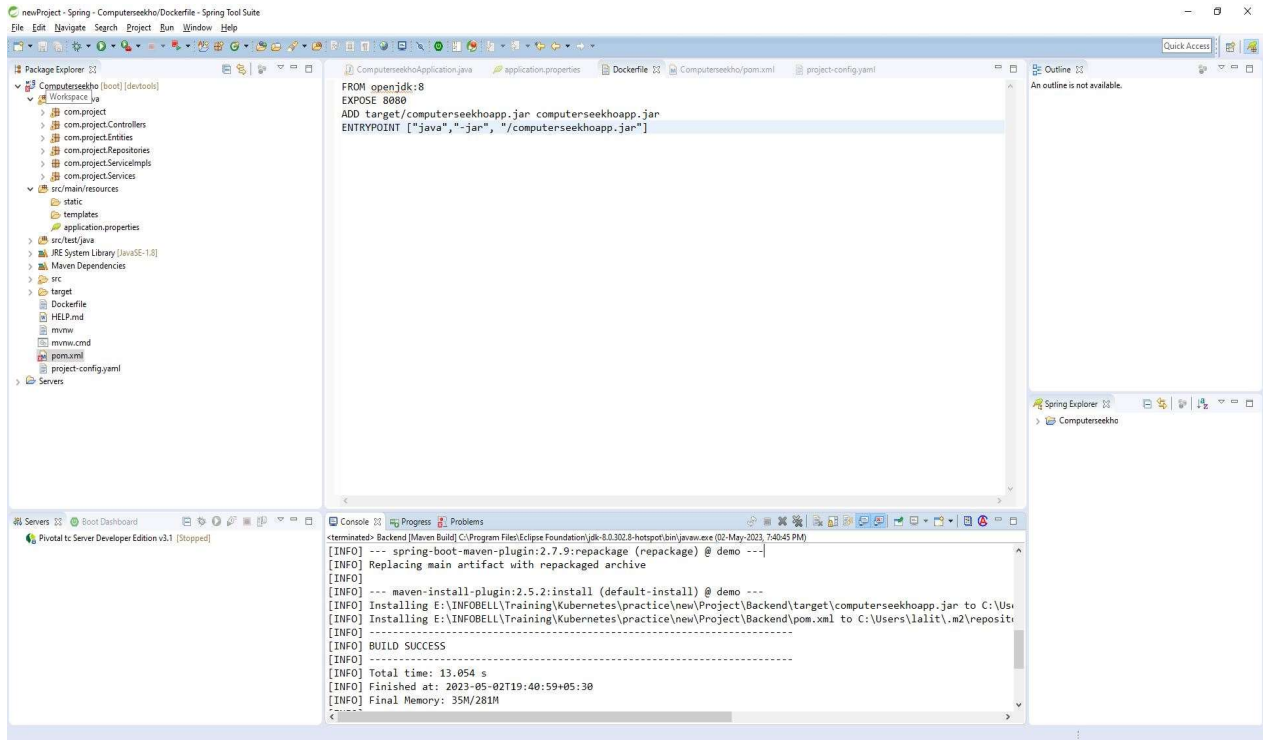
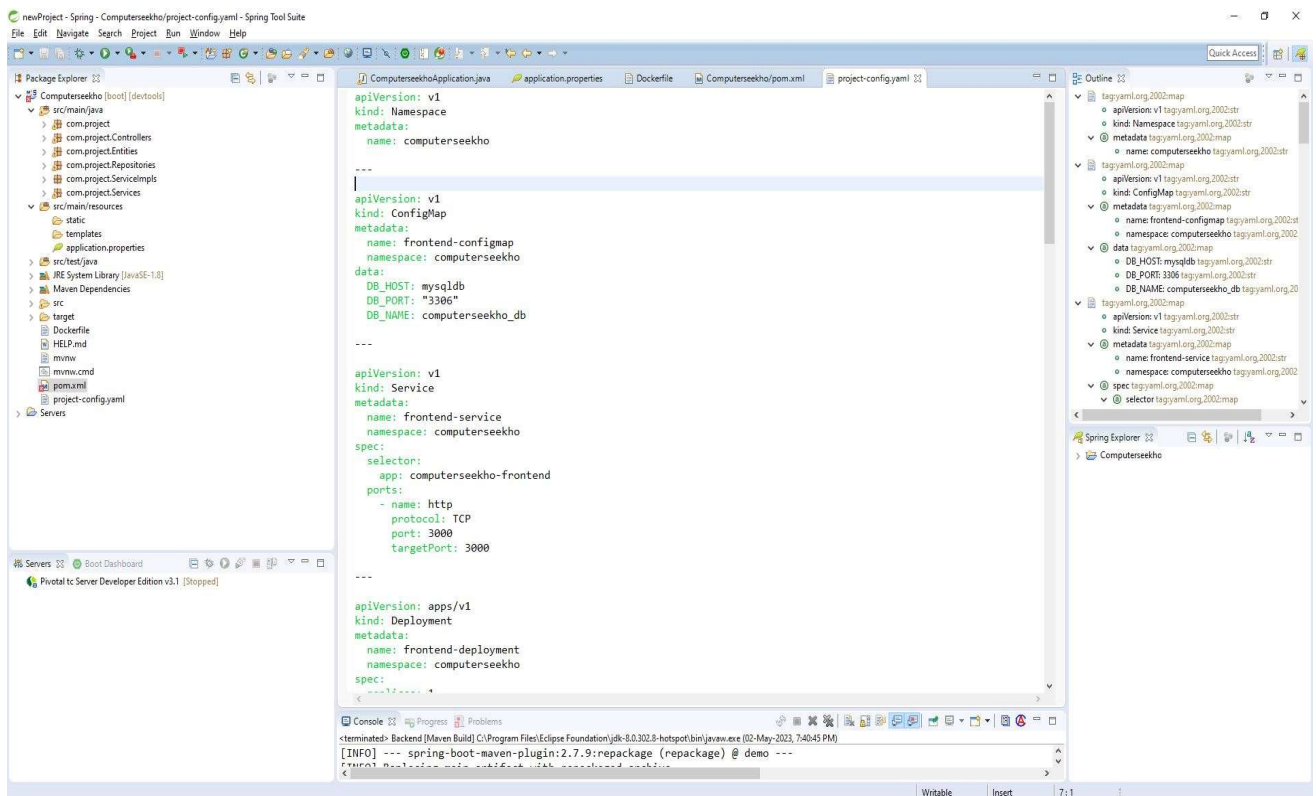


- K8S Project

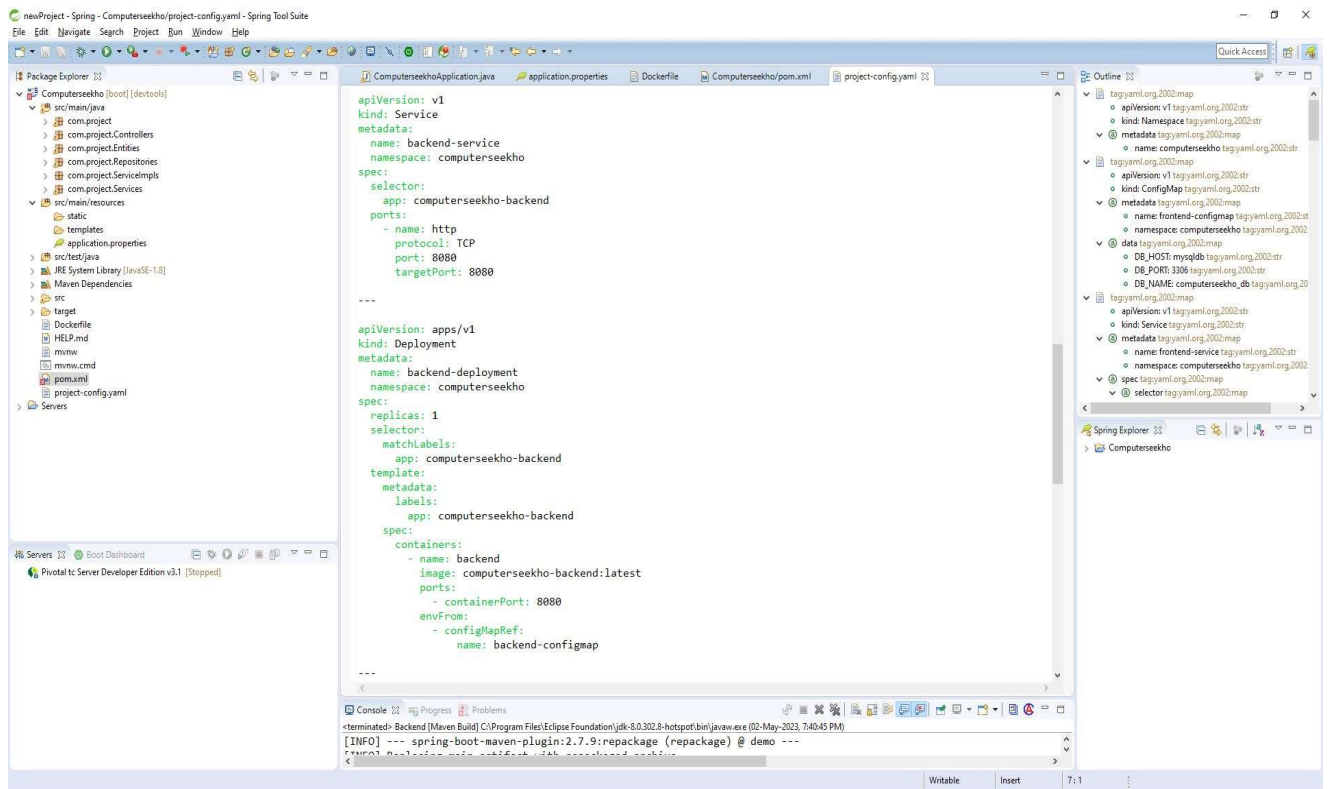
// Dockerfile of backend



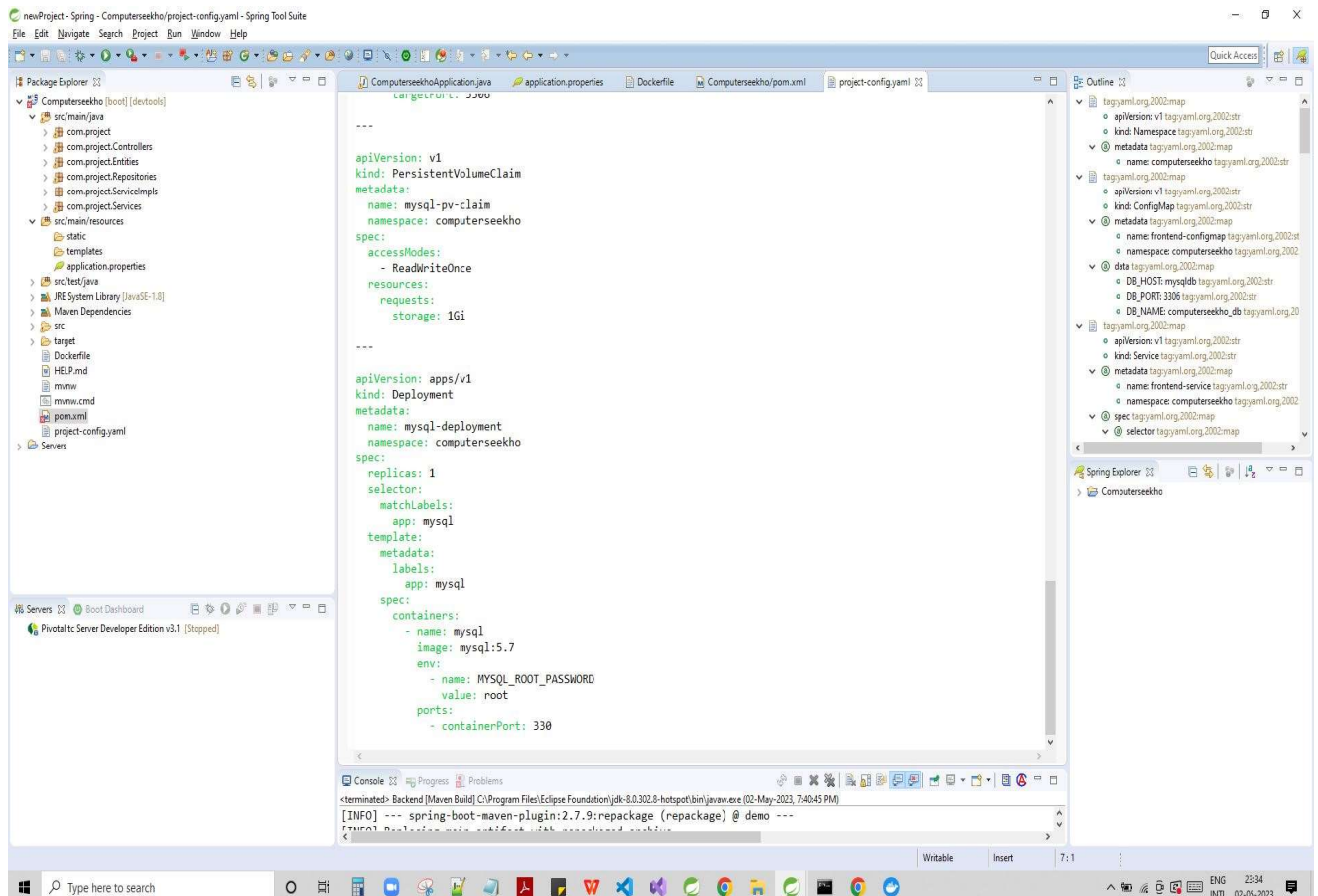
// Project-config.yaml file created at backend for configuration of frontend, backend & mysql



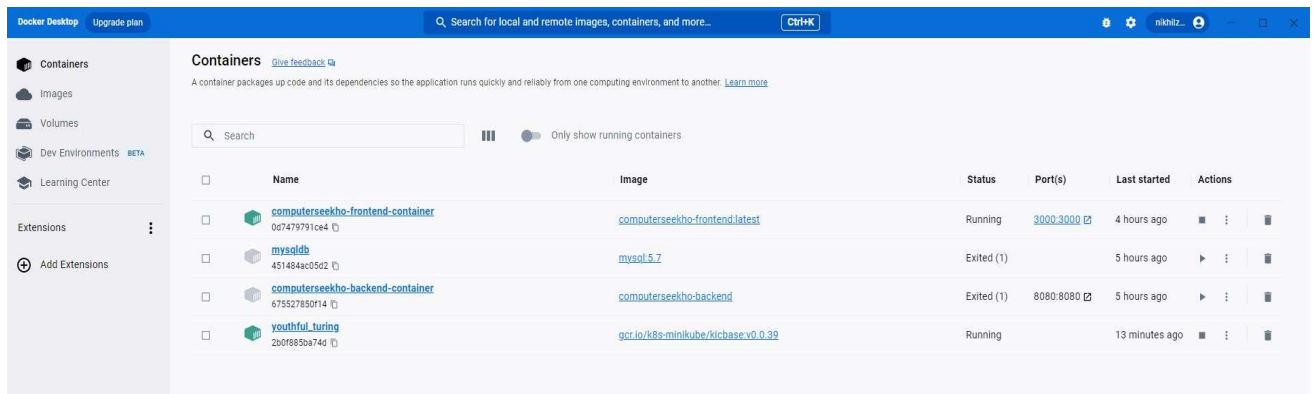
// backend deployment



// mysql deployment



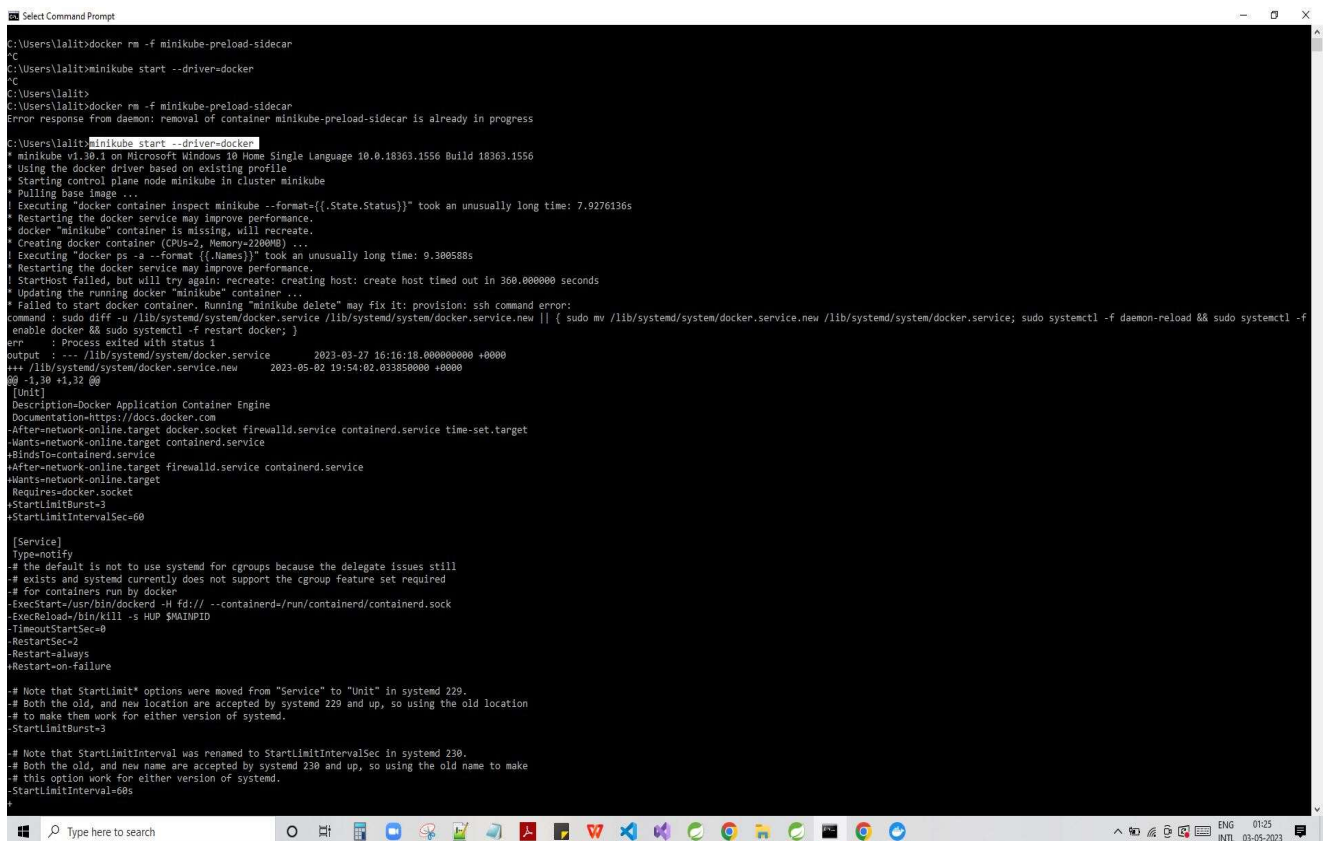
// Created Containers



The screenshot shows the Docker Desktop application window. The 'Containers' tab is selected, displaying a table of running and exited containers. The table has columns for Name, Image, Status, Port(s), Last started, and Actions. There are four containers listed: 'computerseekho-frontend-container' (Running), 'mysqldb' (Exited (1)), 'computerseekho-backend-container' (Exited (1)), and 'youthful_turing' (Running).

	Name	Image	Status	Port(s)	Last started	Actions
<input type="checkbox"/>	computerseekho-frontend-container 0d7479791ce4	computerseekho-frontend:latest	Running	3000:3000	4 hours ago	■ ⋮ 🗑
<input type="checkbox"/>	mysqldb 451484ac0502	mysql:5.7	Exited (1)		5 hours ago	▶ ⋮ 🗑
<input type="checkbox"/>	computerseekho-backend-container 67552785014	computerseekho-backend	Exited (1)	8080:8080	5 hours ago	▶ ⋮ 🗑
<input type="checkbox"/>	youthful_turing 2b0f9850a74d	gcr.io/k8s-minikube/kicbase:v0.0.39	Running		13 minutes ago	■ ⋮ 🗑

// Minikube start --driver=docker



```
C:\Users\lalit>docker rm -f minikube-preload-sidecar
C
C:\Users\lalit>minikube start --driver=docker
C
C:\Users\lalit>
C:\Users\lalit>docker rm -f minikube-preload-sidecar
Error response from daemon: removal of container minikube-preload-sidecar is already in progress
C:\Users\lalit>minikube start --driver=docker
* minikube v1.30.1 on Microsoft Windows 10 Home Single Language 10.0.18363.1556 Build 18363.1556
* Using the docker driver based on existing profile
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Executing "docker container inspect minikube --format={{.State.Status}}" took an unusually long time: 7.9276136s
* Restarting the docker service may improve performance.
* docker "minikube" container is missing, will recreate.
* Creating docker container (CPUs=2, Memory=2200MB) ...
* Executing "docker ps -a --format {{.Names}}" took an unusually long time: 9.300588s
* Restarting the docker service may improve performance.
* StartHost failed, but will try again: recreate: creating host: create host timed out in 360.000000 seconds
* Updating the running docker "minikube" container ...
* Failed to start docker container. Running "minikube delete" may fix it: provision: ssh command error:
command : sudo diff -u /lib/systemd/system/docker.service /lib/systemd/system/docker.service.new || { sudo mv /lib/systemd/system/docker.service /lib/systemd/system/docker.service; sudo systemctl -f daemon-reload && sudo systemctl -f
enable docker && sudo systemctl -f restart docker; }
err      : Process exited with status 1
output   : --- /lib/systemd/system/docker.service      2023-03-27 16:16:18.000000000 +0000
+++ /lib/systemd/system/docker.service.new           2023-05-02 19:54:02.033850000 +0000
@@ -1,30 +1,32 @@
[Unit]
Description=Docker Application Container Engine
Documentation=https://docs.docker.com
+After=network-online.target docker.socket firewalld.service contained.service time-set.target
+Wants=network-online.target contained.service
+BindsTo=contained.service
+After=network-online.target firewalld.service contained.service
+Wants=network-online.target
+Requires=docker.socket
+StartLimitBurst=3
+StartLimitIntervalSec=60

[Service]
Type=notify
# the default is not to use systemd for cgroups because the delegate issues still
# exists and systemd currently does not support the cgroup feature set required
# for containers run by docker
ExecStart=/usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock
ExecReload=/bin/kill -s HUP $MAINPID
+TimeoutStartSec=0
+RestartSec=2
+Restart=always
+RestartOnFailure

# Note that StartLimit* options were moved from "Service" to "Unit" in systemd 229.
# Both the old, and new location are accepted by systemd 229 and up, so using the old location
# to make them work for either version of systemd.
+StartLimitBurst=3

# Note that StartLimitInterval was renamed to StartLimitIntervalSec in systemd 230.
# Both the old, and new name are accepted by systemd 230 and up, so using the old name to make
# this option work for either version of systemd.
+StartLimitInterval=60s
+
```

// Checked the minikube status & current context using update-context to minikube



```
C:\Users\lalit>minikube update-context
* "minikube" context has been updated to point to 127.0.0.1:54048
* Current context is "minikube"

C:\Users\lalit>minikube status
minikube
type: Control Plane
host: Running
kubernetes: Stopped
apiserver: Stopped
kubeconfig: Configured

C:\Users\lalit>
```

// checked the Dockerfile in current directory using dir

```
E:\INFOBELL\Training\Kubernetes\practice\new\Project\Backend> dir
Volume in drive E is New Volume
Volume Serial Number is 5C70-D3FB

Directory of E:\INFOBELL\Training\Kubernetes\practice\new\Project\Backend

02-05-2023  23:04    <DIR>          .
02-05-2023  23:04    <DIR>          ..
12-03-2023  16:27             1,226 .classpath
12-03-2023  16:27             395 .gitignore
02-05-2023  19:17    <DIR>          .mvn
12-03-2023  16:27             980 .project
02-05-2023  19:17    <DIR>          .settings
02-05-2023  19:39             137 Dockerfile
12-03-2023  16:27             1,233 HELP.md
12-03-2023  16:27            10,284 mvnw
12-03-2023  16:27             6,734 mvnw.cmd
02-05-2023  19:36             1,843 pom.xml
02-05-2023  23:44            2,731 project-config.yaml
02-05-2023  19:17    <DIR>          src
02-05-2023  19:40    <DIR>          target
                9 File(s)          25,563 bytes
                6 Dir(s)         494,085,763,072 bytes free

E:\INFOBELL\Training\Kubernetes\practice\new\Project\Backend>
```

// Build an image computerseekho-k8s-app

```
CA\Windows\System32\cmd.exe - docker build -t computerseekho-k8s-app .
E:\INFOBELL\Training\Kubernetes\practice\new\Project\Backend> docker build -t computerseekho-k8s-app .

[+] Building 16.6s (2/3)
=> [internal] load build definition from Dockerfile
=> [internal] load .dockerignore
=> [internal] load context: .
=> [internal] load metadata for docker.io/library/openjdk:8
[+] Building 19.8s (2/3)
=> [internal] load build definition from Dockerfile
=> [internal] load .dockerignore
=> [internal] load context: .
=> [internal] load metadata for docker.io/library/openjdk:8
=> [internal] load .dockerignore
=> [internal] load metadata for docker.io/library/openjdk:8
=> [internal] load metadata for docker.io/library/openjdk:8
[+] Building 18.3s (2/3)
=> [internal] load build definition from Dockerfile
=> [internal] load .dockerignore
=> [internal] load context: .
=> [internal] load metadata for docker.io/library/openjdk:8
=> [internal] load .dockerignore
=> [internal] load metadata for docker.io/library/openjdk:8
[+] Building 20.7s (2/3)
=> [internal] load build definition from Dockerfile
=> [internal] load .dockerignore
=> [internal] load context: .
=> [internal] load metadata for docker.io/library/openjdk:8
=> [internal] load .dockerignore
=> [internal] load metadata for docker.io/library/openjdk:8
[+] Building 48.2s (5/7)
=> [internal] load build definition from Dockerfile
=> [internal] load .dockerignore
=> [internal] load context: .
=> [internal] load metadata for docker.io/library/openjdk:8
=> [internal] load .dockerignore
=> [internal] load metadata for docker.io/library/openjdk:8
=> [internal] load build context
=> [internal] load metadata for docker.io/library/openjdk:8
=> [internal] load .dockerignore
=> [internal] load metadata for docker.io/library/openjdk:8
[+] Building 26.3s (2/3)
=> [internal] load build definition from Dockerfile
=> [internal] load .dockerignore
=> [internal] load context: .
=> [internal] load metadata for docker.io/library/openjdk:8
=> [internal] load .dockerignore
=> [internal] load metadata for docker.io/library/openjdk:8
```

// Checked generated image

```
Select C:\Windows\System32\cmd.exe
E:\INFOBELL\Training\Kubernetes\practice\new\Project\Backend> docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
computerseekho-frontend   latest             a78321889547       6 hours ago        487MB
nikhilzambare24/demorepo   computerseekho-frontend-hub  a78321889547       6 hours ago        487MB
computerseekho-backend   latest             bdd44d3c240b       6 hours ago        565MB
computerseekho-k8s-app    latest             bdd44d3c240b       6 hours ago        565MB
nikhilzambare24/demorepo   computerseekho-backend-hub  bdd44d3c240b       6 hours ago        565MB
mysql                   5.7                dd6675b5cfea       2 weeks ago        569MB
nikhilzambare24/demorepo   mysql5.7-hub       dd6675b5cfea       2 weeks ago        569MB
gcr.io/k8s-minikube/kicbase   v0.0.39           67a4b1138d2d       4 weeks ago        1.05GB
registry.k8s.io/kube-apiserver   v1.25.4           00631e54acba       5 months ago        128MB
registry.k8s.io/kube-scheduler   v1.25.4           e2d17ec744c1       5 months ago        50.6MB
registry.k8s.io/kube-proxy       v1.25.4           2c2bc1864279       5 months ago        61.7MB
registry.k8s.io/pause          3.8               4873874c08ef       10 months ago       711kB

E:\INFOBELL\Training\Kubernetes\practice\new\Project\Backend>
```


// Created Client.crt and Client.key manually & Checked the kubernetes configuration using
kubectl config view

```
Command Prompt

To further debug and diagnose cluster problems, use 'kubectl cluster-info dump'.
Unable to connect to the server: EOF

C:\Users\lalit>minikube status
! Executing "docker container inspect minikube --format={{.State.Status}}" took an unusually long time: 6.345673s
* Restarting the docker service may improve performance.
minikube
type: Control Plane
host: Running
kubelet: Stopped
apiserver: Stopped
kubeconfig: Configured

C:\Users\lalit>kubectl config view
apiVersion: v1
clusters:
- cluster:
  certificate-authority-data: DATA+OMITTED
  server: https://kubernetes.docker.internal:6443
  name: docker-desktop
- cluster:
  certificate-authority: C:\Users\lalit\.minikube\ca.crt
  extensions:
  - extension:
    last-update: Wed, 03 May 2023 01:28:38 IST
    provider: minikube.sigs.k8s.io
    version: v1.30.1
    name: cluster info
  server: https://127.0.0.1:54048
  name: minikube
contexts:
- context:
  cluster: docker-desktop
  user: docker-desktop
  name: docker-desktop
- context:
  cluster: minikube
  user: minikube
  name: minikube
current-context: minikube
kind: Config
preferences: {}
users:
- name: docker-desktop
  user:
    client-certificate-data: REDACTED
    client-key-data: REDACTED
- name: minikube
  user:
    client-certificate: ..\.minikube\client.crt
    client-key: ..\.minikube\client.key
```

// Deleted all unused images from Docker Desktop to avoid error occurrence

```
Command Prompt

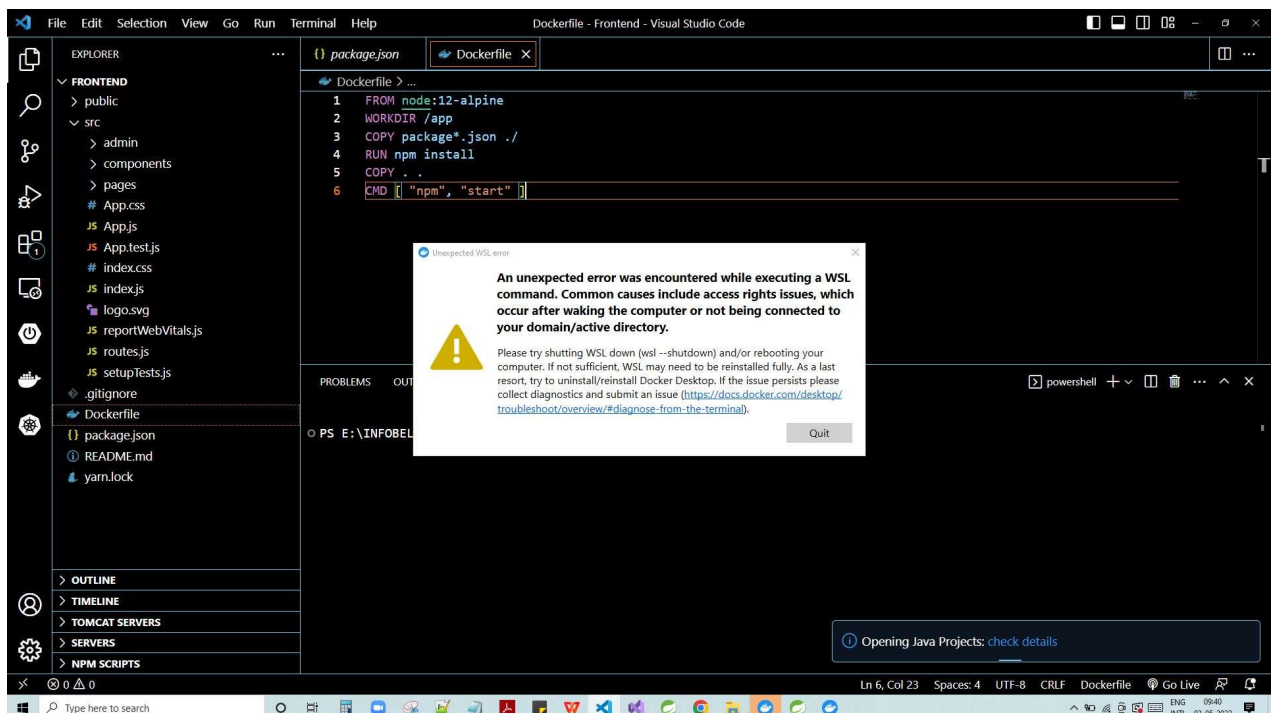
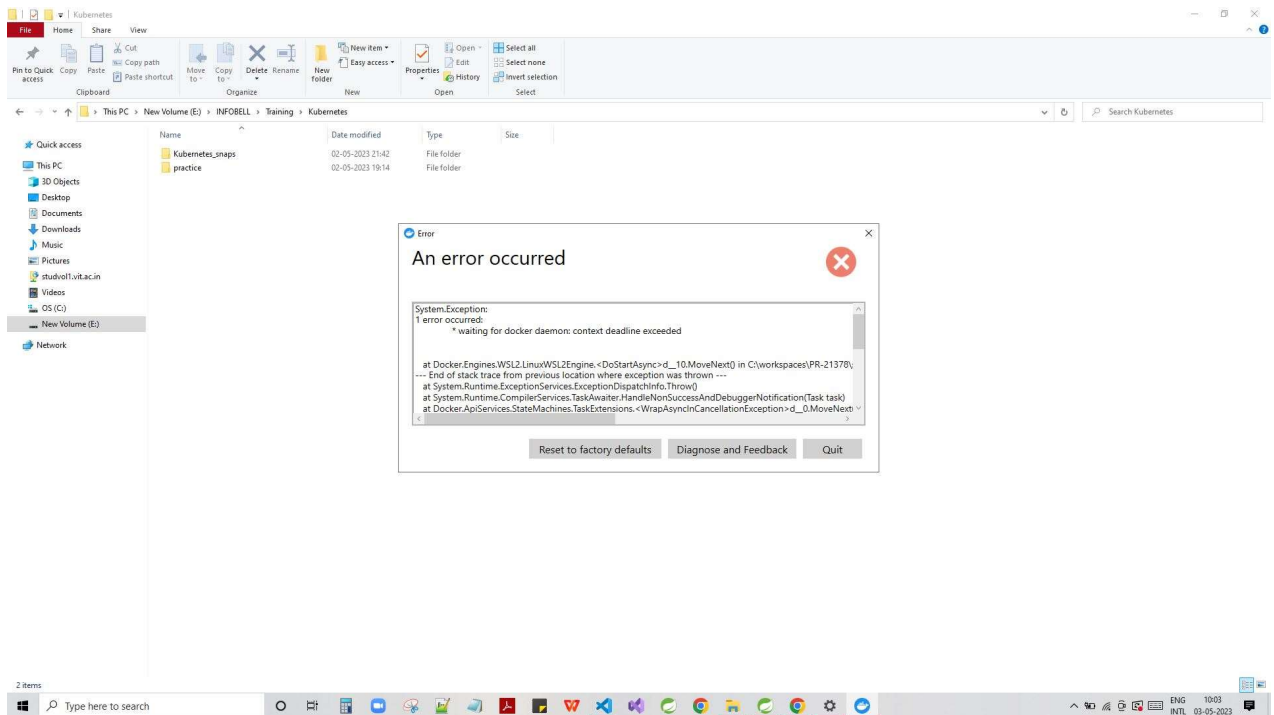
Microsoft Windows [Version 10.0.18363.1556]
(c) 2019 Microsoft Corporation. All rights reserved.

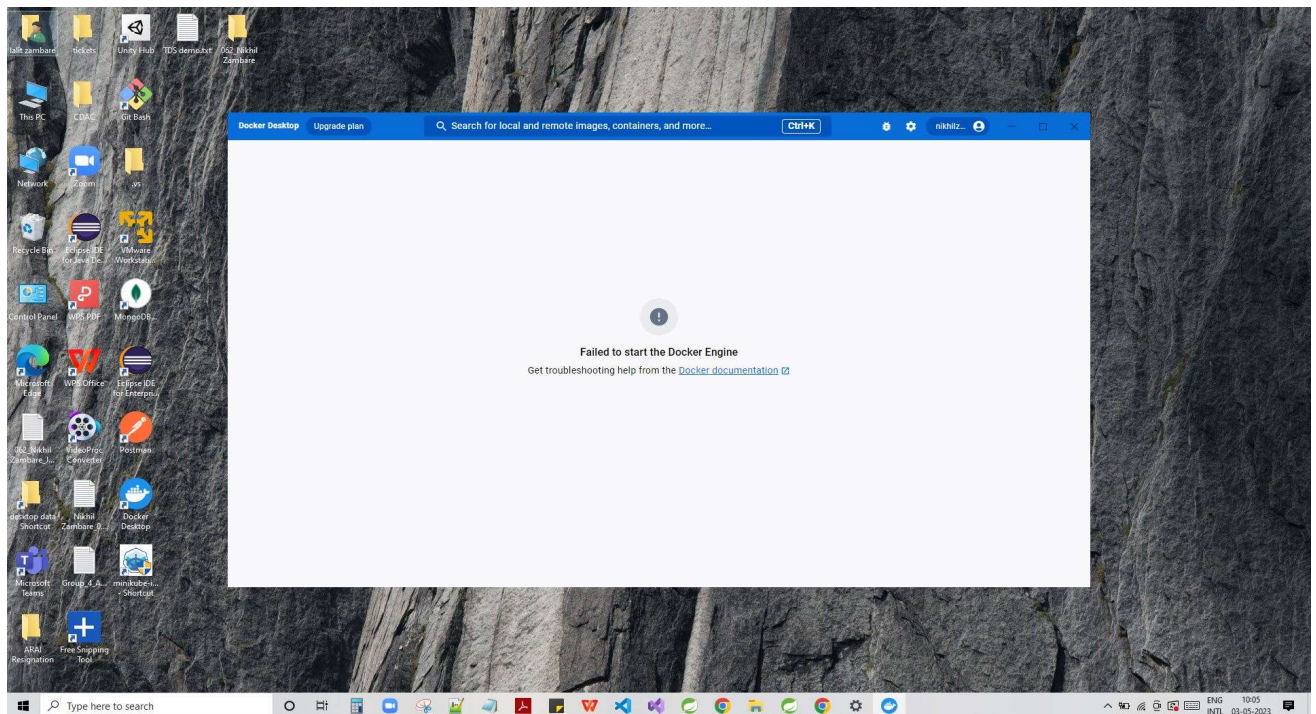
C:\Users\lalit>docker image prune
WARNING! This will remove all dangling images.
Are you sure you want to continue? [y/N] y
Total reclaimed space: 0B

C:\Users\lalit>docker image prune --all
WARNING! This will remove all images without at least one container associated to them.
Are you sure you want to continue? [y/N] y
Deleted Images:
untagged: registry.k8s.io/coredns/coredns:v1.9.3
deleted: sha256:5185b9f0becf59032b8e3646e99f84d9655dff3ac9e2605e0dc77f9c441ae4a
deleted: sha256:e99a82a659f95954fb241f8811974cb66ace6161c42fa4d81dc0d35b09397a5
deleted: sha256:256b6c5c338a84323ce8b6f58f1b0d0573f5137e610e7b0a05bc4460d9ea0219
untagged: registry.k8s.io/kube-apiserver:v1.25.4
deleted: sha256:00631e54c3a3ad507a97b7095a81151b8a8f909f93e50f64269ea30daf2cf
deleted: sha256:7670dc5a8813ad26baefa681e11acbd8c6cd72fd19d246871d8defae8af0ae
untagged: registry.k8s.io/kube-scheduler:v1.25.4
deleted: sha256:e2d17ec74dc1f1ee0d8b676fec521fae36b16261d367670a92aef472cfe9
deleted: sha256:ea36a50b4072df2684c47209a11213e42626c26b1642cd57d0a2be88b01b8f
untagged: docker/desktop-storage-provisioner:v2.0
deleted: sha256:99f89471f4708f173e688f777bfb0995b10355a46cc388b273b0130add7aad
deleted: sha256:ac642f643a36f89e4314102ad90aee3e82f8ed6cccd8568e256294f78cc4d74
untagged: hubproxy.docker.internal:5555/docker/desktop-kubernetes-etc/v3.5.5-0
untagged: hubproxy.docker.internal:5555/docker/desktop-kubernetes-etc/v3.5.5-0
deleted: sha256:4694d0f8e611efdf9f8b3a86d9d2969ef57b4b5662388ace6627287d6fd6
deleted: sha256:ca40f789280f8c358182908cbe24ac6d33b005660480c5ec210577ca9b01
deleted: sha256:b103fe33d253852f98c835eb6840e5081d1b4d77f9442cb13a48a017362750
deleted: sha256:f5ea95f09f85a0d11bc5a6ac48473dfce8db4bf6b6d0724580571ab2e0de407
deleted: sha256:877cf3f528e4d3b3276d13a95d6fdb4cb093f92c4b1a7df676465ed847088f
deleted: sha256:fa9b438e48f4d7a18aaff9e140032e419ec1891e18ab876609b796902498366b
untagged: registry.k8s.io/kube-controller-manager:v1.25.4
deleted: sha256:8f59f6d4aed0b6613fdb2b50a9dd31584e52f56513b01ce4bb779da5ee0cbd1
deleted: sha256:4343e3f0a3124218956707ec3317bb579f1201336a0893f444ed13ad83c23400
deleted: sha256:251251726900a1060781141171e60d9efc09d1f45fc9c47bbedc40b9336c67
deleted: sha256:f3d1c60ade91e053775deb21a1f646ab7a884255ee85c97abea265577122d
untagged: docker/desktop-vpnkit-controller:v2.0
deleted: sha256:8c2c38aa67e97e7b4c3805bdcdb240a933fafcc5f6cc508d2a3a005b24cb8
deleted: sha256:00bee617592167c296c5c286986d34dd4d035be095146227a39a53290785657
untagged: registry.k8s.io/kube-proxy:v1.25.4
deleted: sha256:2cb185427901615493be1074b02f3ba0e2455eb659c062efcab20241eabf
deleted: sha256:b10aebb7c643a5a9d11cfb26595df17849b88254c9e6c048672dacdf046733
deleted: sha256:e4d19dd12df2042fd4dd860b2af2074b3cdd7e88dc4c3a6c92912420e918da
untagged: registry.k8s.io/pause:3.8
deleted: sha256:4873874a06ef72a89729883a83ffbb7502ee729e9a5ac097723806e7f613517
deleted: sha256:961e93da9dd918d8e26aca24cccd5c5db05176850d2c53476d8814f5d004816
Total reclaimed space: 761.9MB

C:\Users\lalit>
```

// An error encountered while starting Docker desktop , expected to reset it to factory defaults





```
C:\Users\lalit>minikube start
* minikube v1.30.1 on Microsoft Windows 10 Home Single Language 10.0.18363.1556 Build 18363.1556
* Using the docker driver based on existing profile
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Another minikube instance is downloading dependencies...
! Executing "docker container inspect minikube --format={{.State.Status}}" took an unusually long time: 3.2875696s
* Restarting the docker service may improve performance.
* docker "minikube" container is missing, will recreate.
* Creating docker container (CPUs=2, Memory=2200MB) ...
! Executing "docker ps -a --format {{.Name}}" took an unusually long time: 8.7470147s
* Restarting the docker service may improve performance.
! StartHost failed, but will try again: recreate: creating host: create host timed out in 360.000000 seconds
* docker "minikube" container is missing, will recreate.
* Creating docker container (CPUs=2, Memory=2200MB) ...
* Failed to start docker container. Running "minikube delete" may fix it: recreate: creating host: create host timed out in 360.000000 seconds

X Exiting due to DRV_CREATE_TIMEOUT: Failed to start host: recreate: creating host: create host timed out in 360.000000 seconds
* Suggestion: Try "minikube delete", and disable any conflicting VPN or firewall software
* Related issue: https://github.com/kubernetes/minikube/issues/7072

C:\Users\lalit>minikube delete
* Deleting "minikube" in docker ...
! Executing "docker container inspect minikube --format={{.State.Status}}" took an unusually long time: 0.0906632s
* Restarting the docker service may improve performance.
* Removing C:\Users\lalit\minikube\machines\minikube ...
* Removed all traces of the "minikube" cluster.

C:\Users\lalit>minikube start
* minikube v1.30.1 on Microsoft Windows 10 Home Single Language 10.0.18363.1556 Build 18363.1556
* Unable to pick a default driver. Here is what was considered, in preference order:
  - docker: Not healthy: deadline exceeded running "docker version --format {{.Server.Os}}-{{.Server.Version}}:{{.Server.Platform.Name}}": exit status 1
    - docker: Suggestion: Restart the Docker service <https://minikube.sigs.k8s.io/docs/drivers/docker/>
* Alternatively you could install one of these drivers:
  - hyperv: Not installed: C:\WINDOWS\System32\WindowsPowerShell\v1.0\powershell.exe -NoProfile -NonInteractive @(Get-CimInstance Win32_ComputerSystem).HypervisorPresent failed:
C:\WINDOWS\System32\WindowsPowerShell\v1.0\powershell.exe -NoProfile -NonInteractive @(Get-WmiObject Win32_ComputerSystem).HypervisorPresent failed:
    - virtualbox: Not installed: unable to find VBoxManage in $PATH
    - podman: Not installed: exec: "podman": executable file not found in $PATH%
    - qemu2: Not installed: exec: "qemu-system-x86_64": executable file not found in $PATH%

X Exiting due to DRV_DOCKER_NOT_RUNNING: Found docker, but the docker service isn't running. Try restarting the docker service.

C:\Users\lalit>minikube start
* minikube v1.30.1 on Microsoft Windows 10 Home Single Language 10.0.18363.1556 Build 18363.1556
* Unable to pick a default driver. Here is what was considered, in preference order:
  - docker: Not healthy: deadline exceeded running "docker version --format {{.Server.Os}}-{{.Server.Version}}:{{.Server.Platform.Name}}": exit status 1
```

// Tried with following to solve the error :

// WSL package reinstallation

// Docker Desktop Reinstallation

// Docker service Restart etc.