

ASSIGNMENT - 4

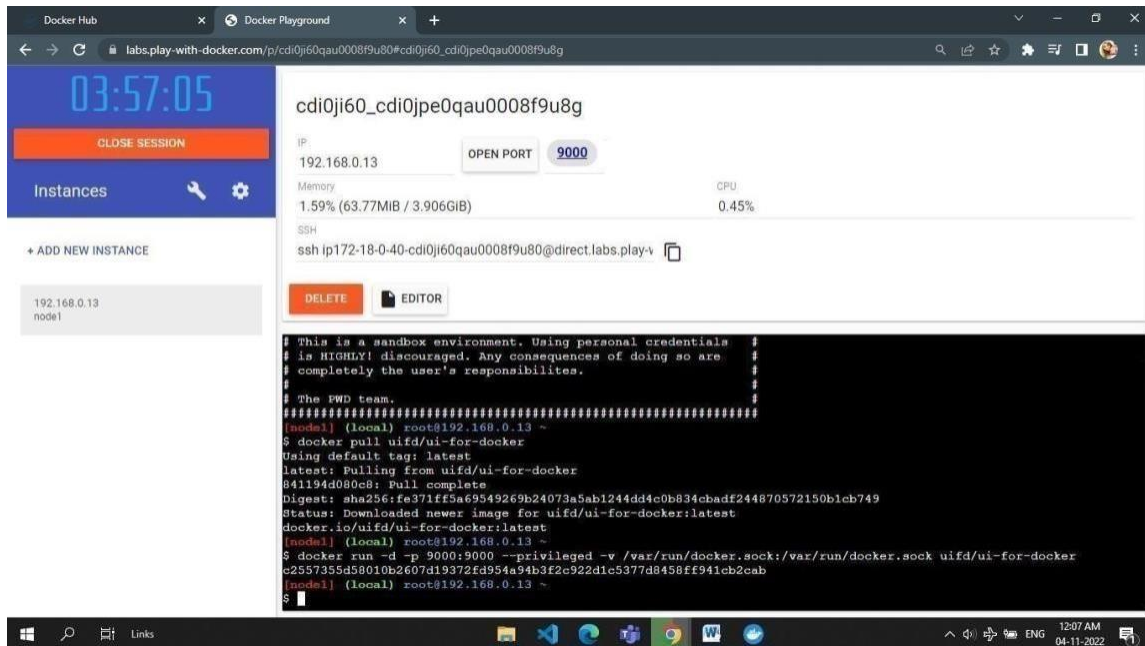
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1: Pull an image from docker hub and run it on docker playground.

Solution 1:

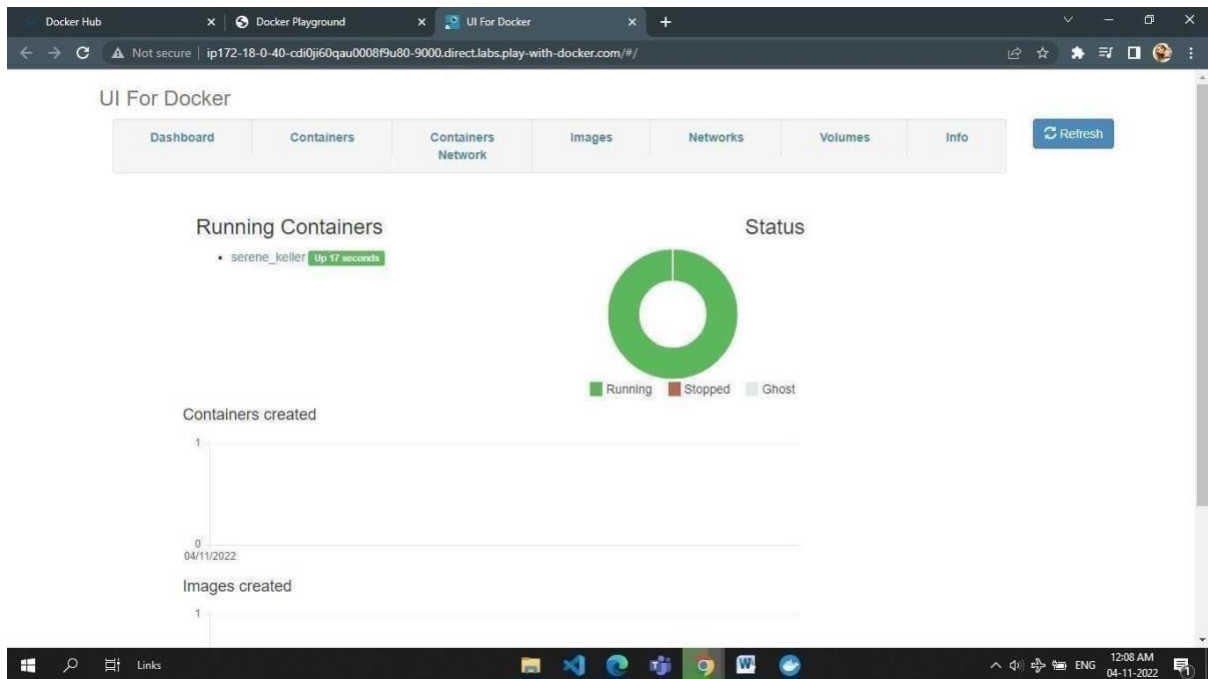
docker pull uifd/ui-for-docker

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



The screenshot displays the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:57:05, a 'CLOSE SESSION' button, and an 'Instances' section. The main area shows a container named 'cdi0ji60_cdi0jpe0qau0008f9u8g' with IP 192.168.0.13 and port 9000. Below this, there's a terminal window showing the following commands and output:

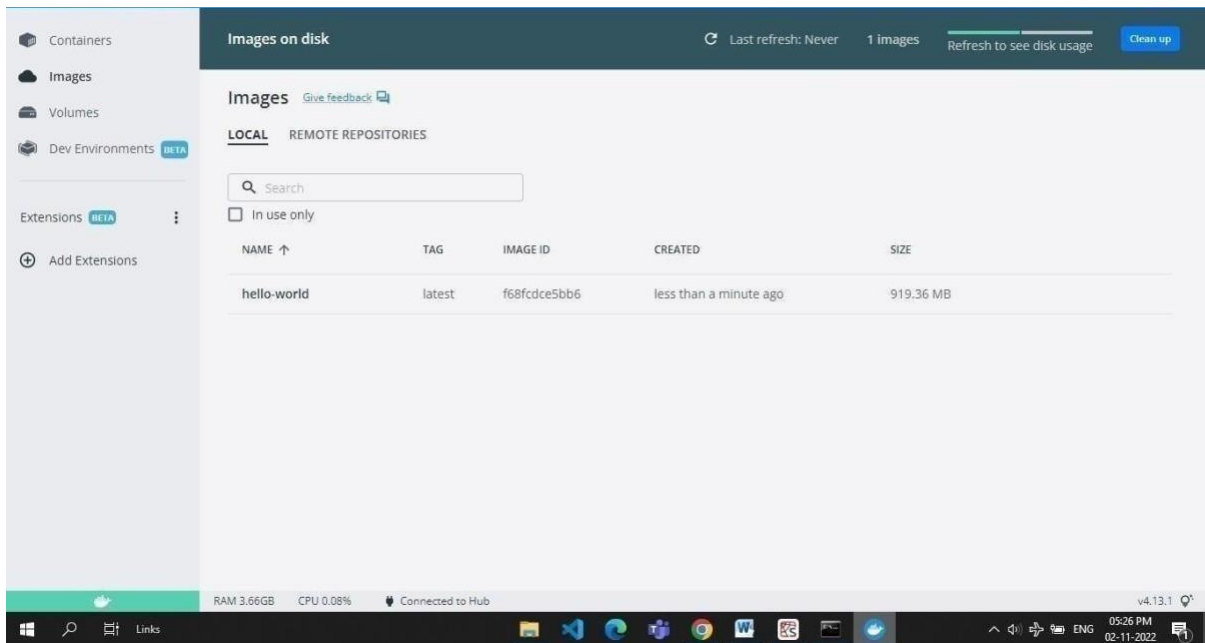
```
[model] (local) root@192.168.0.13 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
641194d000e8: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
[model] (local) root@192.168.0.13 ~
$ docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
c2557355d58010b2607d19372fd954a94b3f2c922d1c5377d8458ff941cb2cab
[model] (local) root@192.168.0.13 ~
$
```



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

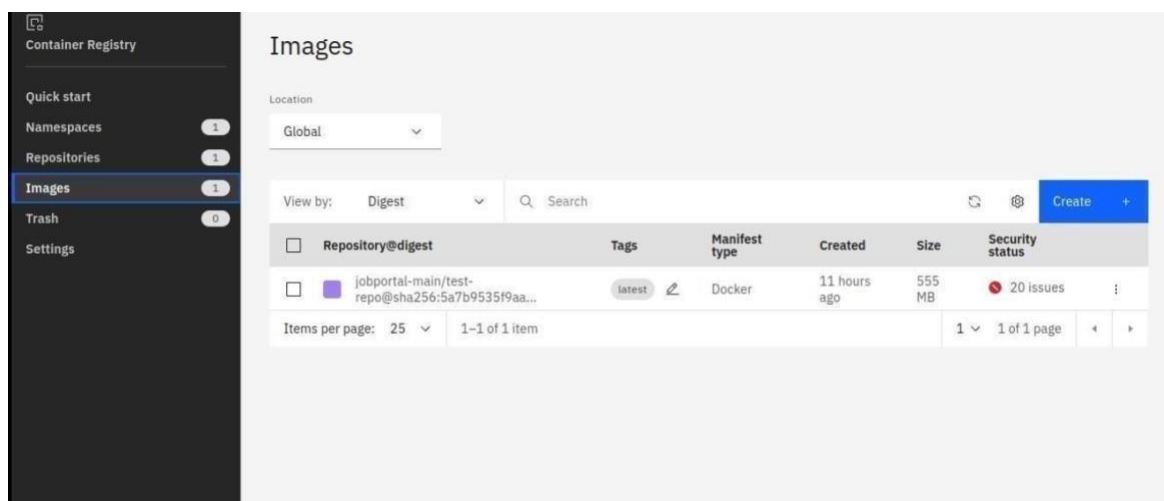
```
Dockerfile - Notepad
File Edit Format View Help
FROM python:3.8
WORKDIR /app
ADD . /app
COPY requirements.txt /app
RUN python3 -m pip install -r requirements.txt
EXPOSE 5000
CMD ["python", "app.py"]
```



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: hello-
world-
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/hello-
worldapp/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	Version	Infrastructure	Zones
cd11j33f9a6mchav5k1g	1.24.7_1542	Classic	Milan 01
Created	Resource group	Image security enforcement	
04/11/2022, 01:12	Default	Enable	

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