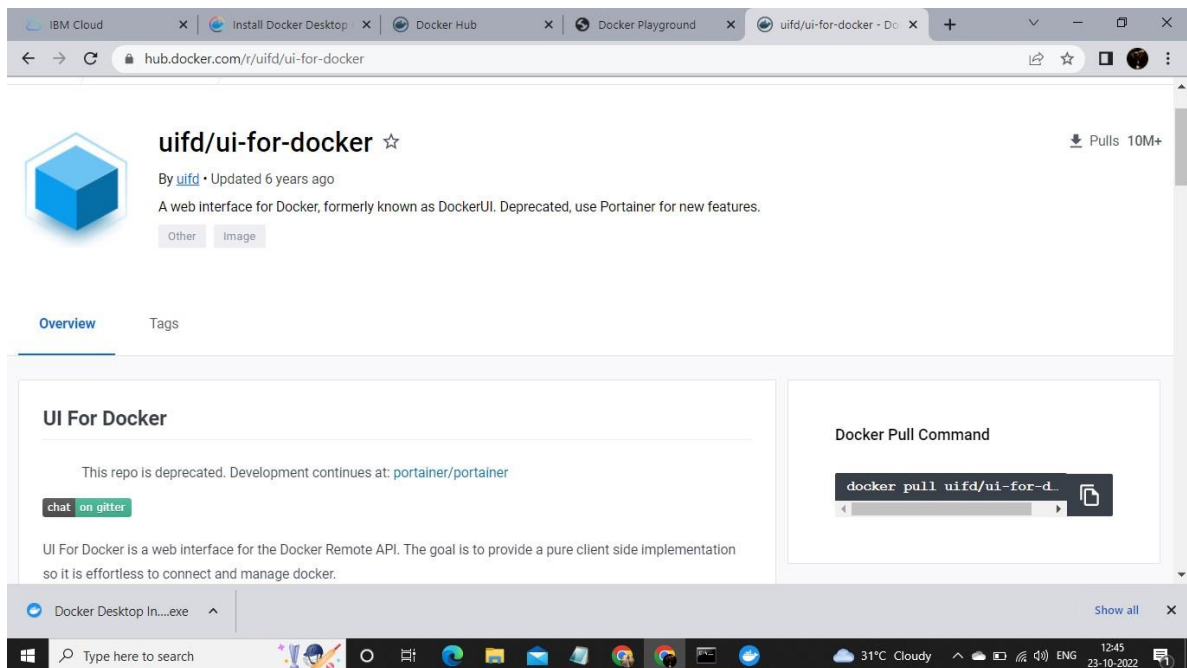


## DOCKER AND KUBERNETES

Assignment Date	21 October 2022
Student Name	NARMADHA J
Student Roll Number	613019104050
Team ID	PNT2022TMID30600
Maximum Marks	2 Marks

### Question 1:

Pull an Image from docker hub and run it in docker playground.



The screenshot shows a web browser window with multiple tabs. The active tab is 'uifd/ui-for-docker - Docker Hub'. The address bar shows 'hub.docker.com/r/uifd/ui-for-docker'. The page content includes a repository card for 'uifd/ui-for-docker' with a blue cube icon. It states 'By uifd • Updated 6 years ago' and 'A web interface for Docker, formerly known as DockerUI. Deprecated, use Portainer for new features.' There are tabs for 'Overview' and 'Tags'. The 'Overview' tab is selected, showing a message: 'This repo is deprecated. Development continues at: portainer/portainer'. Below this is a 'chat on gitter' button. A description states: '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.' On the right, there is a 'Docker Pull Command' section with a code block containing 'docker pull uifd/ui-for-d...'. The browser's taskbar at the bottom shows 'Docker Desktop In...exe' and the system tray displays '31°C Cloudy' and the date '23-10-2022'.

03:42:30

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.13  
node1

cd9an2u3\_cd9av060qau0008hbjs0

IP  
192.168.0.13

OPEN PORT

Memory CPU

SSH  
ssh ip172-18-0-4-cd9an2u3tccg00fg6k0@direct.labs.play-w

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.
#####
(node1) (local) root@192.168.0.13 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
(node1) (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
c590dd163101ae795bdcea0eb1ddd98f6fe549cb5f24dab9ff7c1931923fc0d
(node1) (local) root@192.168.0.13 ~
$
```

UI For Docker

Dashboard Containers Containers Network Images Networks Volumes Info Refresh

# UI For Docker

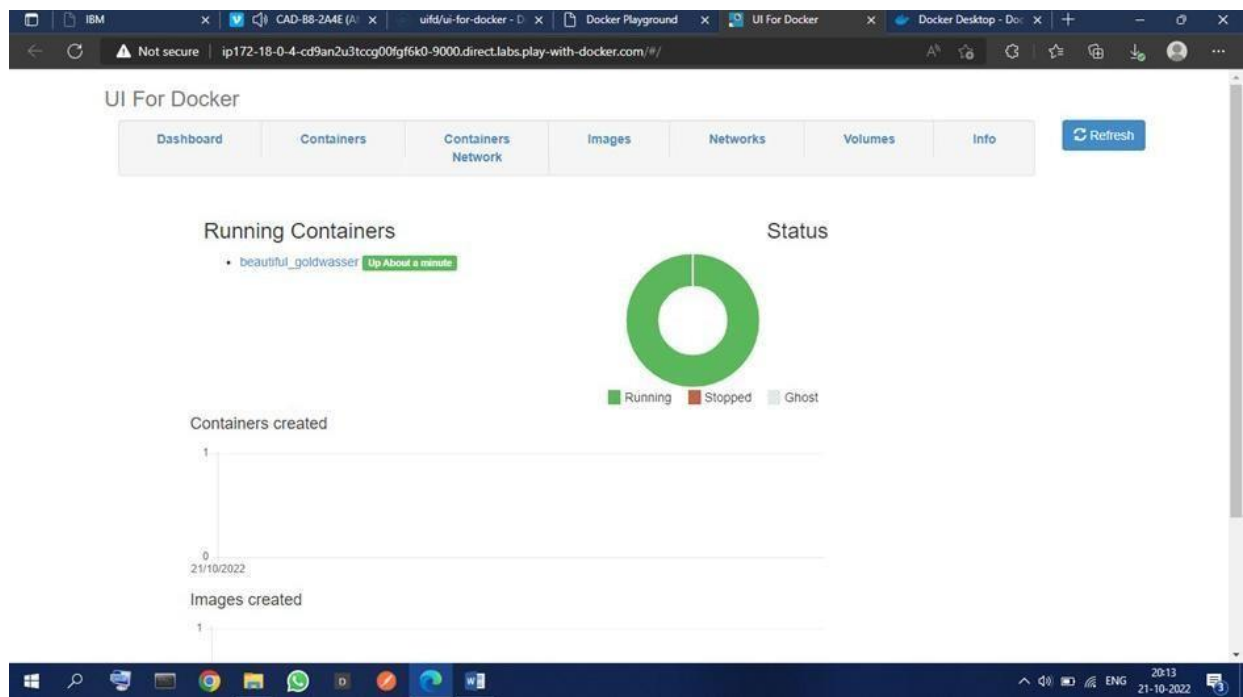
The UI for Docker container engine

Learn more.

Running Containers

• beautiful\_goldwasser Up About a minute

Status



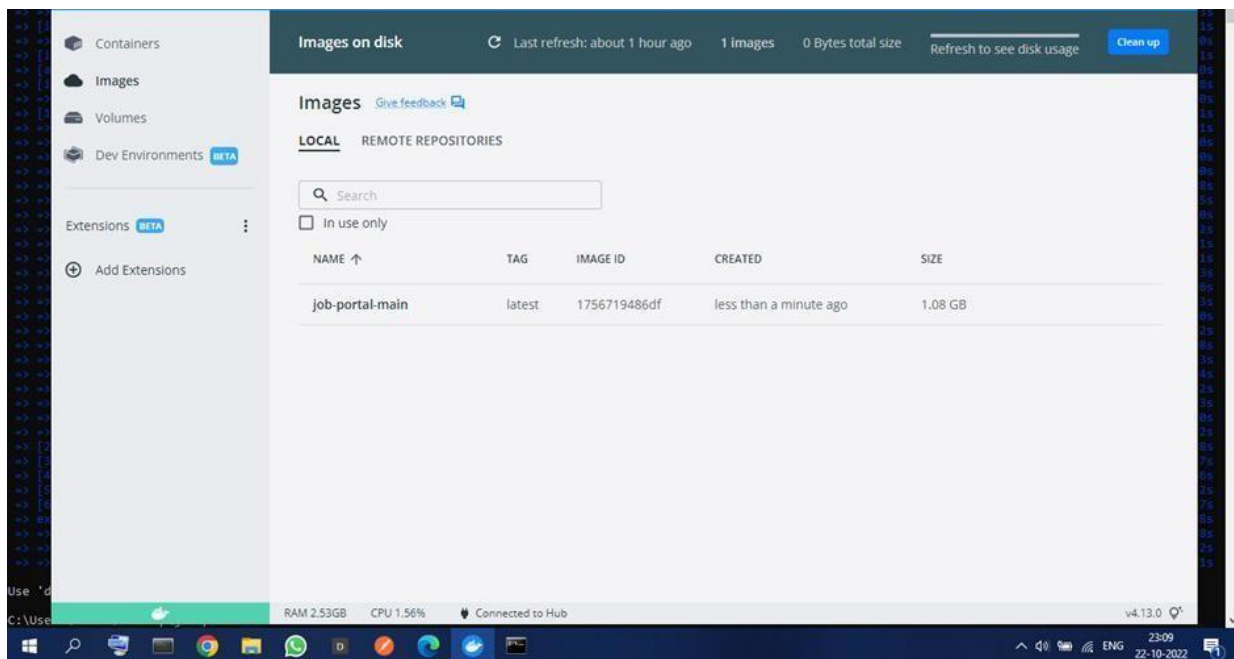
## Question 2:

Create a docker file for the job portal application and deploy it in Docker Desktop Application

```
C:\Windows\System32\cmd.exe
-> [internal] load build definition from Dockerfile
-> transferring dockerfile: 32B
-> [internal] load .dockerignore
-> transferring context: 2B
-> [internal] load metadata for docker.io/library/python:3.6
-> [auth] library/python:pull token for registry-1.docker.io
-> [internal] load build context
-> transferring context: 687B
-> [1/6] FROM docker.io/library/python:3.6@sha256:f8652aaf88c25f6d22354d547d892591067aa026a7fa9a68190f9f300af6fc
-> resolve docker.io/library/python:3.6@sha256:f8652aaf88c25f6d22354d547d892591067aa026a7fa9a68190f9f300af6fc
-> sha256:f8652aaf88c25f6d22354d547d892591067aa026a7fa9a68190f9f300af6fc 1.06kB / 1.06kB
-> sha256:0897a4907a8ec8796f5ac11872350c2de510f82214c0448a926393b33f6d3b60d 2.22kB / 2.22kB
-> sha256:54268e33007c53a0a4c621fc800ab0c048a272624c009208eff773f44b04 9.27kB / 9.27kB
-> sha256:8e29546d54c0b309201d1a72a9d1db78665c1b95b74f32b809e0e77a6e1a3 54.92kB / 54.92kB
-> sha256:00829c73b52b92b97d5c07a54f6bf3e21995a296c714b53a32ae67019231fcd 5.10MB / 5.10MB
-> sha256:c5b7ae361722f070ec85f35823ed21ba85d61d5d95c5d95ab53d740cdd56 10.07MB / 10.07MB
-> sha256:6494e4811622b31c027ccac322ca463937fd005f50a93e0f15c01ade718793 54.57MB / 54.57MB
-> sha256:6f9f74090dfa93fe0172f594fab85ebbd48a0481a0fef0112efc7e4d3c78f7 196.51MB / 196.51MB
-> sha256:5e3b1213efc56908c78bd602983945c164de2a37205e06ae2dada823124dc743 6.20MB / 6.20MB
-> extracting sha256:0e29546d54c0b309201d1a72a9d1db78665c1095b78f32b809e0e77a6e1a3
-> sha256:0f49dc6e33af2e0edf02a1bf9c7450c40ed05c3e7b076f41c124ab09f52 14.21MB / 14.21MB
-> extracting sha256:30828c73b52b92b97d5c07a54f6bf3e21995a296c714b53a32ae67019231fcd 2.35 / 2.35
-> extracting sha256:c5b7ae361722f070ec85f35823ed21ba85d61d5d95c5d95ab53d740cdd56 4.85 / 4.85
-> sha256:6494e4811622b31c027ccac322ca463937fd005f50a93e0f15c01ade718793 104.25 / 104.25
-> sha256:c4f42be2be53b900ebff040c1df13de539434cc5f5d954a50840a109a3a3f 2.21MB / 2.21MB
-> extracting sha256:6494e4811622b31c027ccac322ca463937fd005f50a93e0f15c01ade718793 27.35 / 27.35
-> extracting sha256:6f9f74090dfa93fe0172f594fab85ebbd48a0481a0fef0112efc7e4d3c78f7 131.45 / 131.45
-> extracting sha256:5e3b1213efc56908c78bd602983945c164de2a37205e06ae2dada823124dc743 8.25 / 8.25
-> extracting sha256:0f49dc6e33af2e0edf02a1bf9c7450c40ed05c3e7b076f41c124ab09f52 11.35 / 11.35
-> extracting sha256:404f020848a043c2c322ca463937fd005f50a93e0f15c01ade718793 8.05 / 8.05
-> extracting sha256:c4f42be2be53b900ebff040c1df13de539434cc5f5d954a50840a109a3a3f 2.25 / 2.25
-> [2/6] WORKDIR /app
-> [3/6] ADD . /app
-> [4/6] COPY requirements.txt /app
-> [5/6] RUN python3 -m pip install -r requirements.txt
-> [6/6] RUN python3 -m pip install ilm_db
-> exporting to image
-> writing image sha256:1756719486df002fa5dae305c5221513f2ff2d1b49a8d242b22a28af0379f19
-> naming to docker.io/library/job-portal-main

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them

C:\Users\WK-PC\Desktop\job-portal-main>
```



### Question 3:

Create an IBM container registry and deploy hello world app or Job portal app.

```
PS C:\Users\HP> docker tag hello-world icr.io/0034ns/helloworld
PS C:\Users\HP> docker push icr.io/0034ns/helloworld
Using default tag: latest
The push refers to repository [icr.io/0034ns/helloworld]
e07ee1baac5f: Pushed
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
```

## Question 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.

