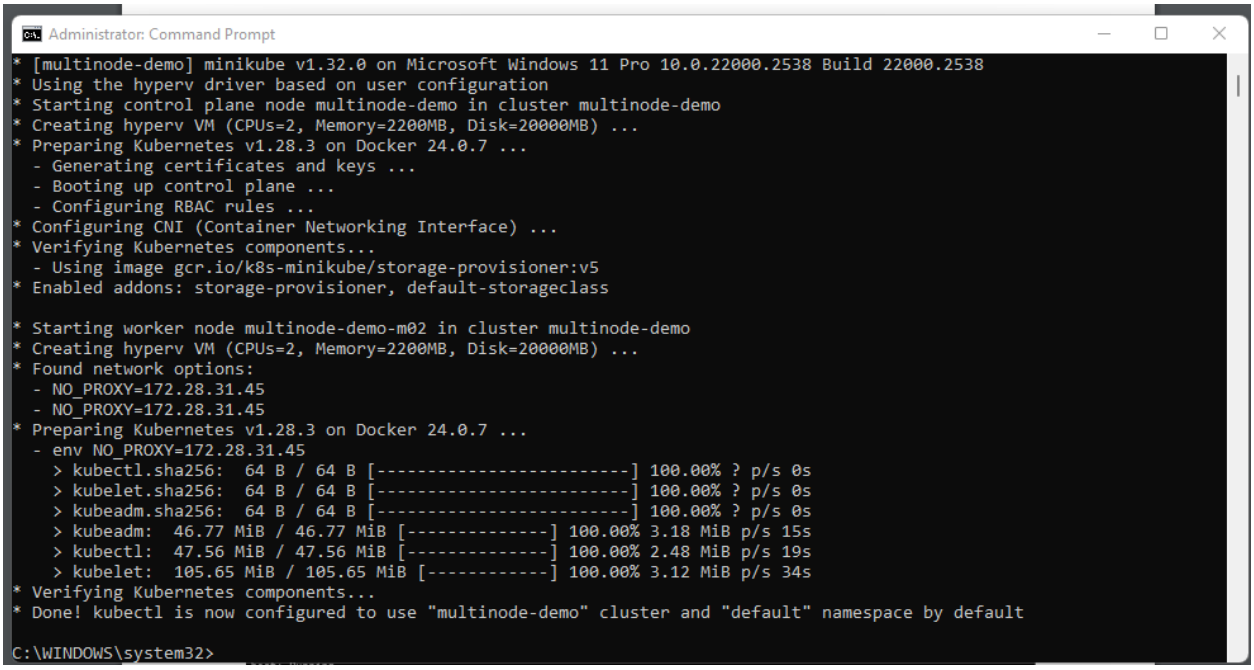
Student Name: Harsh Bhavsar
Student ID: 101440339

Term: Winter 2024

# BCDV 4032 – Building scalable blockchain applications

# Week-2 lab-3

- **Section-1:** Run a multi-node cluster using the commands above. Submission should include screenshots for each command.



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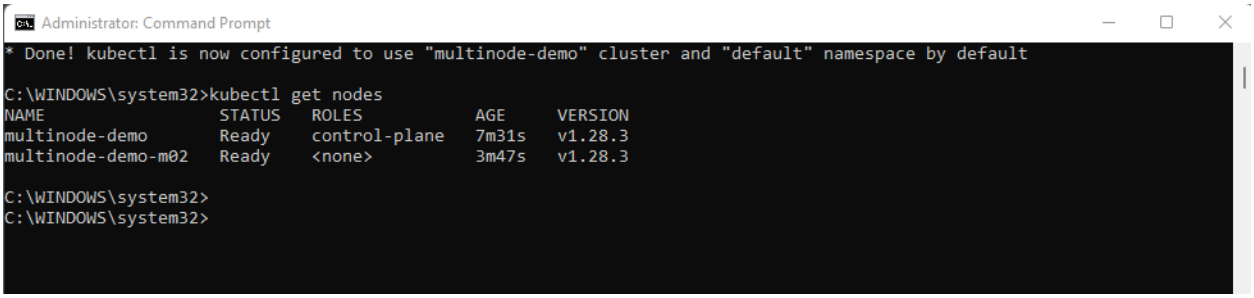


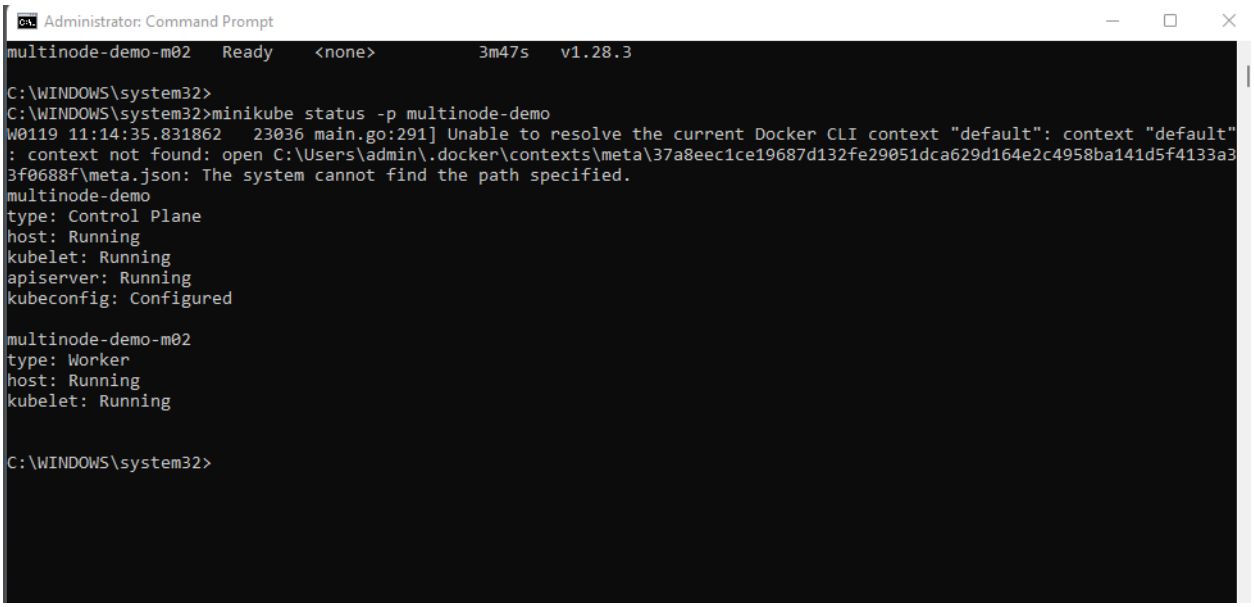

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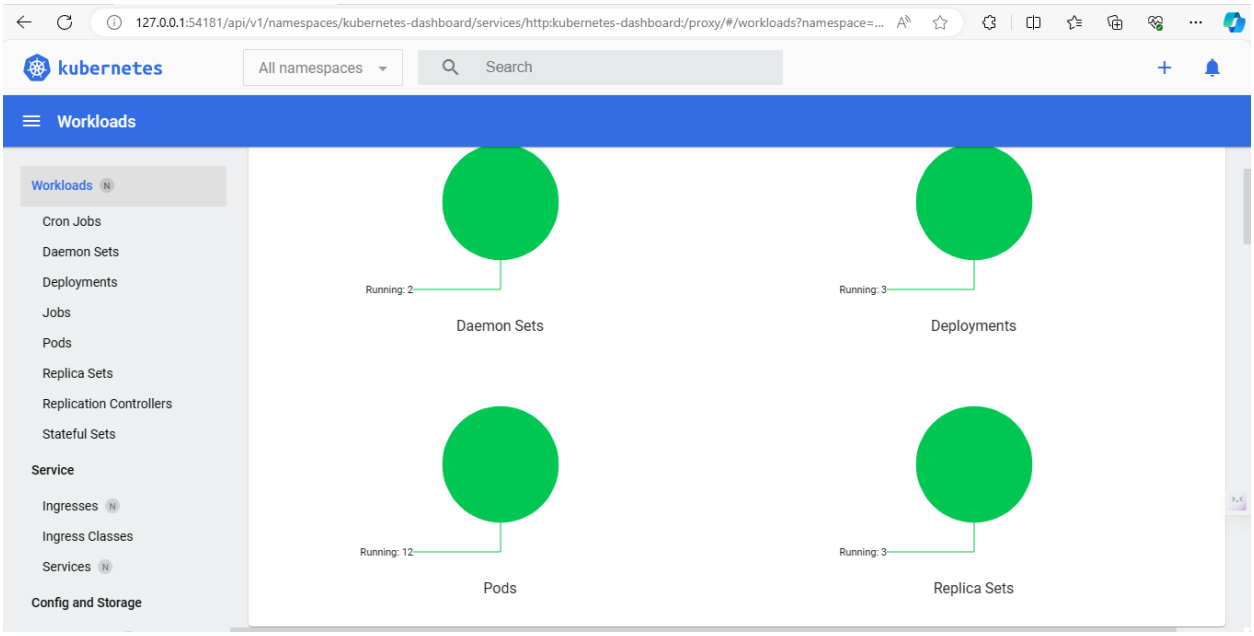


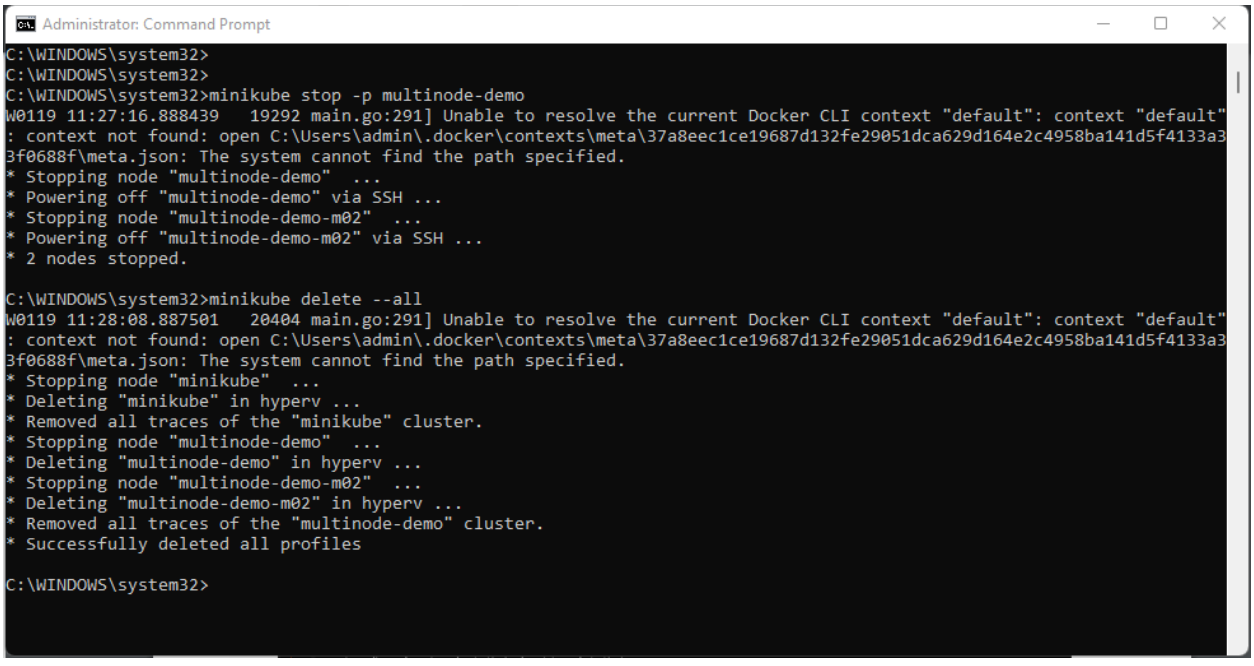

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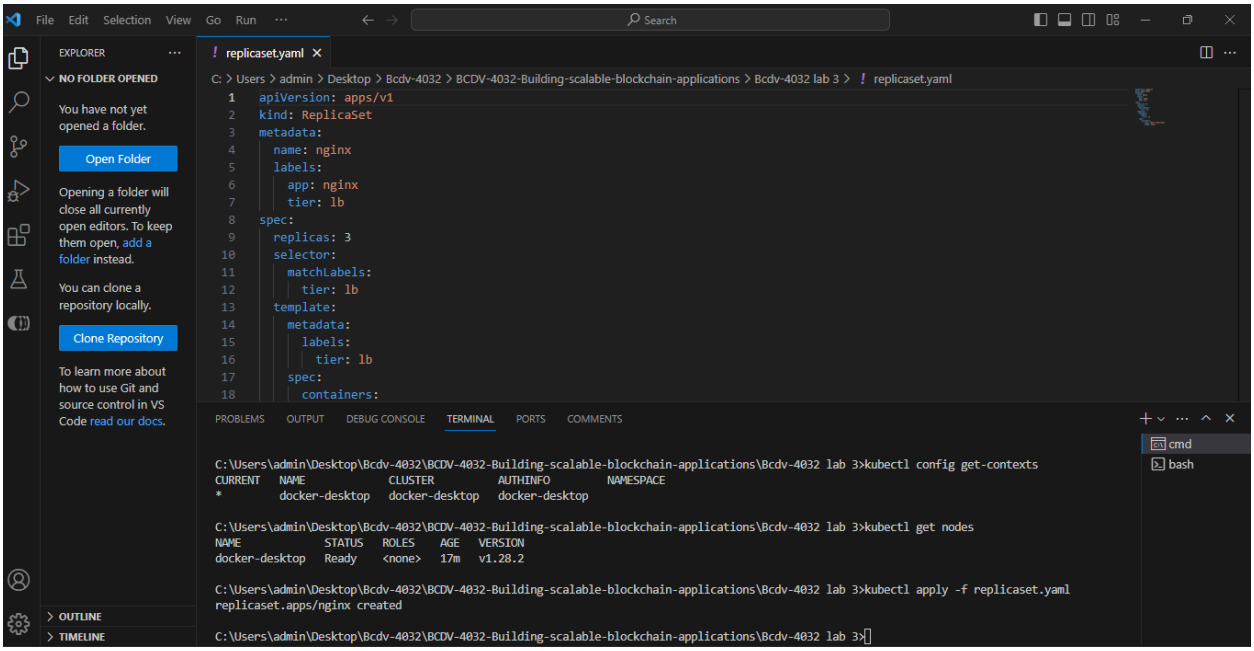
- **Section-2:** Run all types of deployment yaml commands separately. Submission should include screenshots for each command.



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```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS

pod "nginx-4dmjg" deleted

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
nginx-fxr66   1/1     Running   0          104m
nginx-klh58   1/1     Running   0          104m
nginx-t67p8   1/1     Running   0          20s

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3>kubectl get replicasets
NAME    DESIRED   CURRENT   READY   AGE
nginx   3         3         3       104m

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3>
```

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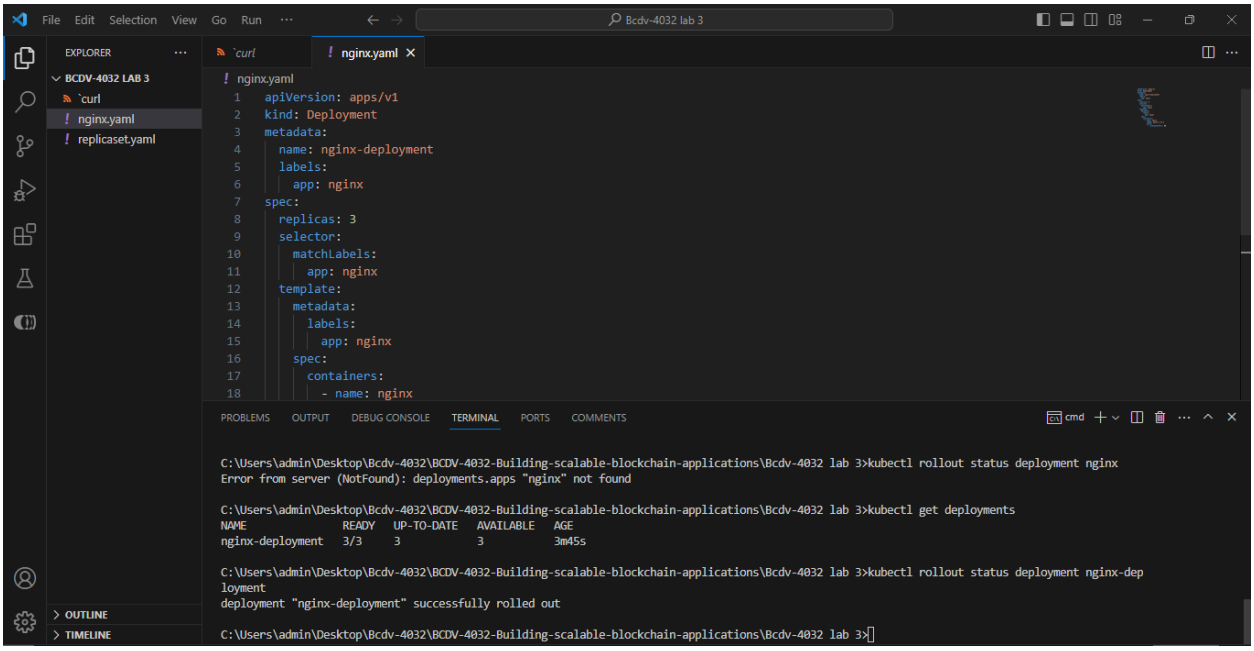

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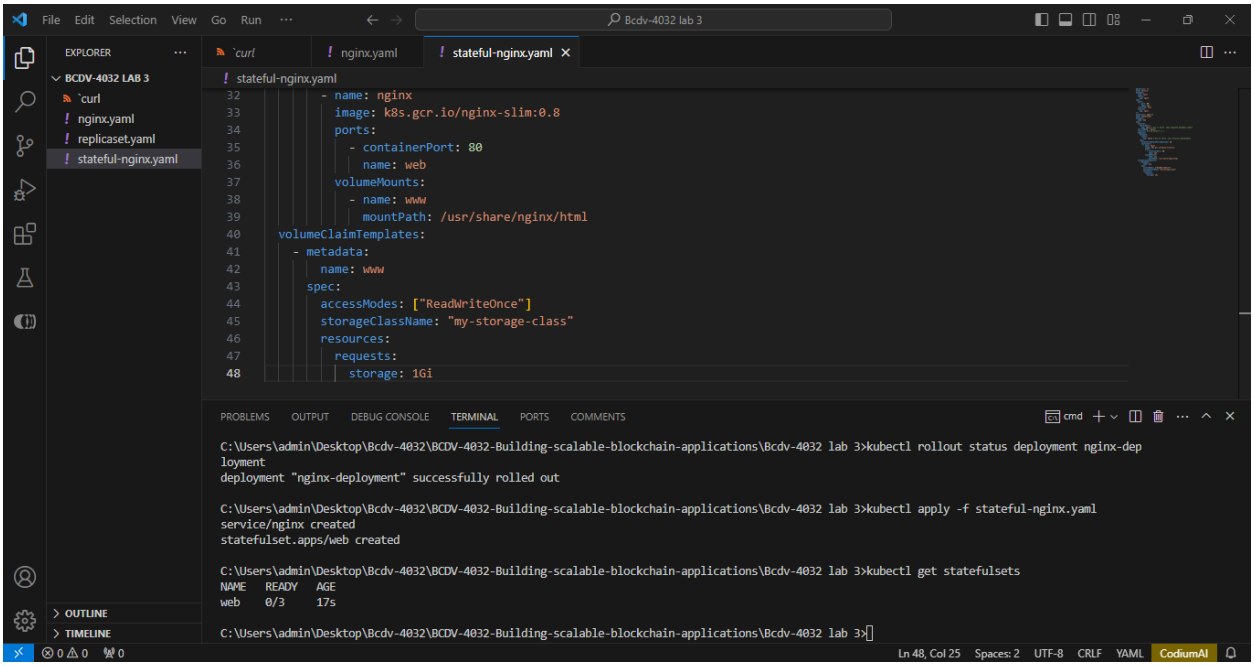


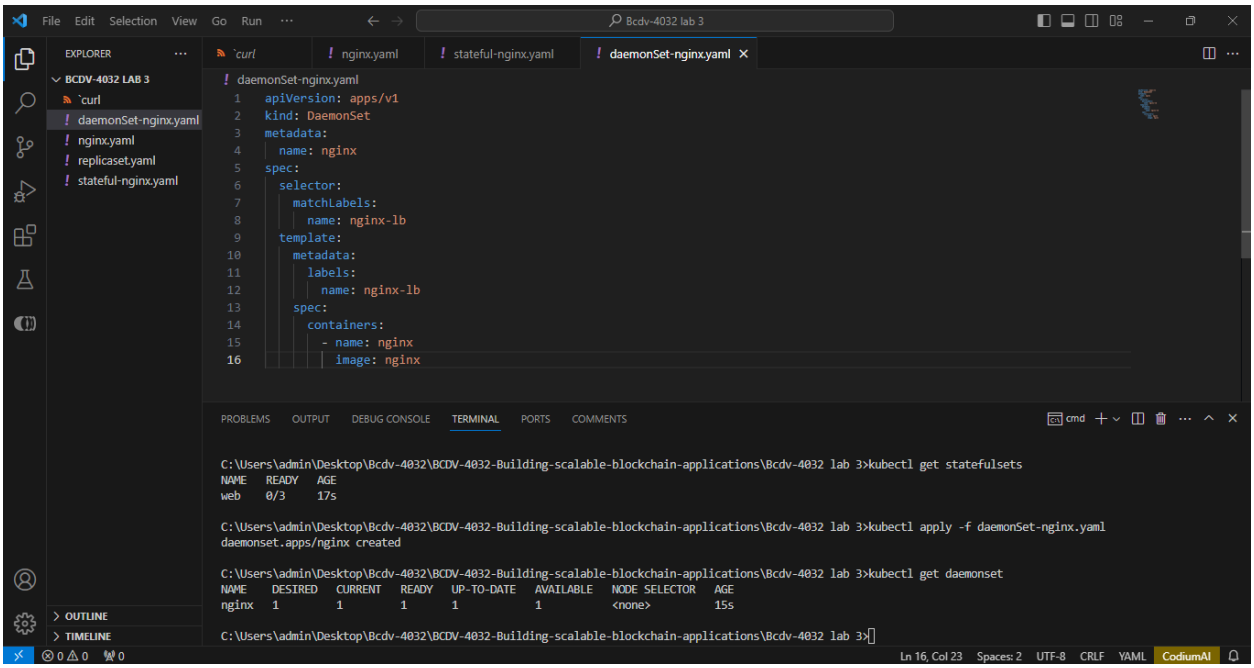

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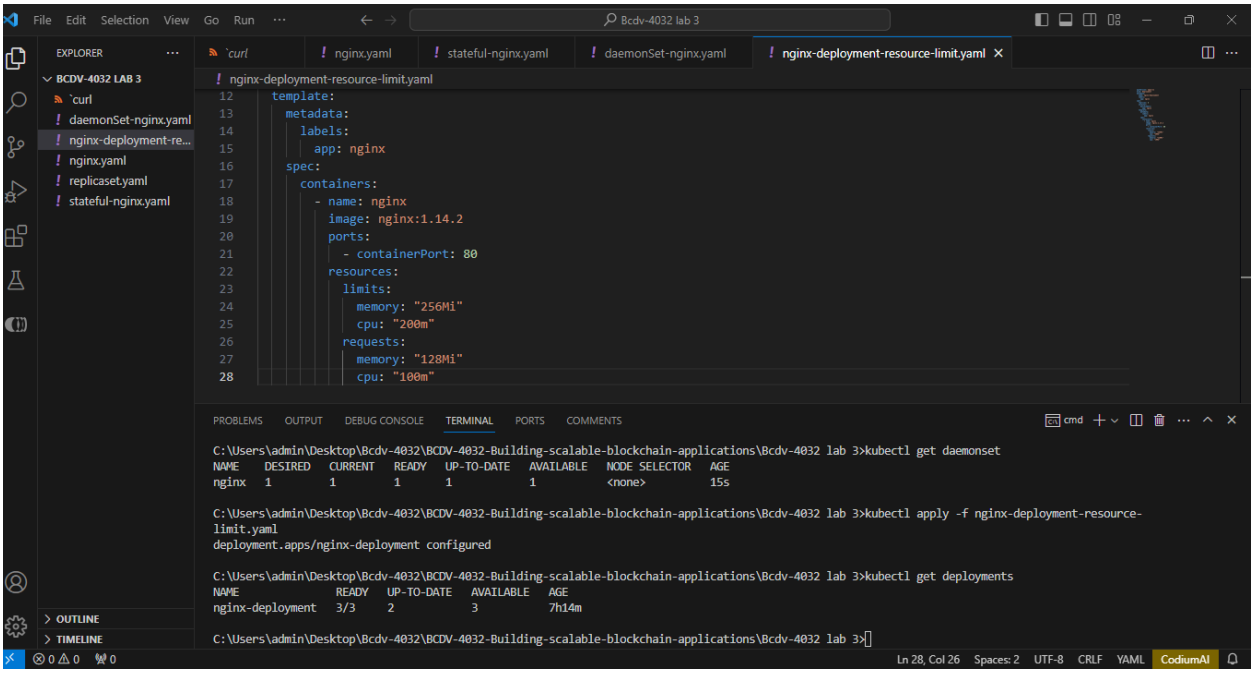


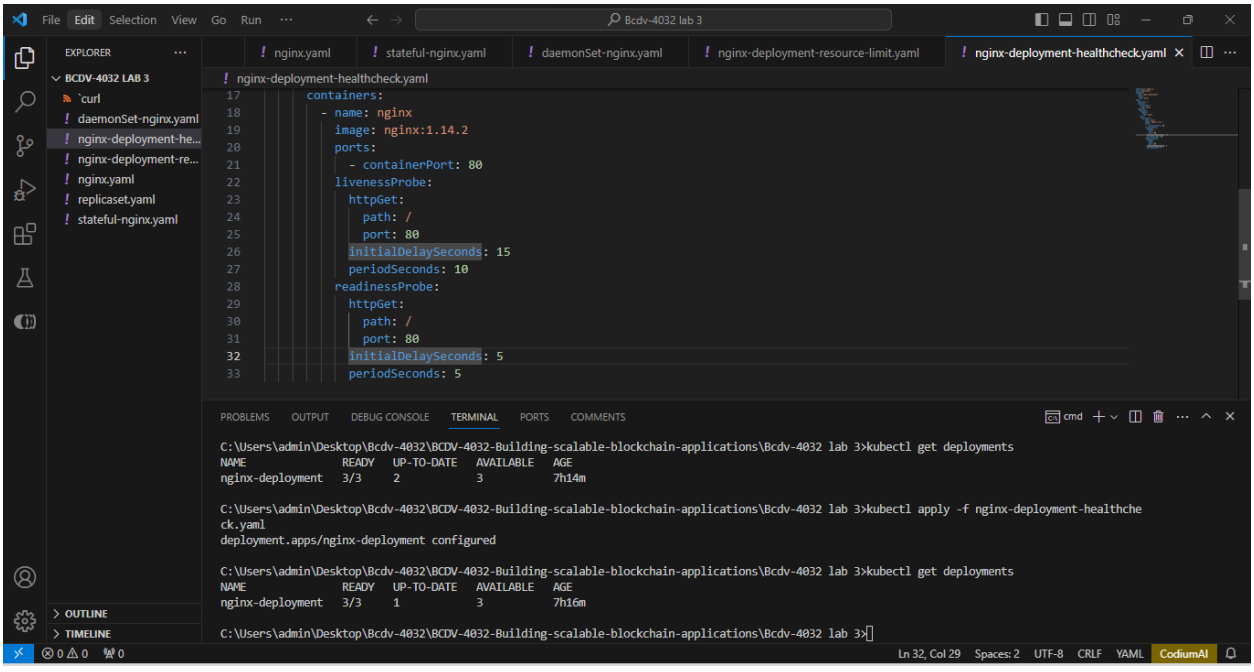

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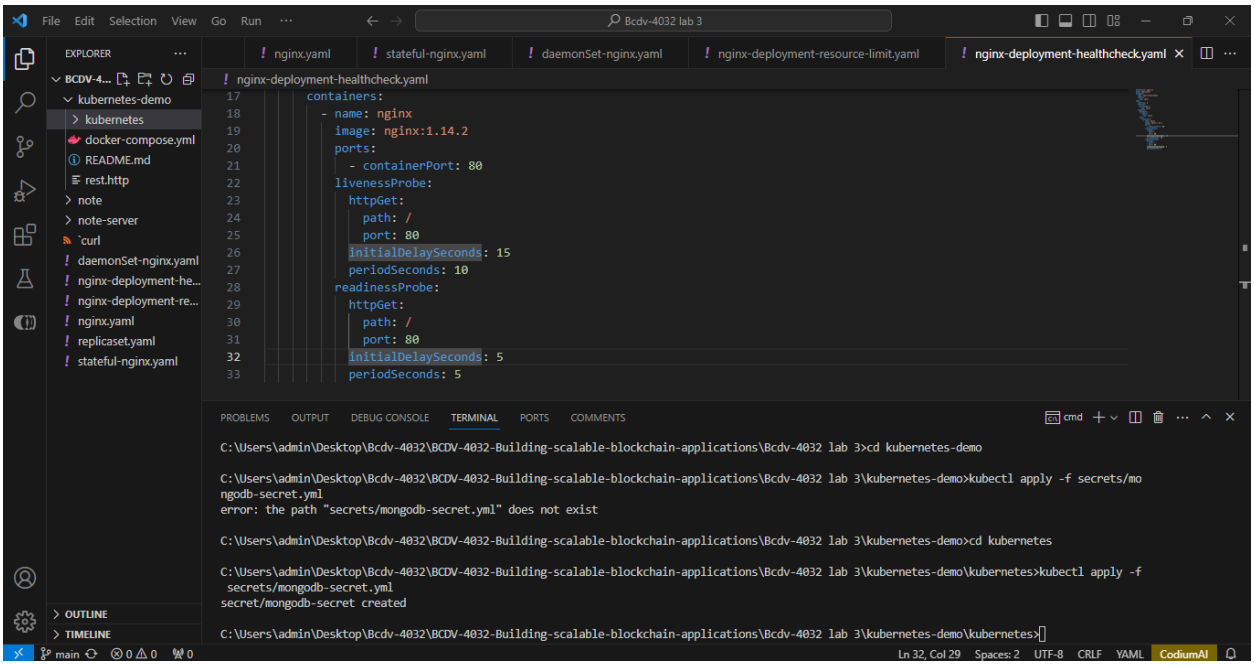
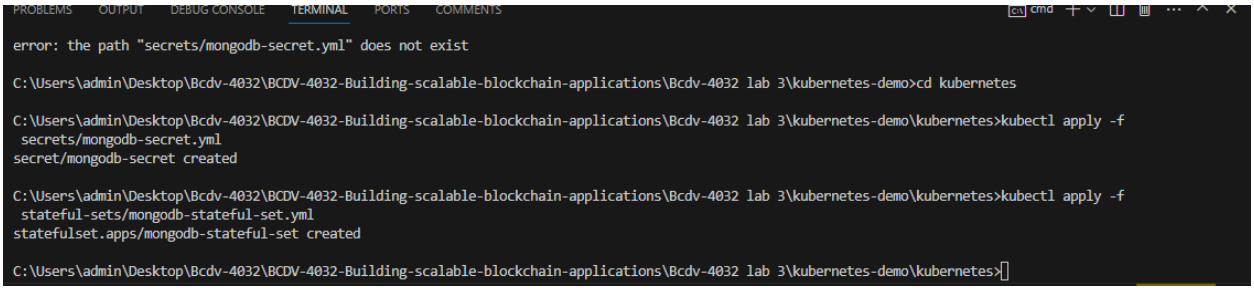
- **Section-3:** Run the full stack application deployment as provided in the attached instructions.
  - Submission should include screenshots for each command.
  - Screenshot with the Front end of the application open.
- **Task:** Bring down note-depp pod. Demonstrate using screenshot if a new pod has started.



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```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS                                                    cmd

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 secrets/mongodb-secret.yml
secret/mongodb-secret created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 stateful-sets/mongodb-stateful-set.yml
statefulset.apps/mongodb-stateful-set created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 services/mongodb-service.yml
service/mongodb-service created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS                                                    cmd

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 stateful-sets/mongodb-stateful-set.yml
statefulset.apps/mongodb-stateful-set created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 services/mongodb-service.yml
service/mongodb-service created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 deployments/note-server-depl.yml
deployment.apps/note-server-deployment created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>
Ln 32, Col 29  Spaces: 2  UTF-8  CRLF  YAML  CodiumAI
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS                                                    cmd

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 services/mongodb-service.yml
service/mongodb-service created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 deployments/note-server-depl.yml
deployment.apps/note-server-deployment created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>kubectl apply -f
 services/note-server-service.yml
service/note-server-service created

C:\Users\admin\Desktop\Bcdv-4032\BCDV-4032-Building-scalable-blockchain-applications\Bcdv-4032 lab 3\kubernetes-demo\kubernetes>
Ln 32, Col 29  Spaces: 2  UTF-8  CRLF  YAML  CodiumAI
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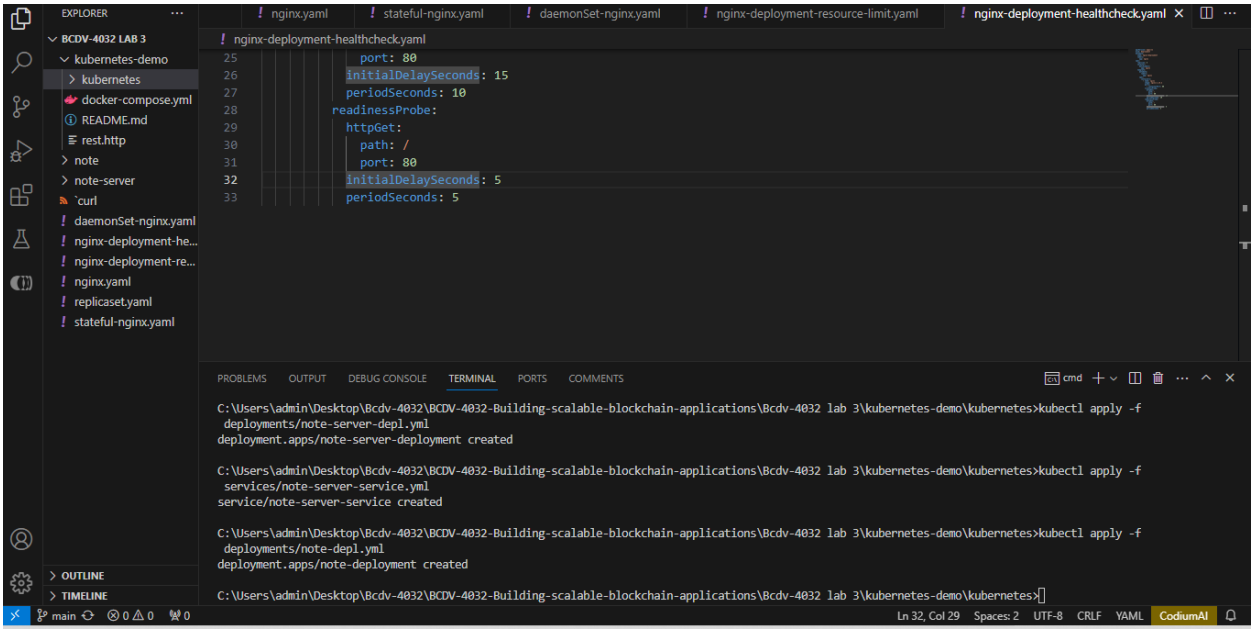


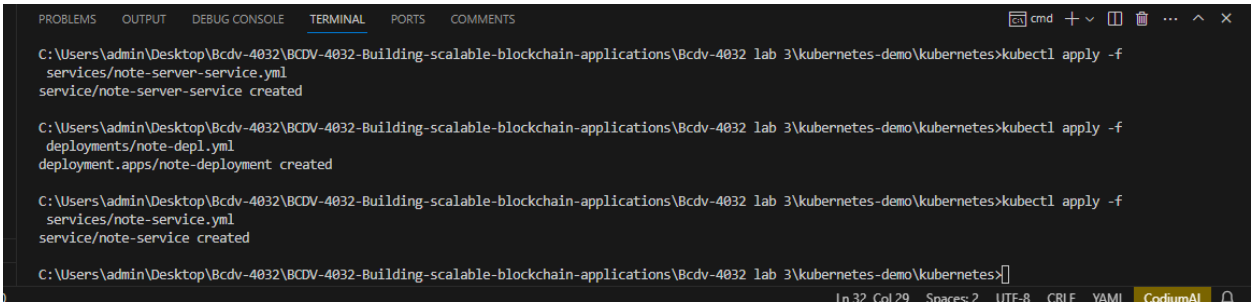

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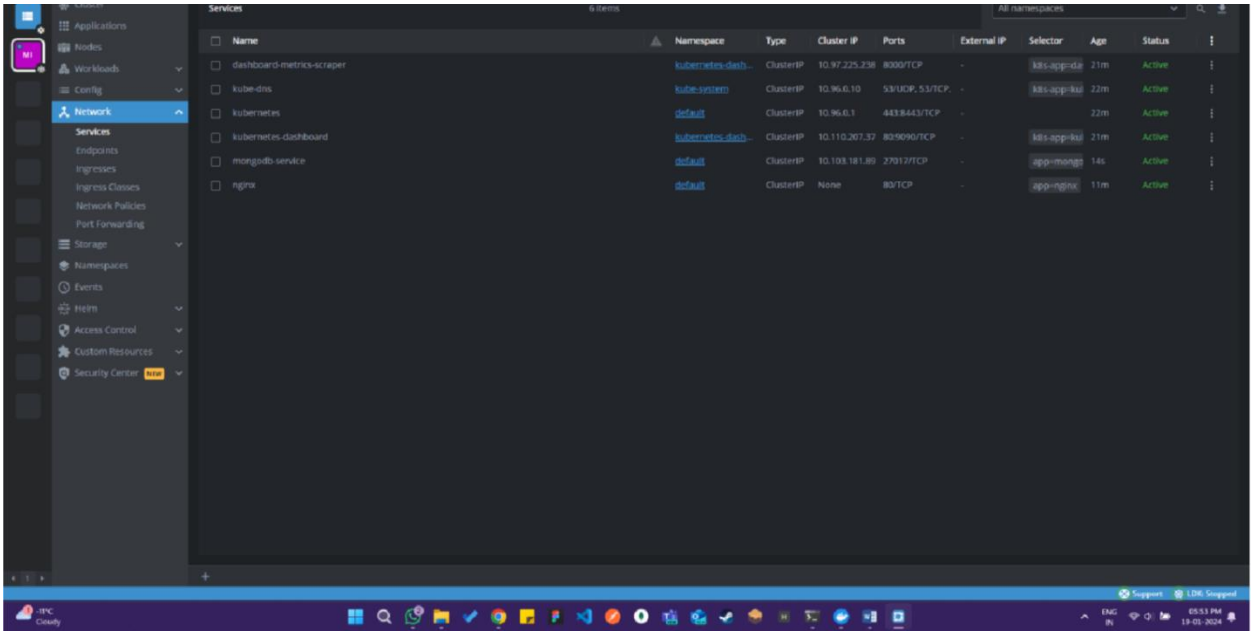


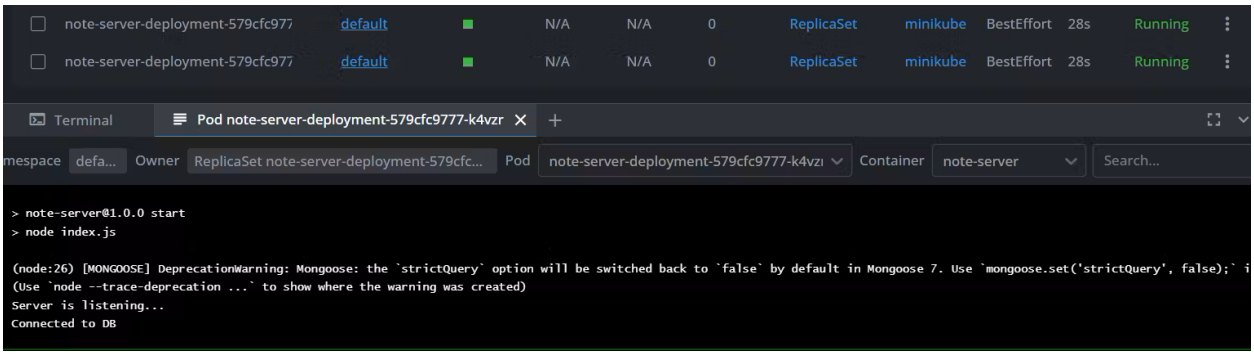

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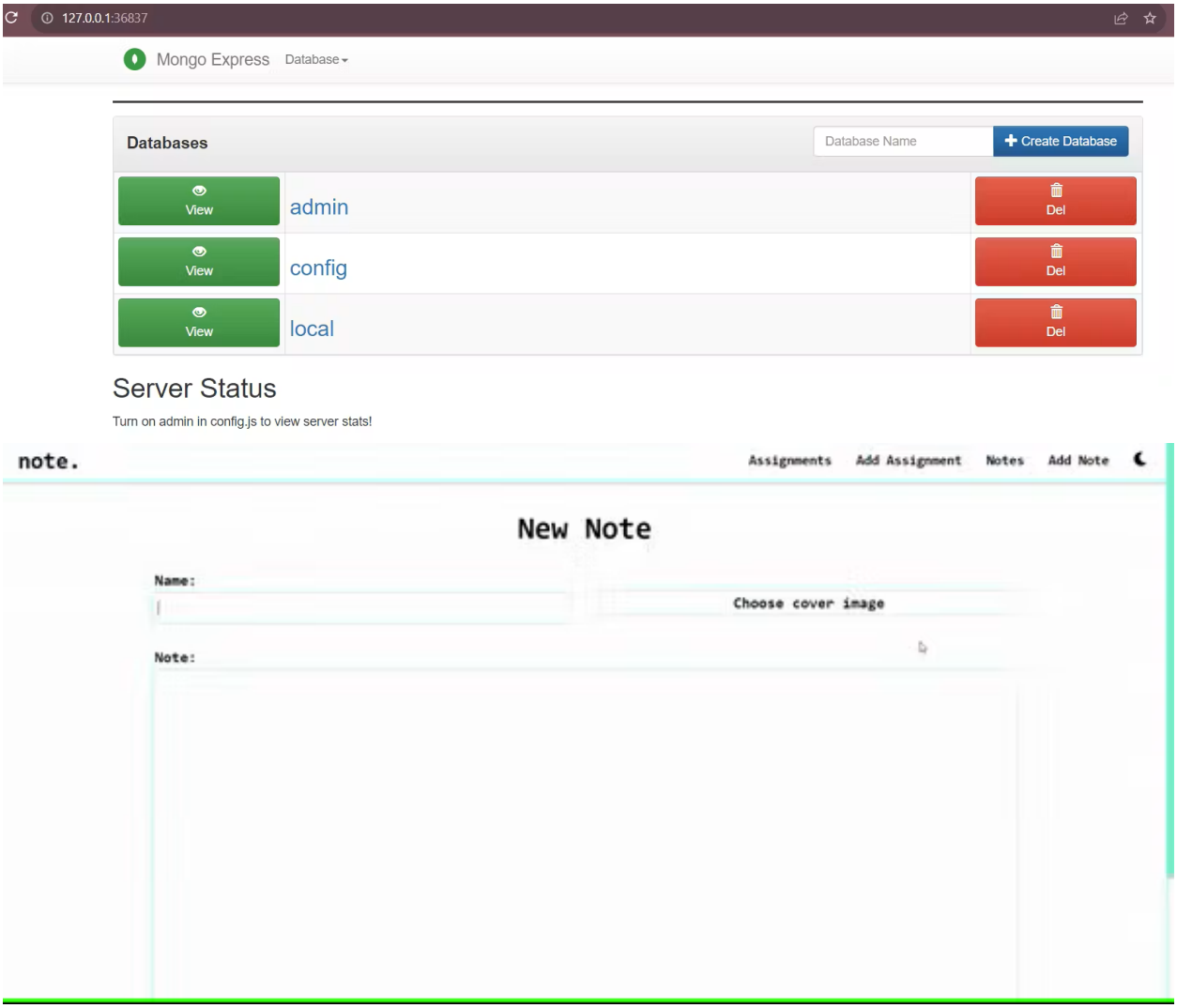
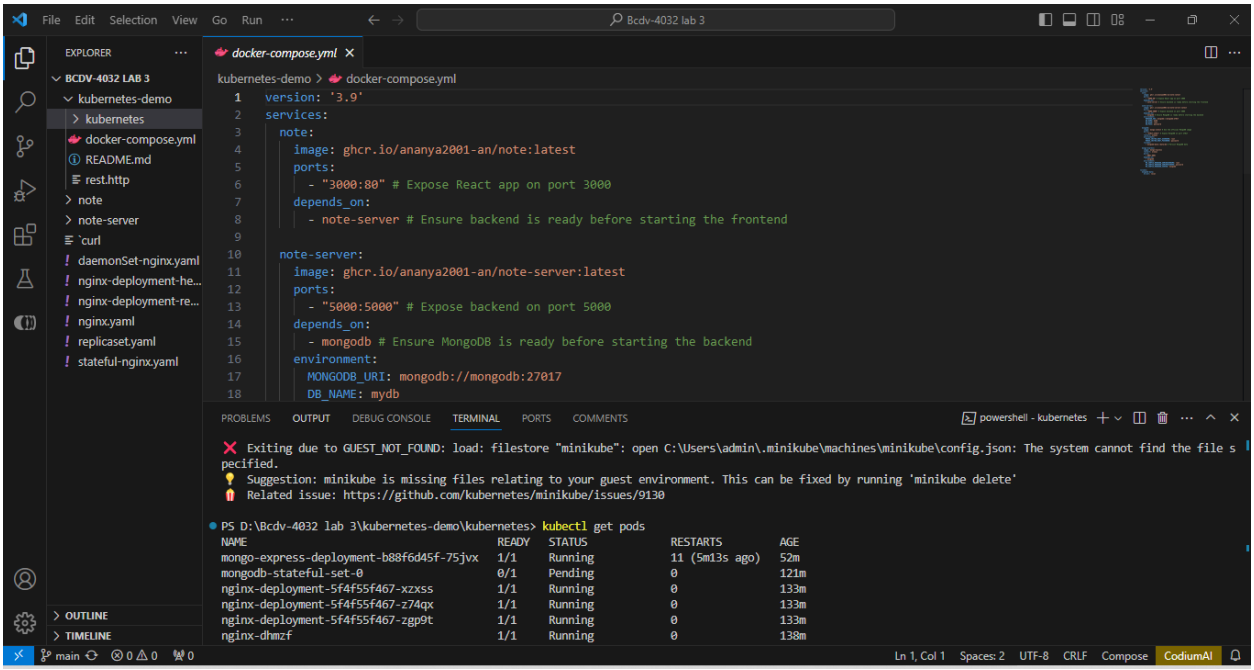
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