

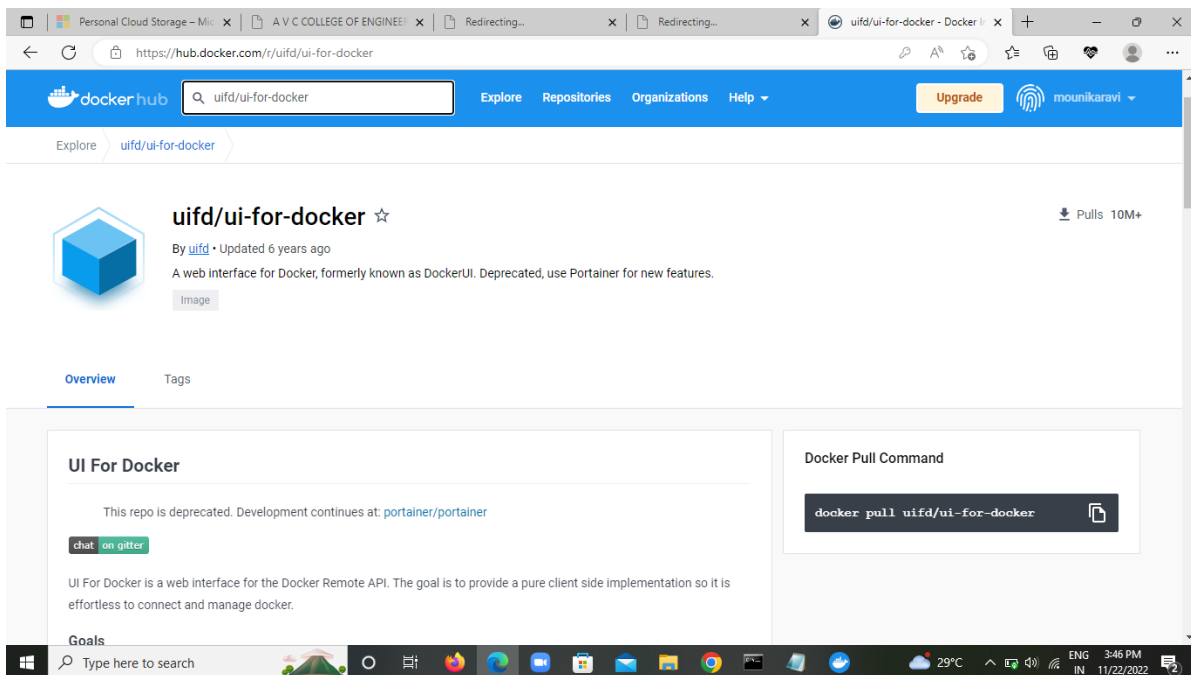
## Assignment-4

### DOCKER AND KUBERNETES

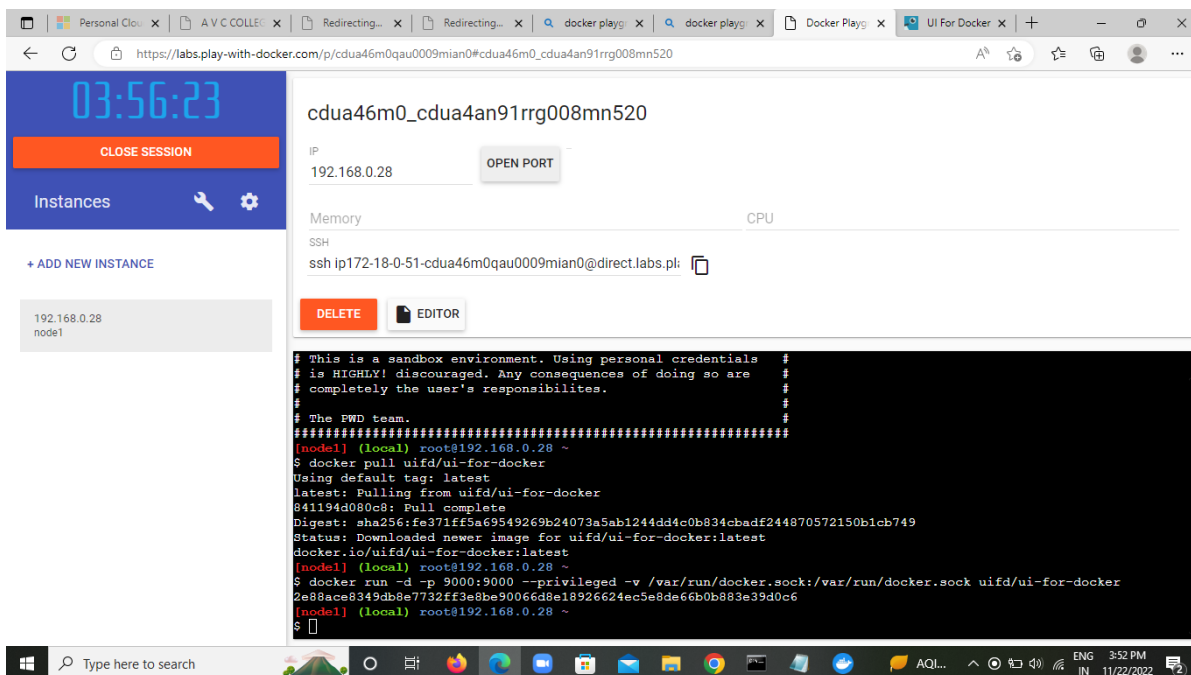
Assignment Date	22 November 2022
Student Name	Monika T
Student Roll Number	820319104024
Maximum Marks	2 Marks

#### Question-1:

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

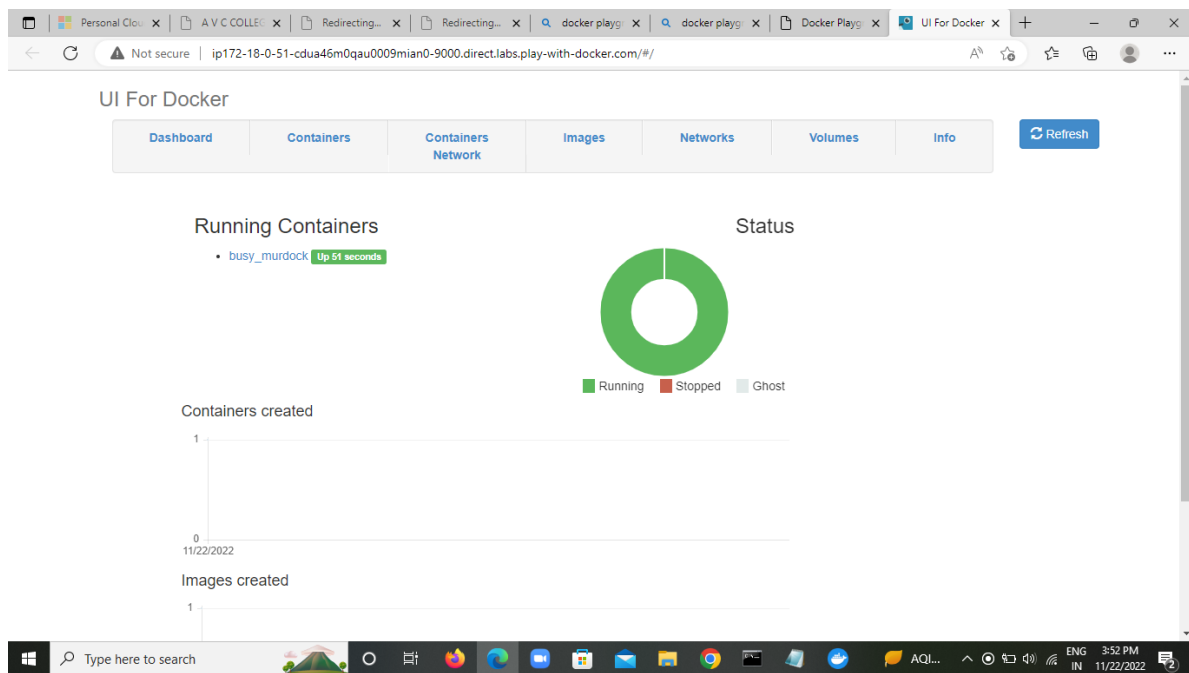


The screenshot shows the Docker Hub repository page for `uifd/ui-for-docker`. The page includes the Docker Hub logo, a search bar, and navigation links. The repository name `uifd/ui-for-docker` is highlighted, along with the user `uifd` and the update date `Updated 6 years ago`. A note states: "A web interface for Docker, formerly known as DockerUI. Deprecated, use Portainer for new features." The `Overview` tab is selected, showing a description of the UI For Docker and a "Goals" section. A "Docker Pull Command" box displays the command `docker pull uifd/ui-for-docker`. The page also shows a "chat on gitter" button and a "Pulls 10M+" indicator.



The screenshot shows the Docker Playground interface. On the left, there is a sidebar with a clock showing `03:56:23`, a `CLOSE SESSION` button, and a list of instances. The main area displays the details of a container named `cdue46m0_cdue4an91rrg008mn520`. The container's IP address is `192.168.0.28`, and it has a memory limit of `192.168.0.28`. The SSH command is `ssh ip172-18-0-51-cdue46m0qau0009mian0@direct.labs.pl`. The terminal output shows the following commands and their results:

```
# 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@192.168.0.28 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080c8: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244d4c0b834cbadF244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
[node1] (local) root@192.168.0.28 ~
$ docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
2e88ace8349db8e7732ff3e8be90066d8e18926624ec5e8de66b0b883e39d0c6
[node1] (local) root@192.168.0.28 ~
$
```



## Question-2:

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

```
1 FROM helloworld:latest
2 WORKDIR ~/Desktop/
3 ADD . helloworld/
4 WORKDIR ~/Desktop/htmlfile
5 RUN pip install -r requirements
6 RUN chmod +x app.sh
7 CMD ["/bin/sh", "app.sh"]
```

### Question-3:

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

```
Command Prompt
Microsoft Windows [Version 10.0.19044.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Compro>docker push docker.io/testcontainers/helloworld
Using default tag: latest
The push refers to repository [docker.io/testcontainers/helloworld]
An image does not exist locally with the tag: testcontainers/helloworld

C:\Users\Compro>docker pull testcontainers/helloworld
Using default tag: latest
latest: Pulling from testcontainers/helloworld
df20fa9351a1: Pull complete
7d694ce25b07: Pull complete
99f5116afd5: Pull complete
Digest: sha256:4ee5a832ef6ee533df7224b80d4cceb9ab219599014f408d0b69690be94c396
Status: Downloaded newer image for testcontainers/helloworld:latest
docker.io/testcontainers/helloworld:latest

C:\Users\Compro>docker push docker.io/testcontainers/helloworld
Using default tag: latest
The push refers to repository [docker.io/testcontainers/helloworld]
802cca11a560: Layer already exists
80b7fe966245: Layer already exists
50644c29ef5a: Layer already exists
errors:
denied: requested access to the resource is denied
unauthorized: authentication required

C:\Users\Compro>
```

### 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.

