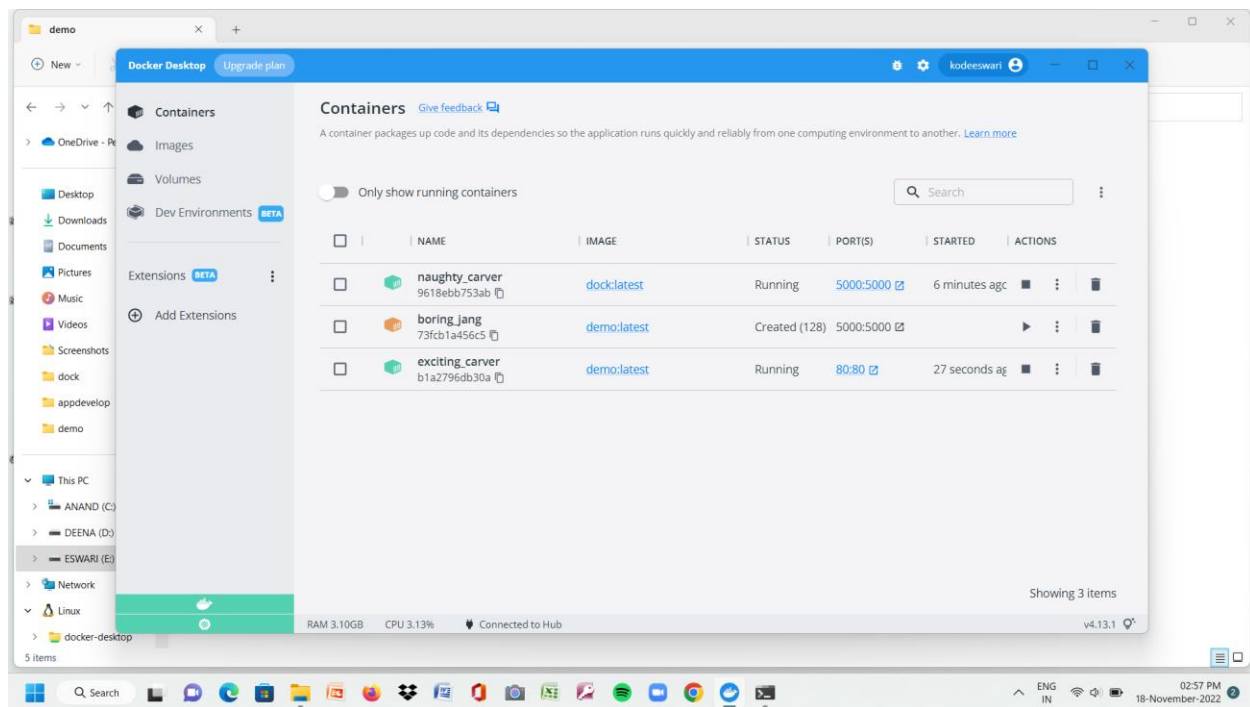


ASSIGNMENT – 4

Student Name	NAGASOWMIYA N
Student Roll Number	913019104014

QUESTION:

- 1.Pull an Image from docker hub and run it in docker playground.
- 2.Create a docker file for the job portal application and deploy it in Docker desktop application.
- 3.Create a IBM container registry and deploy hello world app or job portal app.
- 4.Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.



```
C:\Windows\System32\cmd.exe x + v
Microsoft Windows [Version 10.0.22621.819]
(c) Microsoft Corporation. All rights reserved.

E:\demo>docker build -t demo .
[+] Building 3.6s (14/14) FINISHED
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 32B 0.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> resolve image config for docker.io/docker/dockerfile:1 1.3s
=> CACHED docker-image://docker.io/docker/dockerfile:1@sha256:9ba7531bd88fb0a858632727c7a112fbfd19b17e94c4e84ce 0.0s
=> [internal] load build definition from Dockerfile 0.0s
=> [internal] load .dockerignore 0.0s
=> [internal] load metadata for docker.io/library/python:3.9.6-slim-buster 1.8s
=> [1/5] FROM docker.io/library/python:3.9.6-slim-buster@sha256:28bed4c51c3b531159d8affc0225701ed616a7deacfd9dfb 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 3.68kB 0.0s
=> CACHED [2/5] WORKDIR /app.py 0.0s
=> CACHED [3/5] COPY requirements.txt requirements.txt 0.0s
=> CACHED [4/5] RUN pip3 install -r requirements.txt 0.0s
=> [5/5] COPY . /app.py 0.0s
=> exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:638ae100a1e1dc018960d4be04718b2bf5b7c239a13a885907f4a20dfe525537 0.0s
=> => naming to docker.io/library/demo 0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them

E:\demo>docker run -d -p 5000:5000 demo
73fcb1a456c5eff8c38ef0fbd74be2768a16509bce654cdd64a87158cdb2e38f
docker: Error response from daemon: driver failed programming external connectivity on endpoint boring_jang (d815b734691aca03df36a36793c3d66a863ea31cf6e10bf082ae3b09e39b7684): Bind for 0.0.0.0:5000 failed: port is already allocated.

E:\demo>docker run -d -p 80:80 demo
bla2796db30ace5519faa4001fb82e4dec5842fb57878573d884d8c93351b53d

E:\demo>
```

```
127.0.0.1:8080 x +
< -> 127.0.0.1:8080
Hello World Alerting App!
```

IBM-Project-18105-1659679490

mycluster-free - IBM Cloud

+

cloud.ibm.com/kubernetes/clusters/cdr6ppff0sr4pti47t9g/overview

IBM Cloud

Search resources and products...

Catalog

Manage

KODEESWARI RC's Acc...

Help

Kubernetes dashboard

Actions...

Clusters / mycluster-free

Preparing master, workers... Expires in 30 days Add tags

Overview

Worker nodes

Worker pools

DevOps New

Expires in 30 days:

Be sure to back up your data, your cluster will be deleted in 30 days. To access the full capabilities of the service, try out a standard cluster.

Node status

1 of 1

Pending

Details

Add-on status

0 of 0

Normal

Details

Master status

Unknown

Docs

Ingress status

Pending

Docs

Details

Cluster ID

cdreppff0sr4pti47t9g

Version

1.24.8_1544

Infrastructure

Classic

Zones

Milan 01

Created

11/17/2022, 10:48 PM

Resource group

Image security enforcement

Enable

Node health

Worker node details

Help

Log in to your cluster

Deploy your app

Expose your app

Add storage to your app

Connect integrations

Install add-ons

Troubleshoot

ENG IN

10:50 PM

17-November-2022