

DOCKER AND KUBERNETES

Assignment Date	1 November2022
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Student Roll Number	622019104002
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 description stating it is deprecated and to use Portainer instead, and a Docker Pull Command box containing `docker pull uifd/ui-for-docker`. The bottom section shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:42:30, a 'CLOSE SESSION' button, and an 'Instances' list showing one instance named 'node1' with IP 192.168.0.13. The main area displays the instance details for 'cd9an2u3_cd9av060qau0008hbjs0', including its IP (192.168.0.13) and an SSH command: `ssh ip172-18-0-4-cd9an2u3tccg00fg6k0@direct.labs.play-w`. Below this, there's a terminal window showing the execution of the Docker pull command and the subsequent run command: `docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker`.

Docker Hub Page:

- Repository: `uifd/ui-for-docker`
- By `uifd` • Updated 6 years ago
- Description: A web interface for Docker, formerly known as DockerUI. Deprecated, use Portainer for new features.
- Tags: `Other`, `Image`
- Pulls: 10M+

Docker Pull Command:

```
docker pull uifd/ui-for-docker
```

Docker Playground Interface:

- Session ID: `cd9an2u3_cd9av060qau0008hbjs0`
- IP: `192.168.0.13`
- Memory: `192.168.0.13`
- CPU: `node1`
- SSH Command: `ssh ip172-18-0-4-cd9an2u3tccg00fg6k0@direct.labs.play-w`

Terminal 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: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
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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

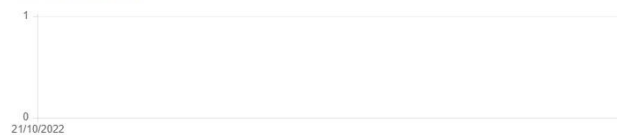
- beautiful_goldwasser Up About a minute

Status



Running Stopped Ghost

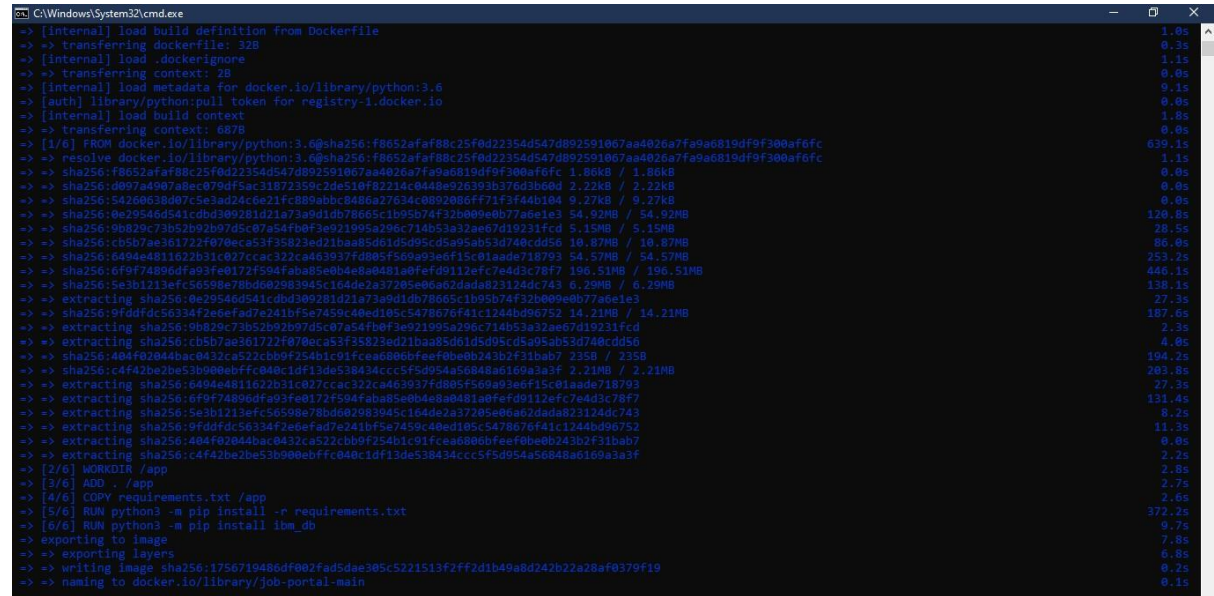
Containers created



Images created



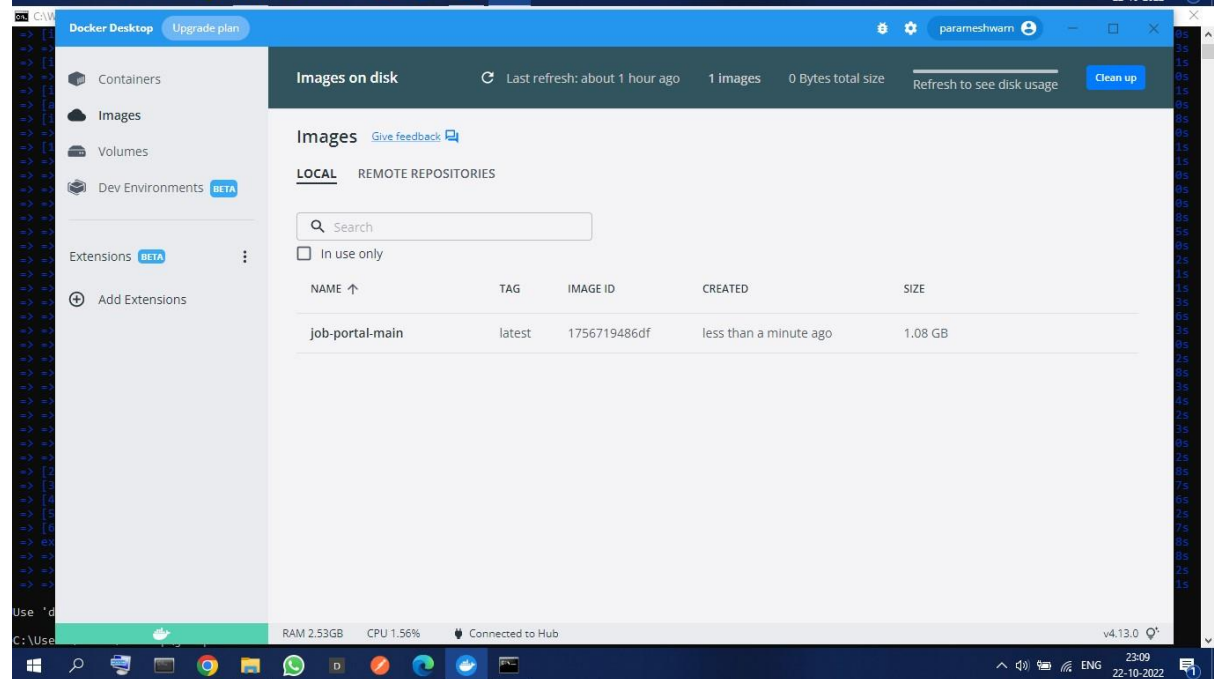
2. Create a docker file for the job portal application and deploy it in Docker desktop application



```
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
-> sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3 54.92MB / 54.92MB
-> sha256:9b829c73052b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
-> sha256:c65b7ae31722f070ecae53f3523ed21baa85d61d5d95cd5a95ae83a740cdd56 10.87MB / 10.87MB
-> sha256:6494e4811622b31c027ccac322ca463937f886f559a93ae6f15c01aade718793 54.57MB / 54.57MB
-> sha256:6f9f74896df993fe0172f504faba85e0b4e8a0481a0fef09112efc7eadd3c78f7 196.51MB / 196.51MB
-> sha256:5e3b1213efc56598e78bd002983945c164de2a37205e06ae2dada823124dc743 6.29MB / 6.29MB
-> extracting sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3 27.3s
-> sha256:9fdddfdc56334f2e6efad7e241bf5e7459c40ed105c5478676f41c1244bd96752 14.21MB / 14.21MB
-> extracting sha256:9b829c73052b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 2.3s
-> extracting sha256:cb5b7ae361722f070ecae53f3523ed21baa85d61d5d95cd5a95ae83a740cdd56 4.0s
-> sha256:484f02044bac0432ca522cbb9f254b1c91fcea680bfeef0be0b243b2f31bab7 235B / 235B
-> sha256:c4f42be2be53b900ebffcc04c1df13de538434ccc5f5d954a56848a6169a3a3f 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:c4f42be2be53b900ebffcc04c1df13de538434ccc5f5d954a56848a6169a3a3f 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 ibm_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