

ASSIGNMENT 4

NAME: D.SINDHU

REGISTER NUMBER: 311519104056

PROJECT TOPIC: CUSTOMER CARE REGISTRY

COLLEGE NAME: MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE

TEAM NUMBER: PNT2022TMID27825

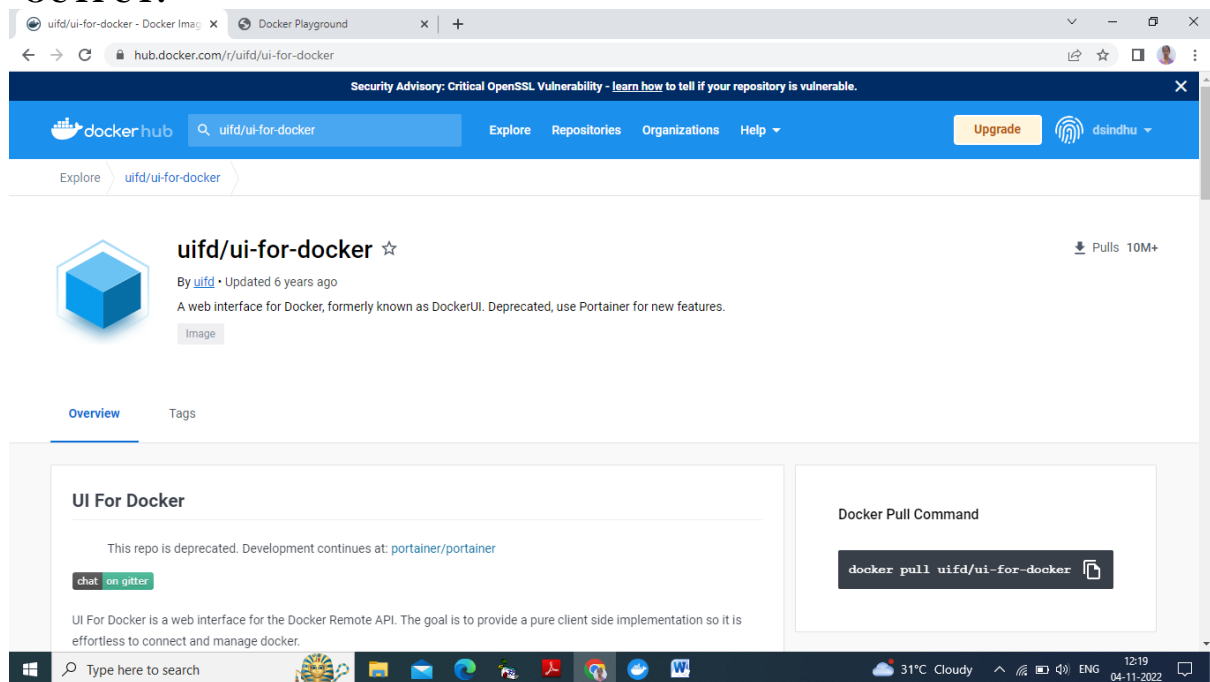
1)PULL AN IMAGE FROM DOCKER HUB AND RUN IT IN DOCKER BACKGROUND

COMMANDS:

```
docker pull uifd/ui-for-docker
```

```
docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock  
uifd/ui-for-docker
```

OUTPUT:



uifd/ui-for-docker - Docker Images x Docker Playground x UI For Docker x +

hub.docker.com/r/uifd/ui-for-docker

UI For Docker

This repo is deprecated. Development continues at: [portainer/portainer](#)

[chat](#) [on gitter](#)

UI For Docker is a web interface for the Docker Remote API. The goal is to provide a pure client side implementation so it is effortless to connect and manage docker.

Goals

- Minimal dependencies - I really want to keep this project a pure html/js app.
- Consistency - The web UI should be consistent with the commands found on the docker CLI.

Quickstart

- Run: `docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker`
- Open your browser to `http://<dockerd host ip>:9000`

Bind mounting the Unix socket into the UI For Docker container is much more secure than exposing your docker daemon over TCP. The `--privileged` flag is required for hosts using SELinux. You should still secure your UI For Docker instance behind some type of auth. Directions for using Nginx auth are [here](#).

Specify socket to connect to Docker daemon

By default UI For Docker connects to the Docker daemon with `/var/run/docker.sock`. For this to work you need to bind mount the unix socket into the container with `-v /var/run/docker.sock:/var/run/docker.sock`.

Docker Pull Command

```
docker pull uifd/ui-for-docker
```

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uifd/ui-for-docker - Docker Images x Docker Playground x UI For Docker x +

labs.play-with-docker.com/p/cdibb6f91rrg00ckd7q0#cdibb6f9_cdibbae0qau000ej30kg

03:49:26

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.28
node1

192.168.0.27
node2

cdibb6f9_cdibbae0qau000ej30kg

IP

192.168.0.27

OPEN PORT

9000

Memory

1.72% (68.75MiB / 3.906GiB)

CPU

0.79%

SSH

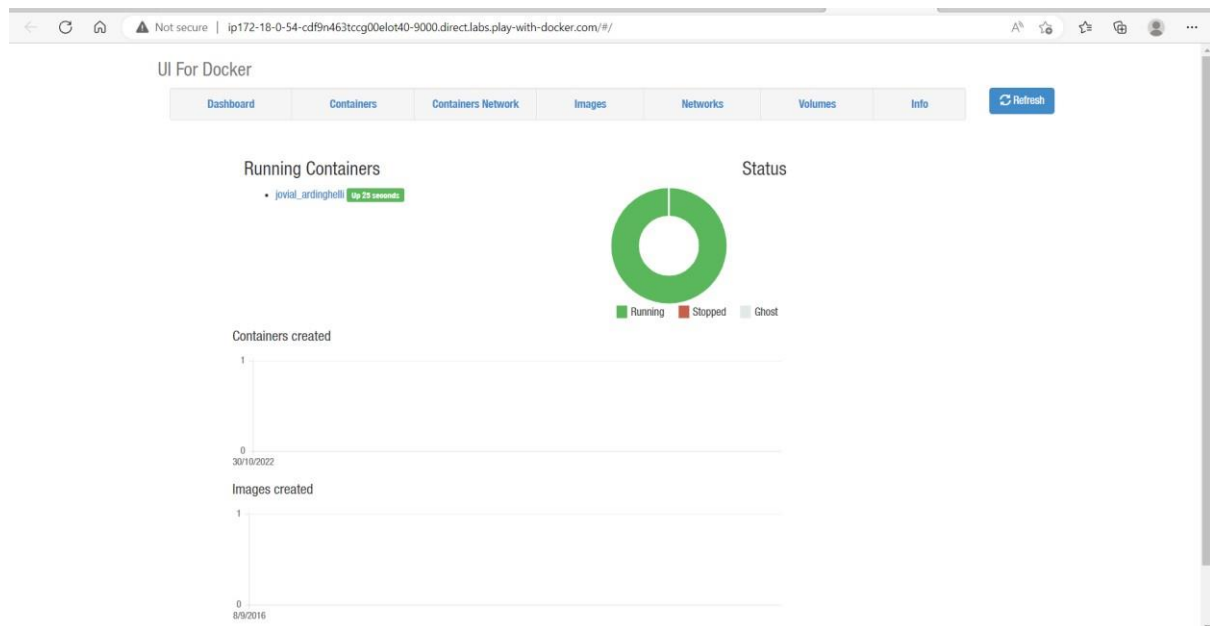
ssh ip172-18-0-20-cdibb6f91rrg00ckd7q0@direct.labs.play-i

DELETE

EDITOR

```
# 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. #
#####
[node2] (local) root@192.168.0.27 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080c8: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
[node2] (local) root@192.168.0.27 ~
$ docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
926ee0c0017213a10987122c7f5dd8f656212488e17f8ce4bc9c16f9137185ff
[node2] (local) root@192.168.0.27 ~
$
```

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2)CREATE A DOCKER FILE FOR THE JOB PORTAL APPLICATION AND DEPLOY IT IN DOCKER DESKTOP APPLICATION.

COMMANDS:

```
docker build -t jp1 .
```

```
docker run -p 5000:5000 jp1
```

OUTPUT:

```
[*] Building 301.5% (11/11) FINISHED
-> [internal] load build definition from Dockerfile
=> [internal] load dockerfile: 320
=> [internal] load .dockerignore
=> [internal] load context: 20
=> [internal] load metadata for docker.io/library/python:3.10
=> [internal] load build context
=> [internal] transferring context: 11.22kB
=> [1/6] FROM docker.io/library/python:3.10@sha256:a186f37cf8d8a8d8d8c379e556f6ac67475d4a5ab95efcad1884952b05
=> CACHED [2/6] WORKDIR /app
=> [3/6] ADD . /app
=> [4/6] COPY requirements.txt /app
=> [5/6] RUN python -m pip install -r requirements.txt
=> [6/6] RUN python -m pip install lm_db
=> exporting to image
=> exporting layers
=> writing image sha256:1db3da07c8d67979eedab8435e9cd79a4ad3e2d9519c8b512413654f69f8a473
=> naming to docker.io/library/jp1
Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
```

```
* Running on http://172.0.0.1:5000
* Running on http://172.17.0.2:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PID: 917-176-492
172.17.0.1 - - [30/Oct/2022 16:07:26] "GET / HTTP/1.1" 404 -
172.17.0.1 - - [30/Oct/2022 16:07:31] "GET /register HTTP/1.1" 200 -
172.17.0.1 - - [30/Oct/2022 16:10:30] "GET /register HTTP/1.1" 200 -
```

← → ↻ ⓘ localhost:5000

NAME

EMAIL

PHONE NUMBER

submit

Service Details - IBM Cloud × IBM Db2 on Cloud × +

← → ↻ bpe61bfd0365e9u4psdglite.db2.cloud.ibm.com/cn%3Av1%3Abluemix%3Apublic%3Adashdb-for-transactions%3Aus-south%3Aa%2F597a38cada124e10bf6b65acb... ⓘ ⌵ ☆ 🗖 👤 ⋮

IBM Db2 on Cloud 🔔 👤

⋮ Load Data Load History **Tables** Views Indexes Aliases MQTs Sequences Application objects

📈

SQL

🗑

🔍

📄

🔗

📄

💡

RNG73403.REGISTER

Back

🗑

Export to CSV

⬇

NAME	EMAIL	PHONE
abc	abc@gmail.com	8908765869
jack	jack@gmail.com	7098643212
sindhu	sindhu@gmail.com	9087659889

📄 ASSIGNMENT1.pdf ⬆

Show all ×

🪟 🔍 Type here to search

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🌧 Rain to stop ⬆ 📶 🔊 🔊 ENG 20:27 02-11-2022 🗨



Docker Desktop

Upgrade plan

Sign in

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](#)

Showing 6 items

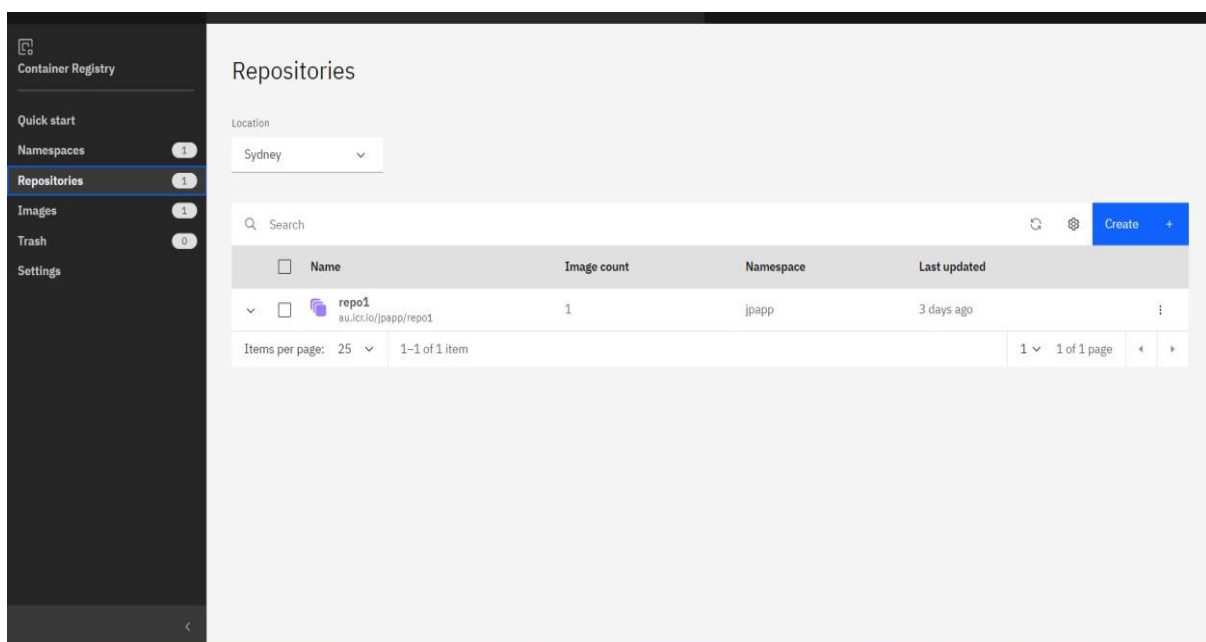
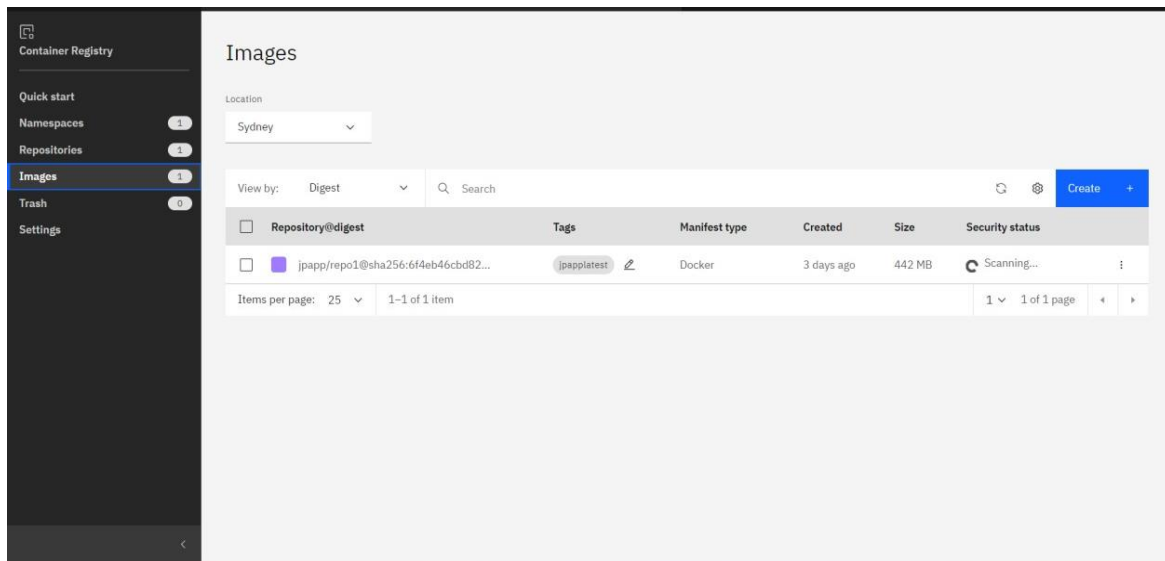
Search

	NAME ↑	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
<input type="checkbox"/>	<div>funny_mayer</div> <div>9b298c33697a</div>	portal1:latest	Exited	5000		<div>▶ ⋮ 🗑</div>
<input type="checkbox"/>	<div>dazzling_albattani</div> <div>015af080718a</div>	portal1:latest	Exited	4000		<div>▶ ⋮ 🗑</div>
<input type="checkbox"/>	<div>dazzling_chatelet</div> <div>2729f894c7ec</div>	port:latest	Exited	8080		<div>▶ ⋮ 🗑</div>
<input type="checkbox"/>	<div>unruffled_mccarthy</div> <div>4e37cbb544d4</div>	app:latest	Exited	8080		<div>▶ ⋮ 🗑</div>
<input type="checkbox"/>	<div>vibrant_nobel</div> <div>fc787277abf9</div>	jp:latest	Exited	5000		<div>▶ ⋮ 🗑</div>
<input type="checkbox"/>	<div>happy_ramanujan</div> <div>ba74a85959f2</div>	jp1:latest	Running	5000	10 minutes ag	<div>■ ⋮ 🗑</div>

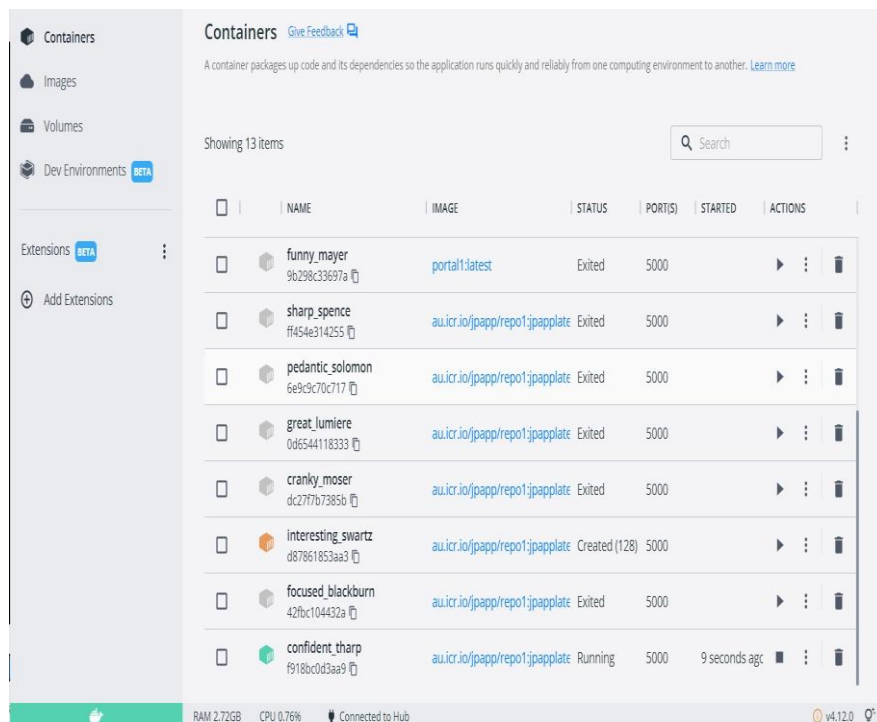
RAM 5.64GB CPU 0.81% Not connected to Hub

v4.12.0

3)CREATE AN IBM CONTAINER REGISTRY AND DEPLOY HELLOWORLD APP OR JOBPORTAL APP



```
Using default tag: latest
The push refers to repository [au.icr.io/jpapp/repo1]
348973eaa72c: Layer already exists
875c3fdf2253: Layer already exists
76025884cfd0: Layer already exists
f2939f19badd: Layer already exists
aec753ddd83a: Layer already exists
f5d161bba139: Layer already exists
1569e0d95ce6: Layer already exists
49e08da15d0c: Layer already exists
6b183c62e3d7: Layer already exists
882fd36bfd35: Layer already exists
d1dec9917839: Layer already exists
438adf39e1dd: Layer already exists
4ed121b04368: Layer already exists
49d07d703dd5: Layer already exists
latest: digest: sha256:6f4eb46cbd82b126771051a7915c8f41324c611a97857a6a82a9f450c25ec7f0 size: 3259
```



←
→
↺
ⓘ localhost:5000

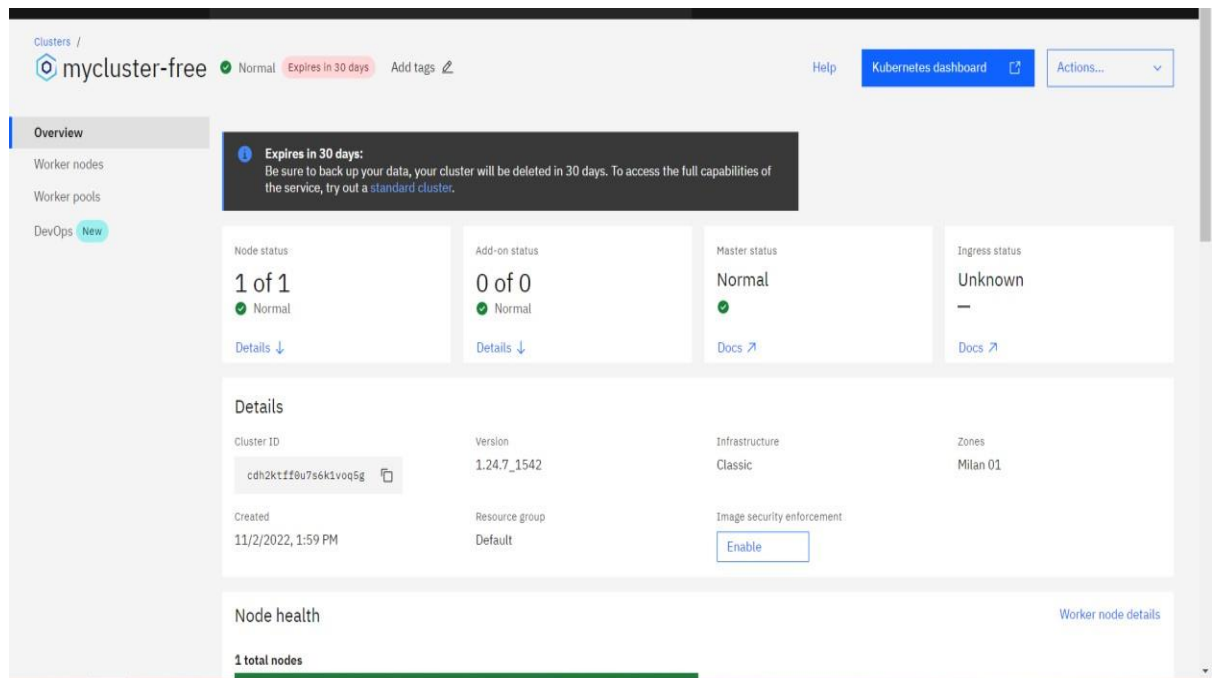
NAME

EMAIL

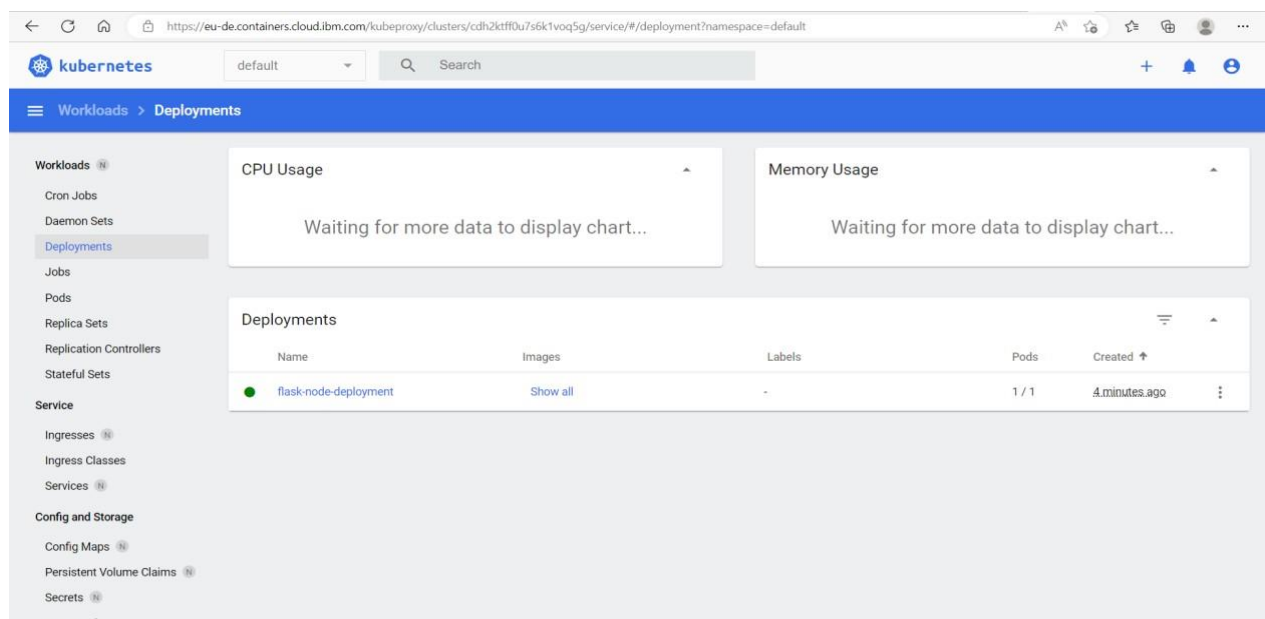
PHONE NUMBER

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 A NODEPORT.

KUBERNETES CLUSTER CREATION:



DEPLOYMENT OF JOB PORTAL APP IN CLUSTER



← ↻ 🔍 <https://eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cdh2kttf0u7s6k1voq5g/service/#/pod?namespace=default> 🔍 Search + 🔔 👤

kubernetes default

Workloads > Pods

Workloads ⓘ

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods**
- Replica Sets
- Replication Controllers
- Stateful Sets

CPU Usage

Waiting for more data to display chart...

Memory Usage

Waiting for more data to display chart...

Pods

Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created ↑
flask-node-deployment-6dc44fd548-mzkb2	Show all	Show all	10.144.212.24	Running	0	3.00m	55.80Mi	4 minutes ago

← ↻ 🔍 <https://eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cdh2kttf0u7s6k1voq5g/service/#/pod?namespace=default> 🔍 Search + 🔔 👤

kubernetes default

Workloads > Pods

Workloads ⓘ

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods**
- Replica Sets
- Replication Controllers
- Stateful Sets

CPU Usage

Waiting for more data to display chart...

Memory Usage

Waiting for more data to display chart...

Pods

Name	Images	Labels	Node	Status	Restarts	CPU Usage (cores)	Memory Usage (bytes)	Created ↑
flask-node-deployment-6dc44fd548-mzkb2	au.icr.io/jpapp/repo1 Show less	app: jobapp pod-template-hash: 6dc44fd548 Show less	10.144.212.24	Running	0	3.00m	55.80Mi	6 minutes ago

← ↻ 🔍 <https://eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cdh2kttf0u7s6k1voq5g/service/#/replicaset?namespace=default> 🔍 Search + 🔔 👤

kubernetes default

Workloads > Replica Sets

Workloads ⓘ

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Replica Sets**
- Replication Controllers
- Stateful Sets

CPU Usage

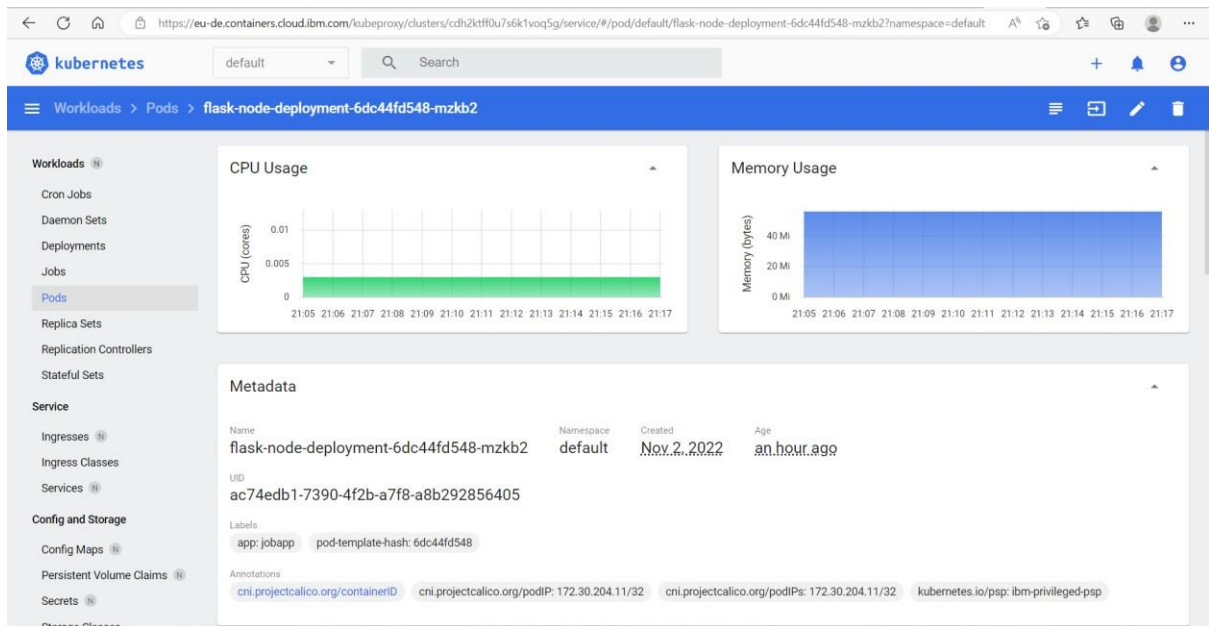
Waiting for more data to display chart...

Memory Usage

Waiting for more data to display chart...

Replica Sets

Name	Images	Labels	Pods	Created ↑
flask-node-deployment-6dc44fd548	Show all	Show all	1 / 1	5 minutes ago



```
Name: flask-node-deployment
Namespace: default
Labels: <none>
Annotations: <none>
Selector: app=flasknode
Type: ClusterIP
IP Family Policy: SingleStack
IP Families: IPv4
IP: 172.21.233.153
IPs: 172.21.233.153
Port: <unset> 5000/TCP
TargetPort: 5000/TCP
Endpoints: <none>
Session Affinity: None
Events: <none>
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
flask-node-deployment	ClusterIP	172.21.233.153	<none>	5000/TCP	68m
kubernetes	ClusterIP	172.21.0.1	<none>	443/TCP	6h58m

```
NAME: flask-node-deployment
Namespace: default
Labels: <none>
Annotations: <none>
Selector: app=jobapp
Type: ClusterIP
IP Family Policy: SingleStack
IP Families: IPv4
IP: 172.21.30.184
IPs: 172.21.30.184
Port: <unset> 80/TCP
TargetPort: 8008/TCP
Endpoints: 172.30.204.11:8008
Session Affinity: None
Events: <none>
```

EXPOSE APP TO NODEPORT:

```
Name: flask
Namespace: default
Labels: <none>
Annotations: <none>
Selector: app=jobapp
Type: NodePort
IP Family Policy: SingleStack
IP Families: IPv4
IP: 172.21.15.156
IPs: 172.21.15.156
Port: <unset> 80/TCP
TargetPort: 8008/TCP
NodePort: <unset> 32153/TCP
Endpoints: 172.30.204.11:8008
Session Affinity: None
External Traffic Policy: Cluster
Events: <none>
```

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](#)

Showing 45 items

Search

	NAME	IMAGE	STATUS	PORT(S)	STARTED	ACTIONS
	k8s_POD_portal_default_84a78d0a-eb49-4a02-853312f4fe4ffca	k8s.gcr.io/pause:3.8	Running	-	5 hours ago	
	jobapp695da01804c5	au.icr.io/jpapp/repo1:jpapplatest	Running	-	5 hours ago	
	k8s_POD_jp-pod_default_1bbb42cf-fa25-4bfe-84976ec649be0711	k8s.gcr.io/pause:3.8	Running	-	5 hours ago	
	k8s_jp-pod_jp-pod_default_1bbb42cf-fa25-4bfe-844eabb3e989ee	au.icr.io/jpapp/repo1:jpapplatest	Running	-	5 hours ago	
	k8s_storage-provisioner_storage-provisioner_kub5113de3496a2	docker/desktop-storage-provisioner:v2.0	Running	-	4 hours ago	
	k8s_kube-scheduler_kube-scheduler-docker-deskc9516595856d	k8s.gcr.io/kube-scheduler:v1.25.0	Exited (1)	-		
	k8s_POD_flask-node-deployment-67ffc9fb5-mntjl0a56ba6ae04e	k8s.gcr.io/pause:3.8	Running	-	3 hours ago	
	k8s_POD_kubernetes-dashboard-66c887759-nq9;b3a531c06c0f	k8s.gcr.io/pause:3.8	Running	-	3 hours ago	
	k8s_POD_dashboard-metrics-scraper-64bcc67c9c-b8e854425167	k8s.gcr.io/pause:3.8	Running	-	3 hours ago	
	k8s_dashboard-metrics-erranan_dashboard-metri					

RAM 5.89GB CPU 45.83% Connected to Hub v4.12.0