

ASSIGNMENT 4


Date	27-10-2022
Student Name	Pradheekshasri A S
Student Roll Number	194023
Maximum Marks	4 Marks

Question 1 :

Pull an Image from docker hub and run it in docker playground.

03:57:32

CLOSE SESSION

Instances  

+ ADD NEW INSTANCE

192.168.0.8
node1

cddvksm0_cddvkvm0qau000a07j5g

IP
192.168.0.8

OPEN PORT

Memory
1.24% (49.52MiB / 3.906GiB)

CPU
0.31%

SSH
ssh ip172-18-0-22-cddvksm0qau000a07j50@direct.labs.pla 

DELETE

 EDITOR

```
#####
#                               #
#      WARNING!!!!             #
# This is a sandbox environment. Using personal credentials   #
# is HIGHLY! discouraged. Any consequences of doing so are   #
# completely the user's responsibilities.                      #
#                                                             #
# The PWD team.                                              #
#####
[node1] (local) root@192.168.0.8 ~
$ docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
[node1] (local) root@192.168.0.8 ~
$ docker run hello-world
```

Activate Windows
Go to Settings to activate Windows

03:57:05

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.8
node1

cddvksm0_cddvkvm0qau000a07j5g

IP
192.168.0.8
OPEN PORT

Memory
1.26% (50.45MiB / 3.906GiB)

CPU
0.39%

SSH
ssh ip172-18-0-22-cddvksm0qau000a07j50@direct.labs.pla

DELETE

EDITOR

2. The Docker daemon pulled the "hello-world" image from the Docker Hub. (amd64)
3. The Docker daemon created a new container from that image which runs the executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
\$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
<https://hub.docker.com/>

For more examples and ideas, visit:
<https://docs.docker.com/get-started/>

[node1] (local) root@192.168.0.8 ~
\$

Activate Windows
Go to Settings to activate Windows

Question 2 :

Create a docker file for the jobportal application and deploy it in Docker desktop application.

Docker File :

```
1 FROM python:3.8-buster
2
3 WORKDIR /app
4
5 COPY requirements.txt /app/
6
7 RUN pip install -r requirements.txt
8
9 COPY . /app/
10
11 RUN cp .env.dev.sample .env
12
13 EXPOSE 8000
14
15 RUN chmod +x entrypoint.sh
16
17 CMD ["sh", "entrypoint.sh"]
```

Deployment :

Containers

Images

Volumes

Dev Environments BETA

Extensions BETA

Add Extensions

Containers [Give feedback](#)

A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. [Learn more](#)

☐ Only show running containers

<input type="checkbox"/>	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	agitated_neumann 918d20882039	icr.io/helloapp/ibm:latest	Exited (137)	49160:8080		
<input type="checkbox"/>	jolly_turing b62c0712bdd3	jobportalapplication:latest	Running	1234:8000	4 minutes ago	

Showing 2 items

RAM 3.06GB CPU 0.57% Connected to Hub

v4.13.0

Output :

Job Board
Find your dream job

[Home](#) [Browse Job](#) [Pages](#) [Blog](#) [Contact](#) [Log in](#) [Post A Job](#)

Popular Search: [Design & Creative](#) [Marketing](#) [Administration](#) [Teaching & Education](#) [Engineering](#) [Software & Web](#) [Telemarketing](#)

Popular Categories

Design & Creative
50 Available position

Marketing
50 Available position

Telemarketing
50 Available position

Software & Web
50 Available position

Administration

Teaching & Education

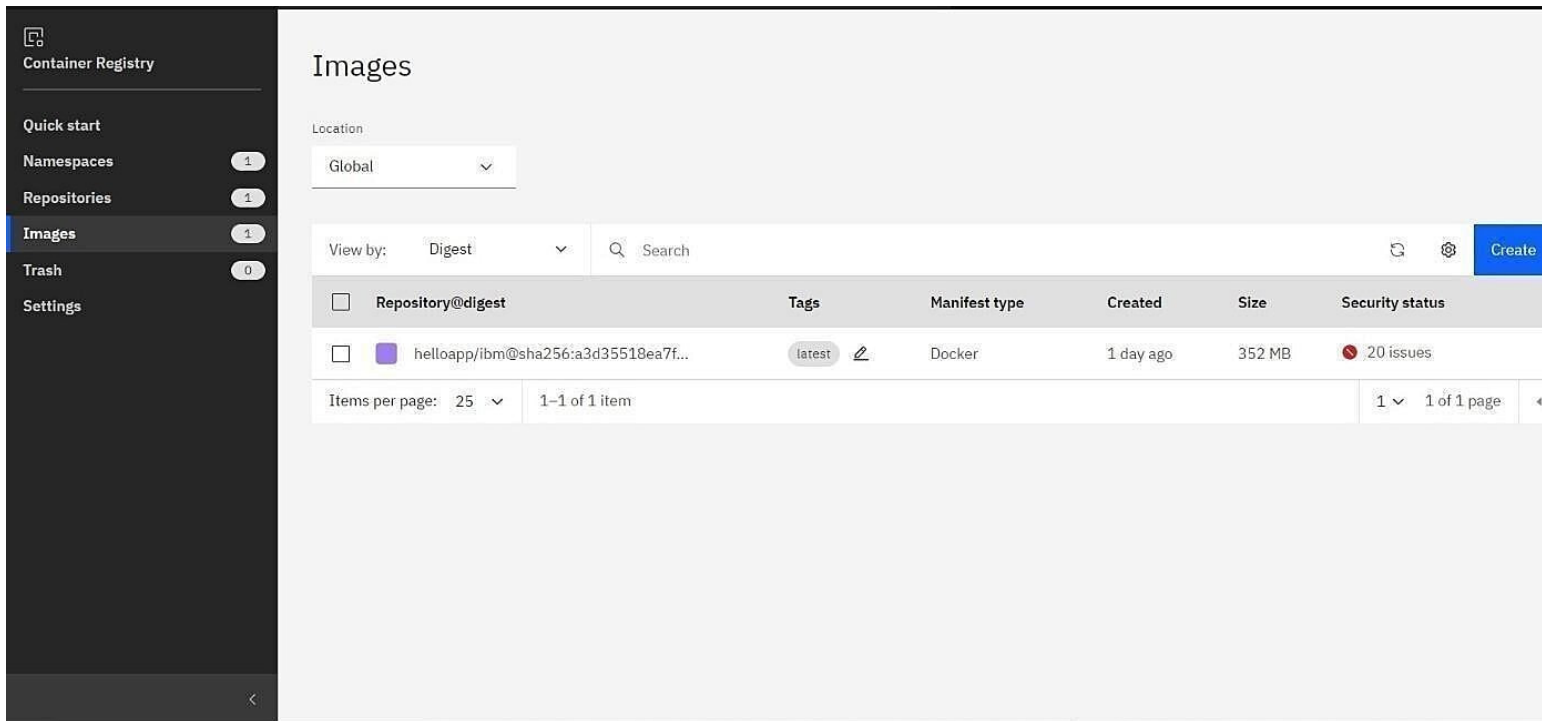
Engineering

Garments / Textile

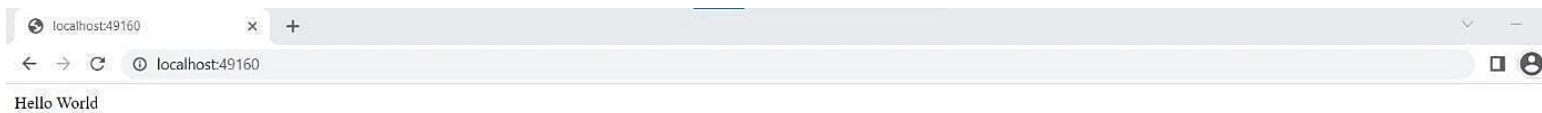
Question 3 :

Create a IBM container registry and deploy helloworld app or jobportalapp.

Container Registry Deployment :



Output :



Question 4 :

Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.

Creating Kubernetes cluster in IBM cloud and exposing node port:

Clusters /

mycluster-free

Normal

Expires in 29 days

Add tags

Help

Kubernetes dashboard

Actions...

Overview

Worker nodes

Worker pools

DevOps New

Pool: Filter...

Search

Name

Status

Worker pool

Zone

Private IP

Public IP

Version

0000008c

Normal

default

Milan 01

10.144.187.51

159.122.179.68

1.23.12_1549

Items per page: 25

1-1 of 1 item

1

1 of 1 page

Output :

File Edit Selection View Go Run ...

Assignment_4

Ln 37, Col 85 Spaces: 2 UTF-8 CRLF HTML

Get Started

app.py

register.html

register_page.html

jobportal.html

jobportal.html

html

body

blockquote.blockquote.text-center

footer.blockquote-footer

cite

```

30 <a class="nav-link" href="/register.html">Register</a>
31 <a class="nav-link" href="/login.html">Login</a>
32 </nav>
33
34 <div class="card">
35 <div class="card-body">
36 <div class="card-text">Find your dream job by using this job portal.</div>
37 <div class="card-text">Below listed jobs are suited for your career.</div>
38 </div>
39 </div>
40 <div class="row">
41 <div class="col-sm-12">
42 <div class="card">
43 <div class="card-body">
44 <div class="card-title">Software Engineer</div>
45 <div class="card-text">Execute full software development life cycle (SDLC).
46 Develop flowcharts, layouts and documentation to identify requirements and soluti
47 </div>
48 </div>
49 </div>
50 <div class="col-sm-12">
51 <div class="card">
52 <div class="card-body">
53 <div class="card-title">Front-End Developer</div>
54 <div class="card-text">Optimizing the user experience.
55 Using HTML, JavaScript and CSS to bring concepts to life.
56 </div>
57 <div class="card-text"><a href="{{url_for('register')}}" class="btn btn-primary">Submit</a>
58 </div>
59 </div>
60 </div>

```

PROBLEMS OUTPUT TERMINAL JUPYTER COMMENTS DEBUG CONSOLE

ItemCommand

PS D:\study\sem_7\nallaya_thiran_works\Assignment\Team Lead\Assignment_4>

Job Portal

Register p

Cards

Bo

Typograp

File

D:\study\sem_7\nall...

Search

Home

Star

Share

Print

Fullscreen

Job Portal

Login Page

Find your dream job by using this job portal.

Below listed jobs are suited for your career.

Software Engineer

Execute full software development life cycle (SDLC). Develop flowcharts, layouts and documentation to identify requirements and solutions.

Submit

Front-end Developer

Optimizing the user experience. Using HTML, JavaScript and CSS to bring concepts to life.

Submit

Special title treatment

A data analyst collects and stores data on sales numbers, market research, logistics, or other behaviors.

Submit

Java Developer

A Java Developer is responsible for planning, designing, developing, and managing Java-based applications and software.

Submit

Business Analyst

Business analysts assess how organizations are performing and help them improve their processes and systems.

Submit

Python Developer

Python Developer is responsible for coding, designing, developing, and debugging development projects.

Submit

Back-End Developer

Backend developers are responsible for developing the server-side logic and database of an application.

Submit

Product Manager

A product manager is the person who identifies the customer need and the larger business objectives that a product or feature will fulfill.

Submit