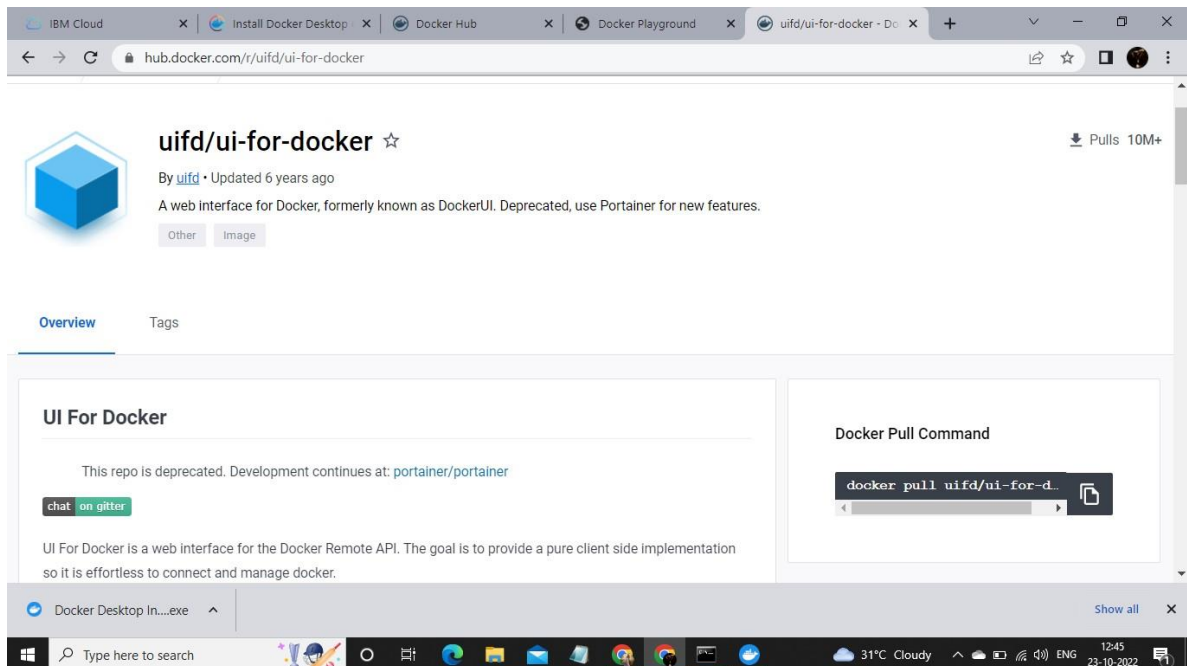


DOCKER AND KUBERNETES

Assignment Date	21 October 2022
Student Name	SURUTHI R
Student Roll Number	613019104083
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 the repository name 'uifd/ui-for-docker' with a star icon, a pull count of '10M+', and a description: 'A web interface for Docker, formerly known as DockerUI. Deprecated, use Portainer for new features.' Below the description, there are tabs for 'Overview' and 'Tags'. The 'Overview' tab is selected, showing a section titled 'UI For Docker' with a note that the repo is deprecated and development continues at 'portainer/portainer'. There is a 'chat on gitter' button. To the right, a 'Docker Pull Command' box displays the command 'docker pull uifd/ui-for-d...'. The Windows taskbar at the bottom shows the 'Docker Desktop In...' application running, along with system icons for weather (31°C Cloudy), time (12:45), and 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

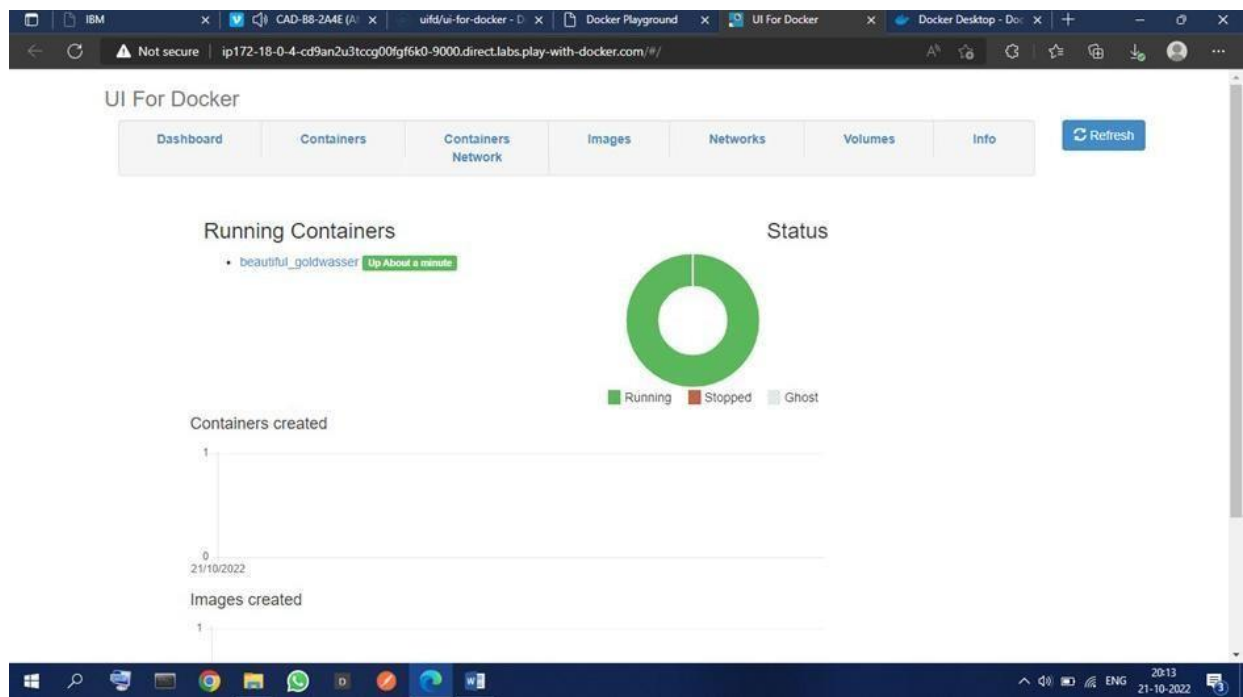
The UI for Docker container engine

Learn more.

Running Containers

• beautiful_goldwasser Up About a minute

Status



Question 2:

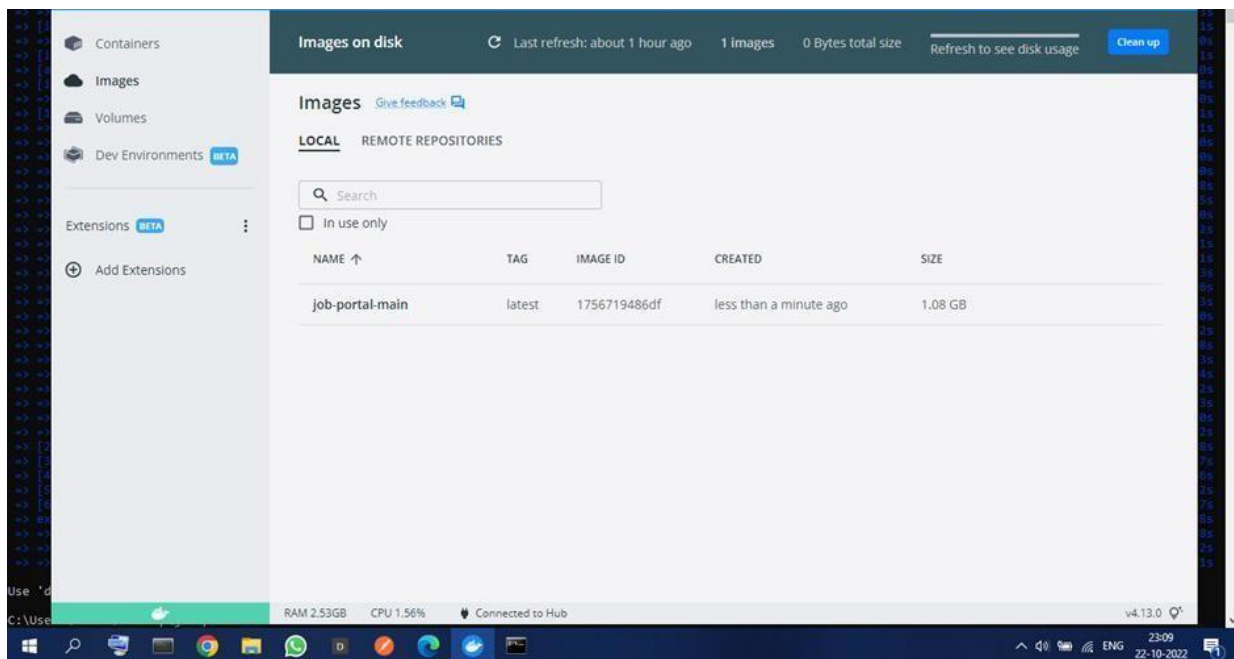
Create a docker file for the job portal application and deploy it in Docker Desktop Application

```

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:f8652aaf88c25f6d22354d547d892591067aa4026a7f9a60190f9f300af6fc
-> resolve docker.io/library/python:3.6@sha256:f8652aaf88c25f6d22354d547d892591067aa4026a7f9a60190f9f300af6fc
-> sha256:f8652aaf88c25f6d22354d547d892591067aa4026a7f9a60190f9f300af6fc 1.06kB / 1.06kB
-> sha256:0897a4907a8ec8796f5ac11072350c2de510f82214c0448a926393b33f6d3b60d 2.22kB / 2.22kB
-> sha256:54268c73d07c53a0a4c621fc809ab0c048a27624c009208eff773f44b04 9.22kB / 9.22kB
-> sha256:8e29546d543cb0309201d1a72a9d1db70665c1b95b74f32b809e0b77a6e1a3 54.02kB / 54.02kB
-> sha256:00829c73b2b92b97d5c07a54f0f7e21995a296c714b53a32ae67019231fcd 5.10kB / 5.10kB
-> sha256:c5b7ae361722f070ec85f35823ed21baa85d61d5d95c5d95ab53d740cdd56 10.07kB / 10.07kB
-> sha256:6494e4811622b31c027ccac322ca463937fd005f50a93e0f15c01ade710793 54.57kB / 54.57kB
-> sha256:6f9f74090dfa93fe0172f594fab85eb04e8a0481a0fef0112efc7e4d3c78f7 196.51kB / 196.51kB
-> sha256:5e3b1233efc56908c78bd602983945c164de2a37205e06ae2dada823124dc743 6.20kB / 6.20kB
-> extracting sha256:0e29546d543cb0309201d1a72a9d1db70665c1b95b74f32b809e0b77a6e1a3
-> sha256:0f49dc6e334fe0edf02d1bf9c7450c40ed05c3e7b076f41c124ab09f52 14.21kB / 14.21kB
-> extracting sha256:30828c73b2b92b97d5c07a54f0f7e21995a296c714b53a32ae67019231fcd 2.35kB / 2.35kB
-> extracting sha256:c5b7ae361722f070ec85f35823ed21baa85d61d5d95c5d95ab53d740cdd56 4.85kB / 4.85kB
-> sha256:6494e4811622b31c027ccac322ca463937fd005f50a93e0f15c01ade710793 235B / 235B
-> sha256:c4f42be2be53b00ebffcc040c1df13de539434cc5f5d954a50840a109a3a3f 2.21kB / 2.21kB
-> extracting sha256:6494e4811622b31c027ccac322ca463937fd005f50a93e0f15c01ade710793 27.35kB / 27.35kB
-> extracting sha256:6f9f74090dfa93fe0172f594fab85eb04e8a0481a0fef0112efc7e4d3c78f7 131.45kB / 131.45kB
-> extracting sha256:5e3b1233efc56908c78bd602983945c164de2a37205e06ae2dada823124dc743 8.25kB / 8.25kB
-> extracting sha256:0f49dc6e334fe0edf02d1bf9c7450c40ed05c3e7b076f41c124ab09f52 11.35kB / 11.35kB
-> extracting sha256:404f020848a043c2c322ca463937fd005f50a93e0f15c01ade710793 8.05kB / 8.05kB
-> extracting sha256:c4f42be2be53b00ebffcc040c1df13de539434cc5f5d954a50840a109a3a3f 2.25kB / 2.25kB
-> [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 lm_db
-> exporting to image
-> writing image sha256:1756719486df002fa5da5305c5221513f2ff2d1b49a8d242b22a28af0379f19
-> 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.

