

Assignment - 4

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:e18f0a77aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
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.

2) Create a docker file for the job portal 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"]
```

The screenshot displays the IBM Cloud Container Registry interface. On the left, a sidebar shows navigation options: Container Registry, Quick start, Namespaces (1), Repositories (1), Images (1), Trash (0), and Settings. The main content area is titled 'Namespaces' and shows a 'Global' location filter. Below this, there's a search bar and a 'Create' button. A table lists the namespaces:

<input type="checkbox"/>	Name	Resource group	Repository count	Image count	Retention policy	
<input type="checkbox"/>	plasma	Default	1	1	Retain all images	<input type="checkbox"/>

At the bottom of the table, there are controls for 'Items per page' (set to 25) and '1-1 of 1 item'. Pagination controls show '1 of 1 page' with navigation arrows.

← → ↺ 🏠 cloud.ibm.com/registry/images

☰ IBM Cloud

Container Registry

Quick start

Namespaces 1

Repositories 1

Images 1

Trash 0

Settings

Search resources and products...

Catalog Manage PRITHIVI RAJ V's Acco...




🔍 ⌵ 🔔 👤

Images

Location

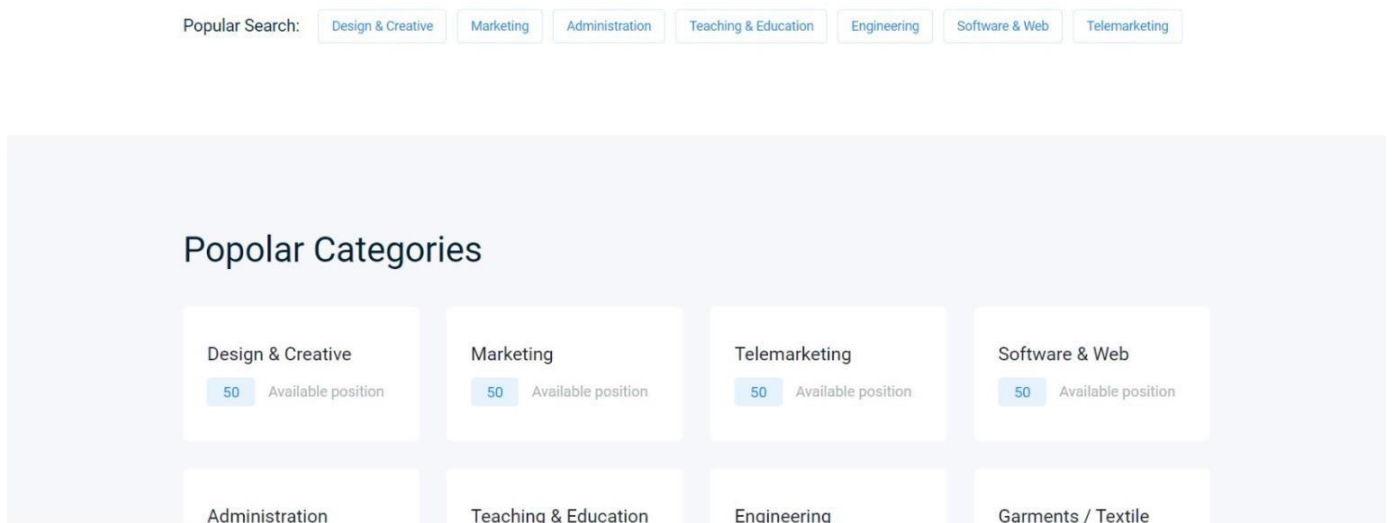
Global

View by: Digest 🔽 🔍 Search 🔁 ⚙️ Create +

<input type="checkbox"/> Repository@digest	Tags	Manifest type	Created	Size	Security status
<input type="checkbox"/>  plasma/gokulap/plasma-donor-app@sha256:b8a6ab6b8680...	v1 	Docker	2 days ago	435 MB	 102 issues ⋮

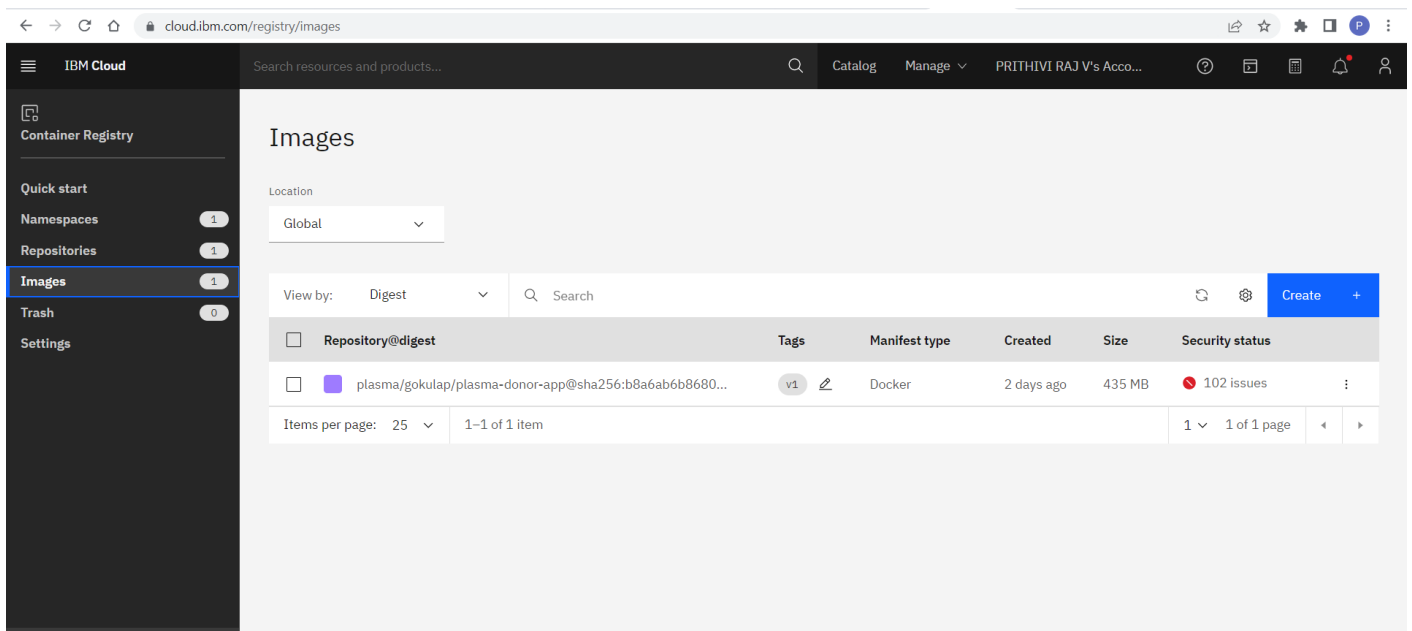
Items per page: 25 🔽 1-1 of 1 item 1 🔽 1 of 1 page 🔽 🔽 🔽

OUTPUT:

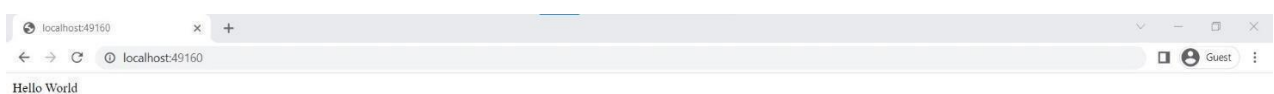


3) Create a IBM container registry and deploy hello-world app or job portal app.IBM

CONTAINER REGISTRY DEPLOYMENT:

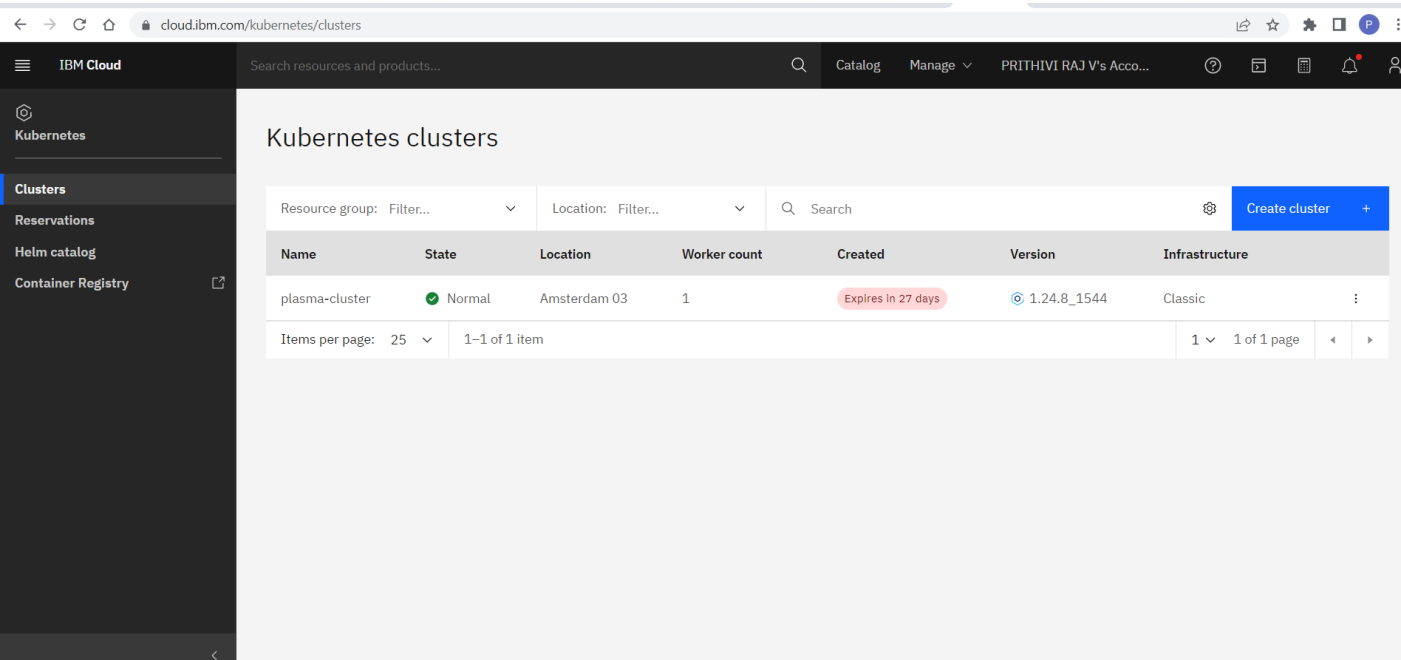


OUTPUT:



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.

Creating Kubernetes cluster in IBM cloud and exposing node port:



Output:

Job Finder

Login Page

Find your dream job by using this Job portal.
— Below listed jobs are suited for your career

Software Engineer

Enroute 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, linguistics, 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 organisations are performing and help them improve their processes and systems.

Submit

Python Developer

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

Submit

Back-End Developer

compile and analyze data, processes, and codes to troubleshoot problems and identify areas for improvement.

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

