

## ASSIGNMENT -4

### Question 1:

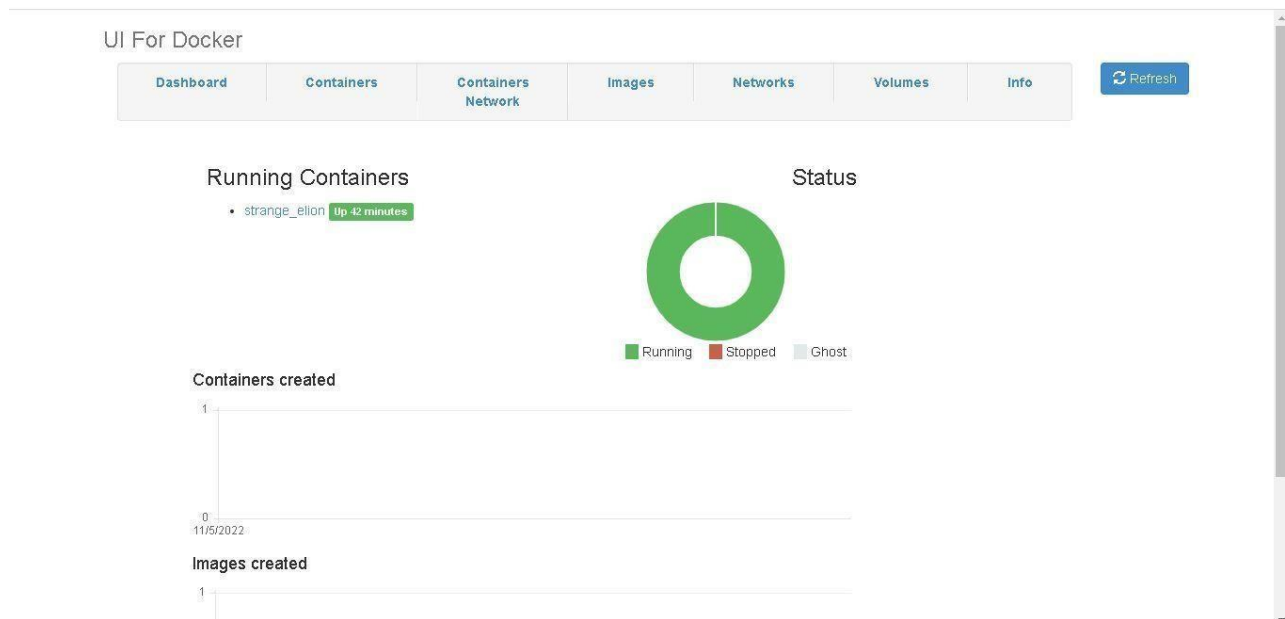
Pull an image from Docker hub and run it on Docker playground.

\$ Docker pull uifd/ui-for-Docker

The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:07:57, a 'CLOSE SESSION' button, and a list of instances. The main area displays the details of an instance named 'cdiuhke3\_cdiv58u0qau000fq8s90'. It shows the IP address 192.168.0.27, memory usage at 1.67%, and CPU usage at 1.10%. Below this, there's a terminal window with the following commands and output:

```
#####  
# 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.  
#####  
[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:fc371ff5a69549269b24073a5ab1244d4c0b834cbadf244870572150b1cb749  
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  
3fb615c8dc211fd99a815cc3f88220511ff77f8c7b4a5511ee6ca70209e635a  
[node2] (local) root@192.168.0.27 ~  
$
```

An 'Activate Windows' watermark is visible in the bottom right corner of the terminal window.



## Question 2:

Create a Docker file for the job portal app or hello world app and deploy it in Docker desktop app.

dockers - 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"]

Containers

Images

Volumes

Dev Environments BETA

Extensions BETA

Add Extensions

Images on disk

Last refresh: Never 1 Images Refresh to see disk usage Clean up

Images [Give feedback](#)

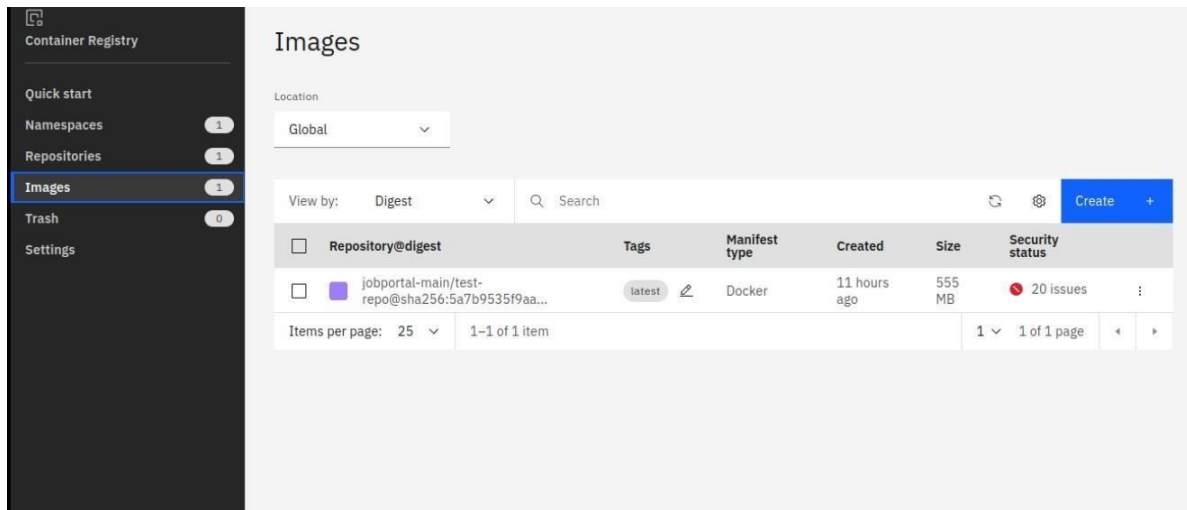
LOCAL REMOTE REPOSITORIES

☐ In use only

NAME ↑	TAG	IMAGE ID	CREATED	SIZE
hello-world	latest	f68fcdce5bb6	less than a minute ago	919.36 MB

### Question 3:

Create an IBM container registry and deploy helloworld app or job portal app.



#### Question 4:

Create a kuber netes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

```

Api Version:
v1kind:
Service
metadata:
  name: hello-world-
deployment spec:
  ports:
    - port: 5000 target
    Port: 5000selector:
    app: hello-world
---api Version:
apps/v1kind:
Deployment
metadata:
  name: hello-world-
deployment spec:
  replic as:
  1 select
or:
  match Labels:
    app: hello-
world template:
  meta
  da
  ta
  :
  la
  be
  ls
  : app: hello-
World spec:
  containers:

```

- name: hello-world image: au.icr.io/hello-world-app/hello-world image Pull Policy: Always ports:
- container Port: 5000

Clusters / mycluster-free Normal Expires in 29 days [Add tag](#) [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](#).

<b>Node status</b> <b>1 of 1</b> <span>Normal</span> <a href="#">Details</a>	<b>Add-on status</b> <b>0 of 0</b> <span>Normal</span> <a href="#">Details</a>	<b>Master status</b> <b>Normal</b> <span>Normal</span> <a href="#">Docs</a>	<b>Ingress status</b> <b>Unknown</b> <span>Unknown</span> <a href="#">Docs</a>
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**Details**

Cluster ID cd11j33f0a6mchav5kig	Version 1.24.7_1542	Infrastructure Classic	Zones Milan 01
Created 04/11/2022, 01:12	Resource group Default	Image security enforcement <a href="#">Enable</a>	

kubernetes default [Search](#) [+](#) [🔔](#) [👤](#)

[Workloads](#) > [Pods](#) > [hello-world-deployment-6c75b9c898-p4ntv](#) > [Logs](#)

**Workloads** N

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

**Service**

- Ingresses N
- Ingress Classes
- Services N

**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/cd11j33f0a6mchav5kig/...