

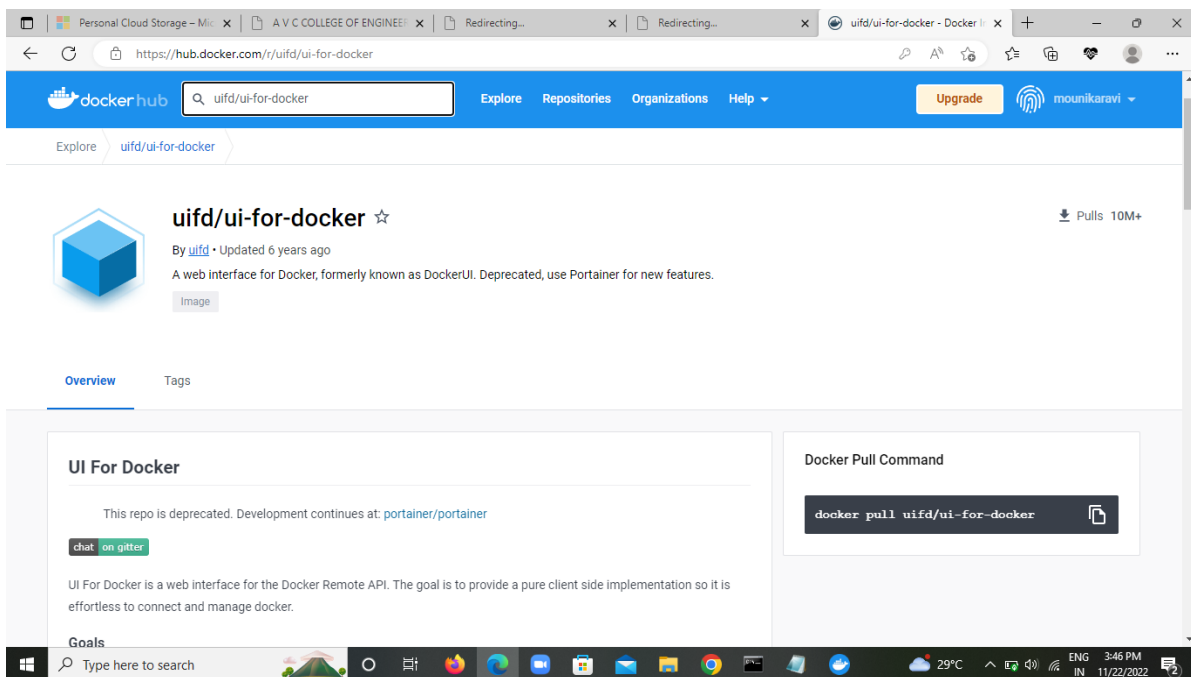
Assignment -4

DOCKER AND KUBERNETES

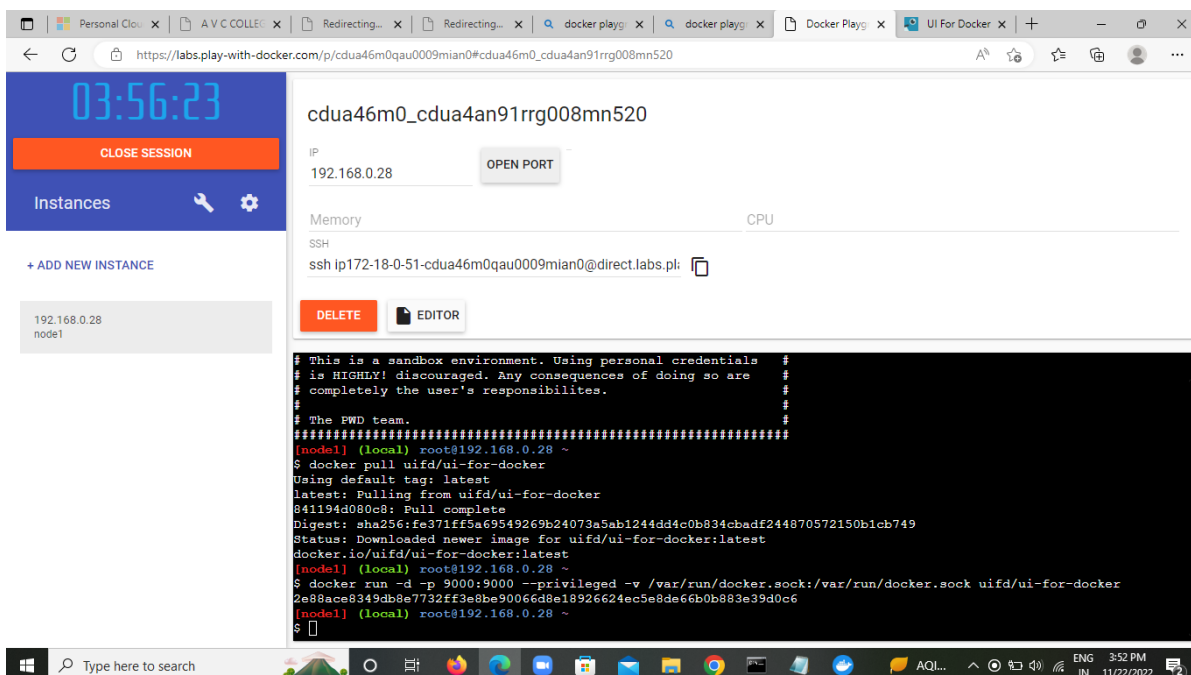
Assignment Date	22 November 2022
Student Name	Falila Banu H
Student Roll Number	820319104015
Maximum Marks	2 Marks

Question-1:

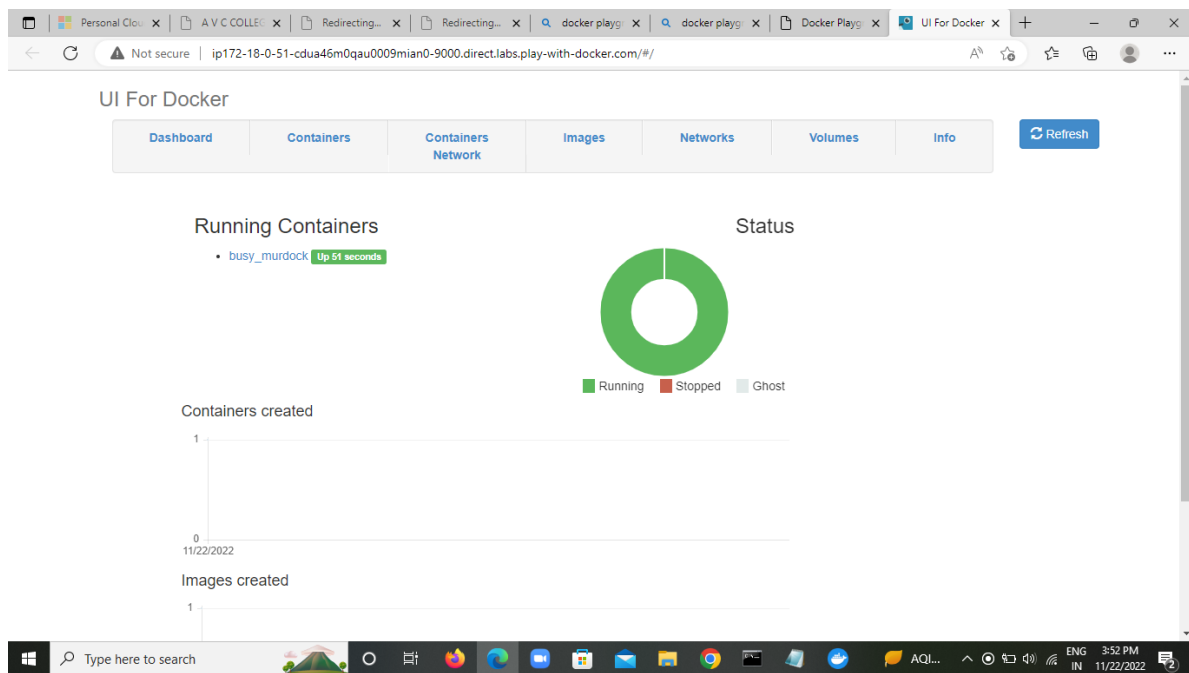
Pull an Image from docker hub and run it in docker playground.



The screenshot shows the Docker Hub repository page for 'uifd/ui-for-docker'. The page includes a search bar with the repository name, navigation links for Explore, Repositories, Organizations, and Help, and an 'Upgrade' button. The repository details show it was updated 6 years ago and is deprecated, with a note to use Portainer for new features. A 'UI For Docker' section explains its purpose as a web interface for the Docker Remote API. A 'Goals' section lists the objectives. A 'Docker Pull Command' box displays the command: `docker pull uifd/ui-for-docker`. The page also features a 'chat on github' link and a 'Tags' section.



The screenshot shows the Docker Playground interface. The top bar displays the time '03:56:23' and a 'CLOSE SESSION' button. The left sidebar shows 'Instances' and a '+ ADD NEW INSTANCE' button. The main area displays the container name 'cdua46m0_cdua4an91rrg008mn520' and its IP address '192.168.0.28'. Below this, the 'Memory' and 'CPU' usage are shown. The 'SSH' section provides the command: `ssh ip172-18-0-51-cdua46m0qau0009mian0@direct.labs.pl:~`. The 'DELETE' and 'EDITOR' buttons are visible. The bottom section shows the terminal output of the container, including the command to pull the image: `docker pull uifd/ui-for-docker` and the command to run it: `docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker`.



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: sha256:4ee5a832ef6eee533df7224b80d4cceb9ab219599014f408d0b69690be94c396
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.

Docker Desktop

Upgrade plan

Search

Ctrl+K

mounikaravi

Containers

Images

Volumes

Dev Environments BETA

Extensions BETA

Add Extensions

Images

Give feedback

An image is a read-only template with instructions for creating a Docker container. [Learn more](#)

LOCAL

REMOTE REPOSITORIES

34.32 MB / 34.32 MB in use

3 images

Last refresh: about 2 hours ago

Search

<input type="checkbox"/>	NAME	TAG	STATUS	CREATED	SIZE	ACTIONS
<input type="checkbox"/>	alpine bfe296a52501	latest	In use	10 days ago	5.54 MB	
<input type="checkbox"/>	docker/getting-started cb90f98fd791	latest	In use	7 months ago	28.78 MB	
<input type="checkbox"/>	testcontainers/helloworld 6974669be52b	latest	Unused	about 2 years ago	12.66 MB	

Showing 3 items

RAM 1.60GB

CPU 0.60%

Connected to Hub

v4.14.1