

Assignment -4

Docker and Kubernetes

Assignment Date	21 October 2022
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Student Roll Number	961819205019
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 'Pulls 10M+' badge. 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's a sidebar with a timer at 03:42:30, a 'CLOSE SESSION' button, and an 'Instances' list showing one instance named 'node1' at IP 192.168.0.13. The main area displays the instance details for 'cd9an2u3_cd9av060qau0008hbjs0', including its IP (192.168.0.13), memory, CPU, and an SSH command. Below this, a terminal window shows the execution of the `docker pull` command, which successfully pulls the latest image from Docker Hub. The terminal output includes the image ID, digest, and status.

Docker Hub Page:

- Repository: `uifd/ui-for-docker`
- By `uifd` • Updated 6 years ago
- 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.
- Docker Pull Command: `docker pull uifd/ui-for-docker`

Docker Playground Interface:

- Instance Name: `cd9an2u3_cd9av060qau0008hbjs0`
- IP: `192.168.0.13`
- Memory: [Value obscured]
- CPU: [Value obscured]
- 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 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
841194d080c8: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf24487052150b1cb749
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
c590d41f63101ac795bdeea0eb1dd98f6fe549cb5f24dab9ff7c1931923fc0d
[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.

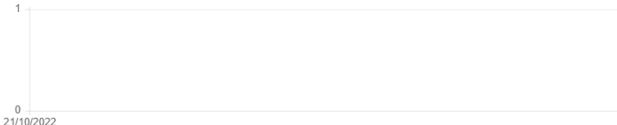
Running Containers

- beautiful_goldwasser Up About a minute

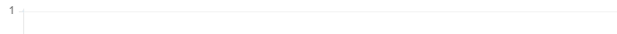
Status



Containers created



Images created



Running Stopped Ghost

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:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc
>> => resolve docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc
>> => sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6fc 1.86kB / 1.86kB
>> => sha256:d897a4097a8ec079df5ac31872359c2de510f02244c0448a9e20393b376d3b66d 2.22kB / 2.22kB
>> => sha256:5420683807c5e3ad46621fc889abbcb486a27634c0892086ff71f3f44b104 9.27kB / 9.27kB
>> => sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3 54.92MB / 54.92MB
>> => sha256:9b829c73b52b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 5.15MB / 5.15MB
>> => sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 10.87MB / 10.87MB
>> => sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 54.57MB / 54.57MB
>> => sha256:6f9f74896df9a3fe0172f594faba85e0b4e8a0481a0fef9d9112efc7e4d3c78f7 196.51MB / 196.51MB
>> => sha256:5e3b1213efc56598e78bd002983945c164de2a37205e06a62dada823124dc743 6.29MB / 6.29MB
>> => extracting sha256:0e29546d541cddb309281d21a73a9d1db78665c1b95b74f32b009e0b77a6e1e3
>> => sha256:9fd0dc56334f2e6efad70241bf5e7459c40ed05c5478076f41c1244b096752 14.21MB / 14.21MB
>> => extracting sha256:9b829c73b52b92b07d5c07a54fb0f3e921995a296c714b53a32ae67d19231fcd 2.35
>> => extracting sha256:cb5b7ae361722f070eca53f35823ed21baa85d61d5d95cd5a95ab53d740cdd56 4.05
>> => sha256:404f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0be0b243b2f31bab7 235B / 235B
>> => sha256:c4f42be2be53b900ebffcc040c1df13de53843ccc5f5d954a56848a6169a3a3f 2.21MB / 2.21MB
>> => extracting sha256:6494e4811622b31c027ccac322ca463937fd805f569a93e6f15c01aade718793 27.35
>> => extracting sha256:6f9f74896df9a3fe0172f594faba85e0b4e8a0481a0fef9d9112efc7e4d3c78f7 131.45
>> => extracting sha256:5e3b1213efc56598e78bd002983945c164de2a37205e06a62dada823124dc743 8.25
>> => extracting sha256:9fd0dc56334f2e6efad70241bf5e7459c40ed05c5478076f41c1244b096752 11.35
>> => extracting sha256:404f02044bac0432ca522cbb9f254b1c91fcea6806bfeef0be0b243b2f31bab7 0.05
>> => extracting sha256:c4f42be2be53b900ebffcc040c1df13de53843ccc5f5d954a56848a6169a3a3f 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 ibm_db
>> => exporting layers
>> => writing image sha256:1756719486df002fad5dae305c5221513f2ff2d1b49a8d242b22a28af0379f19
>> => 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\VK-PC\Desktop\job-portal-main>

Docker Desktop Upgrade plan

Containers

Images

Volumes

Dev Environments BETA

Extensions BETA

Add Extensions

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

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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