ASSIGNMENT - 4

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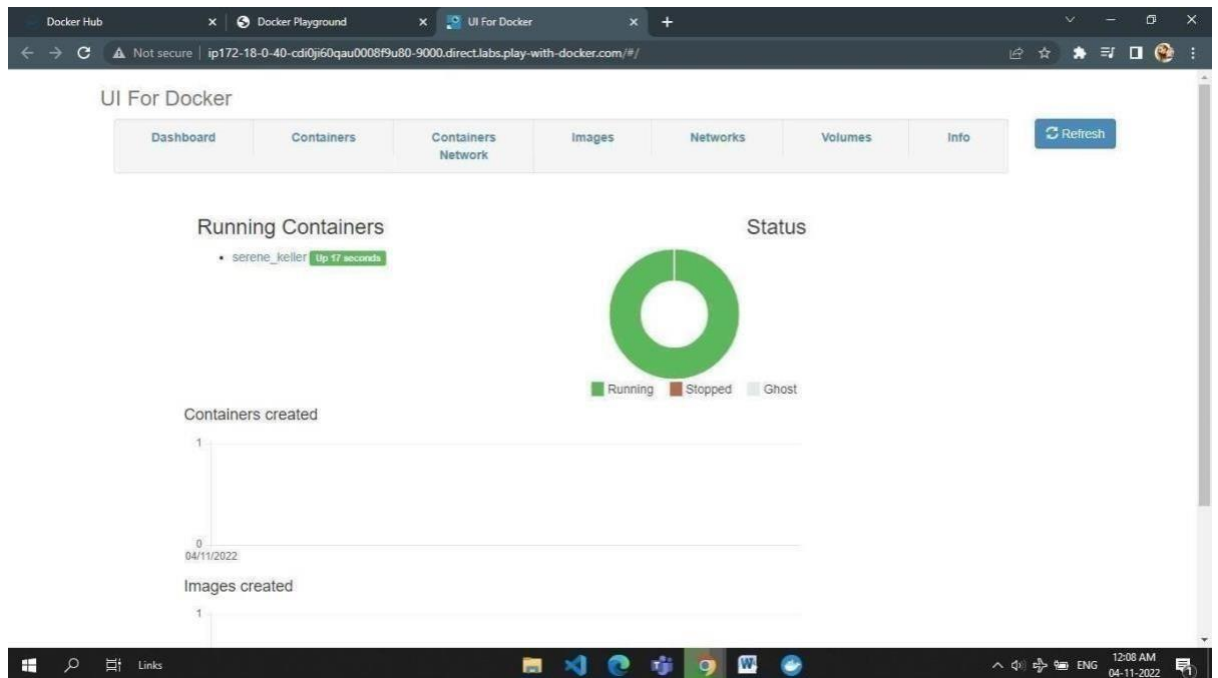**1:** Pull an image from docker hub and run it on docker playground.

Solution 1:

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

2: Create a docker file for the job portal app or hello world app and deploy it in docker desktop app. **Solution 2:**

Docker file


```
Dockerfile - Notepad
File  Edit  Format  View  Help
FROM python:3.8
WORKDIR /app
ADD . /app
COPY requirements.txt /app
RUN python3 -m pip install -r requirements.txt
EXPOSE 5000
CMD ["python","app.py"]
```
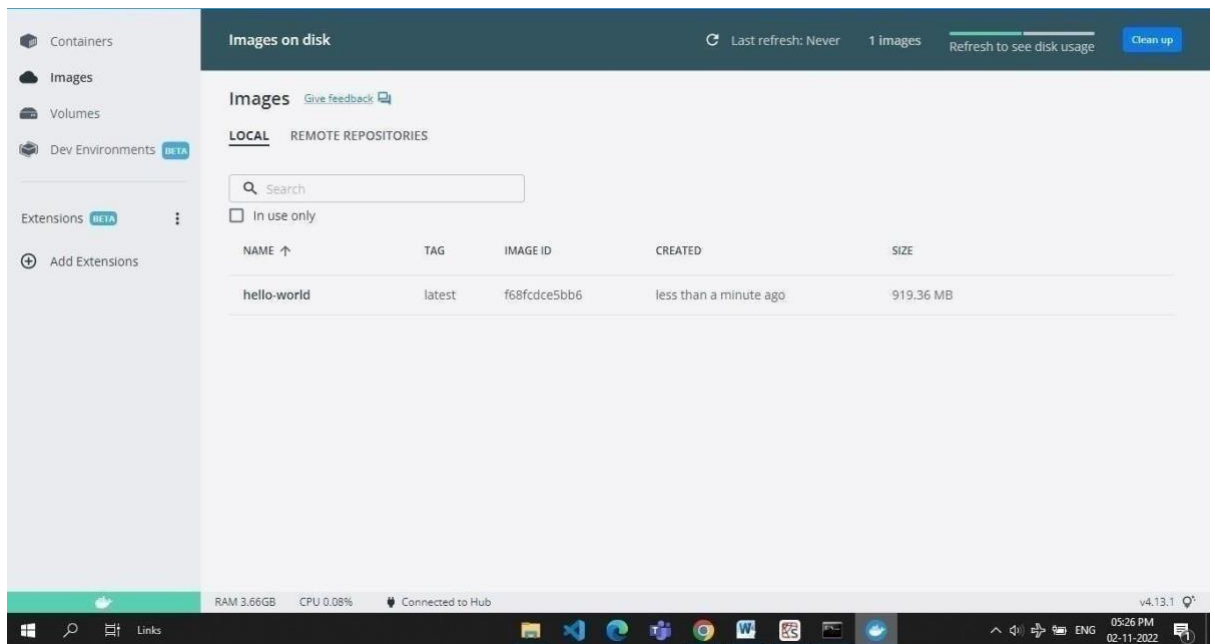
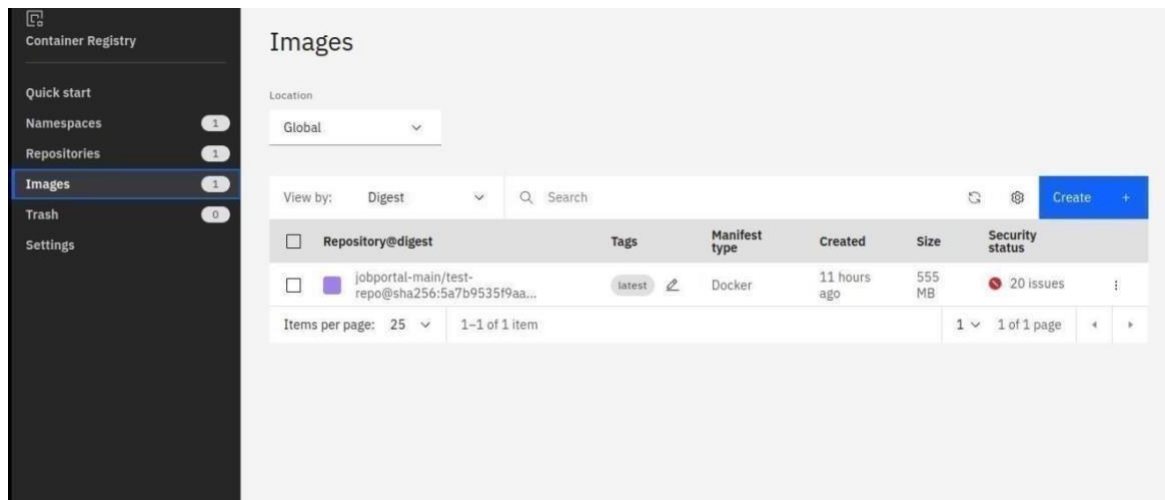**3:**Create an IBM container registry and deploy helloworld app or job portal app.

Solution 3:
  My image link: au.icr.io/hello-world-app/hello-world

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.

Solution 4:

```
apiVersion: v1 kind:
Service metadata: name: helloworld-  deployment
  spec: ports:
    - port:
    5000 targetPort:
  5000 selector: app:
  hello-world  ---
  apiVersion: apps/v1
  kind:  Deployment
  metadata:   name:
  hello-world-
  deployment spec:
     replic as: 1 select or:
       matchLabels: app:  helloworld
     template: meta da ta :
       la be ls : app:
       hello- world
       spec:  containers:
         - name: hello-world image:
           au.icr.io/helloworldapp/helloworld
           imagePullPolicy: Always ports:
         - containerPort: 5000
```

Clusters /

mycluster-free ● Normal | Expires in 29 days | Add tags ✎

Help | **Kubernetes dashboard** ☐ | Actions... ⌄

Overview
Worker nodes
Worker pools
DevOps New

ⓘ **Expires in 29 days:**
Be sure to back up your data, your cluster will be deleted in 29 days. To access the full capabilities of the service, try out a standard cluster.

Node status
1 of 1
● Normal
Details ↓

Add-on status
0 of 0
● Normal
Details ↓

Master status
Normal
●
Docs ↗

Ingress status
Unknown
—
Docs ↗

Details

Cluster ID
cdi1j33f0a6mchav5kig ⧉

Version
1.24.7_1542

Infrastructure
Classic

Zones
Milan 01

Created
04/11/2022, 01:12

Resource group
Default

Image security enforcement
Enable

⊞ ⌕ ☐ Links | 01:37 PM 04-11-2022 ENG

❀ **kubernetes** | default ⌄ | ⌕ Search | + 🔔 👤

≡ Workloads > Pods > hello-world-deployment-6c75b9c898-p4ntv > **Logs**

Workloads ⓝ
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets

Service
Ingresses ⓝ
Ingress Classes
Services ⓝ

Config and Storage

Logs from hello-world ⌄ in hello-world-dep... ⌄ ⤓

```
* Serving Flask app 'app'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://172.30.82.142:5000
Press CTRL+C to quit
```

Logs from Nov 4, 2022 to Nov 4, 2022 UTC | |< < >

eu-de.containers.cloud.ibm.com/kubeproxy/clusters/cdi1j33f0a6mchav5kig/.../ser...

⊞ ⌕ ☐ Links | 03:49 PM 04-11-2022 ENG