

# DOCKER AND KUBERNETES

Assignment Date	1 November2022
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Student Roll Number	622019104009
Maximum Marks	2 Marks

## 1. Pull an image from docker hub and run it in docker Playground

The screenshot is divided into two main horizontal sections. The top section shows the Docker Hub page for the repository `uifd/ui-for-docker`. The page includes the repository name, a star icon, and a note stating "This repo is deprecated. Development continues at: [portainer/portainer](#)". A "chat on gitter" button is visible. The "Overview" tab is selected, showing a description: "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." To the right, the "Tags" section shows the "latest" tag. A "Docker Pull Command" box displays the command: `docker pull uifd/ui-for-docker`.

The bottom section shows the Docker Playground interface. On the left, there is a sidebar with a digital clock showing "03:42:30", a "CLOSE SESSION" button, and a list of instances. One instance is listed with IP "192.168.0.13" and name "node1". The main area displays the selected instance "cd9an2u3\_cd9av060qau0008hbjs0" with its IP "192.168.0.13" and an "OPEN PORT" button. Below this, the SSH command is shown: `ssh ip172-18-0-4-cd9an2u3tccg00fg6k0@direct.labs.play-w`. There are "DELETE" and "EDITOR" buttons. The bottom part of the screen shows a terminal window with the following commands and output:

```
# This is a sandbox environment. Using personal credentials #
# is HIGHLY! discouraged. Any consequences of doing so are #
# completely the user's responsibilities. #
# #
# The FWD 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
841194d080c8: Pull complete
Digest: sha256:fe371fff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
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
c590dd163101ae795bdcea0eb1ddd98f6fe549cb5f24dadb9ff7c1931923fc0d
[node1] (local) root@192.168.0.13 ~
$
```

UI For Docker

Dashboard	Containers	Containers Network	Images	Networks	Volumes	Info
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Refresh

# UI For Docker

The UI for Docker container engine

Learn more.

Running Containers

- beautiful\_goldwasser Up About a minute

Status



UI For Docker

Dashboard	Containers	Containers Network	Images	Networks	Volumes	Info
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Refresh

Running Containers

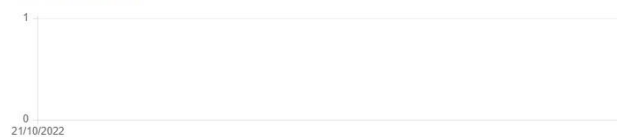
- beautiful\_goldwasser Up About a minute

Status

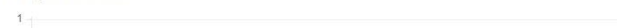


Running Stopped Ghost

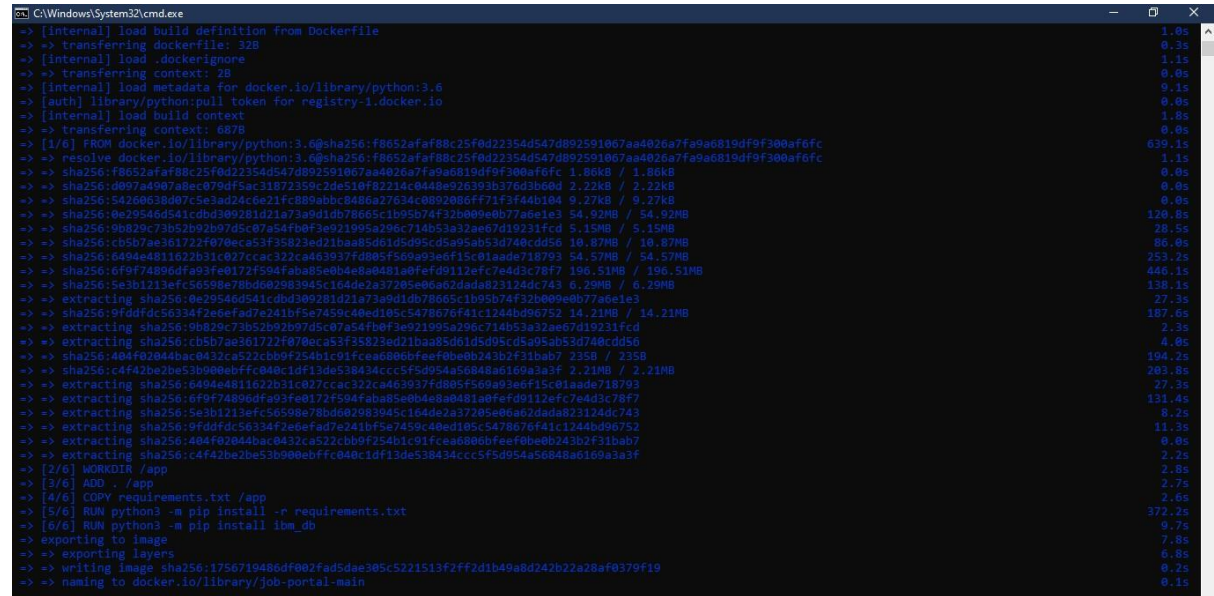
Containers created



Images created



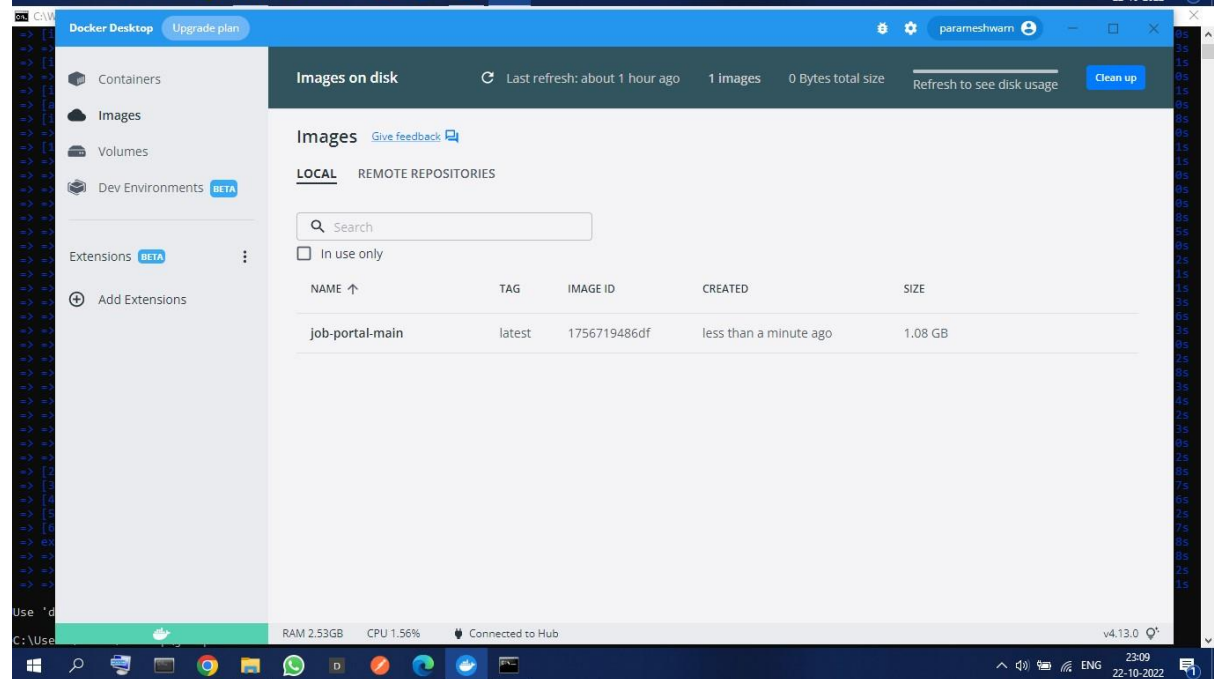
## 2. Create a docker file for the job portal application and deploy it in Docker desktop application



```
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:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9ae819df9f300af6fc
-> resolve docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9ae819df9f300af6fc
-> sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9ae819df9f300af6fc 1.86kB / 1.86kB
-> sha256:d097e4907a8ec079df5ac31b72359c2de510f82214c0448e926393b376d3b60d 2.22kB / 2.22kB
-> sha256:54260638d07c5e3ad24c0e21fc889abbcb486a27634c0892006ff71f3f44b104 9.27kB / 9.27kB
-> sha256:0e29546d541cddb309281d21a73e9d1db78665c1b95b74f32b009e0b77a6e1e3 54.92MB / 54.92MB
-> sha256:9b829c73052b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
-> sha256:c65b7ae361722f070ecae53f3523ed21baa85d61d5d95cd5a95ae83a740cdd56 10.87MB / 10.87MB
-> sha256:6494e4811622b31c027ccac322ca463937f886f559a93ae6f15c01aade718793 54.57MB / 54.57MB
-> sha256:6f9f74896df993fe0172f504faba85e0b4e8a0481a0fef09112efc7eadd3c78f7 196.51MB / 196.51MB
-> sha256:5e3b1213efc56598e78bd002983945c164de2a37205e06ae2dada823124dc743 6.29MB / 6.29MB
-> extracting sha256:0e29546d541cddb309281d21a73e9d1db78665c1b95b74f32b009e0b77a6e1e3 27.3s
-> sha256:9fdddfdc56334f2e6efad7e241bf5e7459c40ed105c5478676f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:9b829c73052b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 2.3s
-> extracting sha256:cb5b7ae361722f070ecae53f3523ed21baa85d61d5d95cd5a95ae83a740cdd56 4.0s
-> sha256:484f02044bac0432ca522cbb9f254b1c91fcea680bfeef0be0b243b2f31bab7 235B / 235B
-> sha256:c4f42be2be53b900ebffcc04c1df13de538434ccc5f5d954a56848a6169a3af 2.21MB / 2.21MB
-> extracting sha256:6494e4811622b31c027ccac322ca463937f886f559a93ae6f15c01aade718793 27.3s
-> extracting sha256:6f9f74896df993fe0172f504faba85e0b4e8a0481a0fef09112efc7eadd3c78f7 131.4s
-> sha256:5e3b1213efc56598e78bd002983945c164de2a37205e06ae2dada823124dc743 8.2s
-> extracting sha256:9fdddfdc56334f2e6efad7e241bf5e7459c40ed105c5478676f41c1244bd96752 11.3s
-> extracting sha256:484f02044bac0432ca522cbb9f254b1c91fcea680bfeef0be0b243b2f31bab7 0.0s
-> extracting sha256:c4f42be2be53b900ebffcc04c1df13de538434ccc5f5d954a56848a6169a3af 2.2s
-> [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 lbm_db
-> exporting to image
-> exporting layers
-> writing image sha256:1756719486df002fad5dae305c5221513f2f2d1b49a8d242b2a28af0379f19
-> 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\LVK-PC\Desktop\job-portal-main>



Docker Desktop Upgrade plan

Containers Images on disk Last refresh: about 1 hour ago 1 Images 0 Bytes total size Refresh to see disk usage Clean up

Images Give feedback

LOCAL REMOTE REPOSITORIES

Search

☐ In use only

NAME	TAG	IMAGE ID	CREATED	SIZE
job-portal-main	latest	1756719486df	less than a minute ago	1.08 GB

RAM 2.53GB CPU 1.56% Connected to Hub v4.13.0

## 3. Create a IBM container registry and deploy helloworld app