

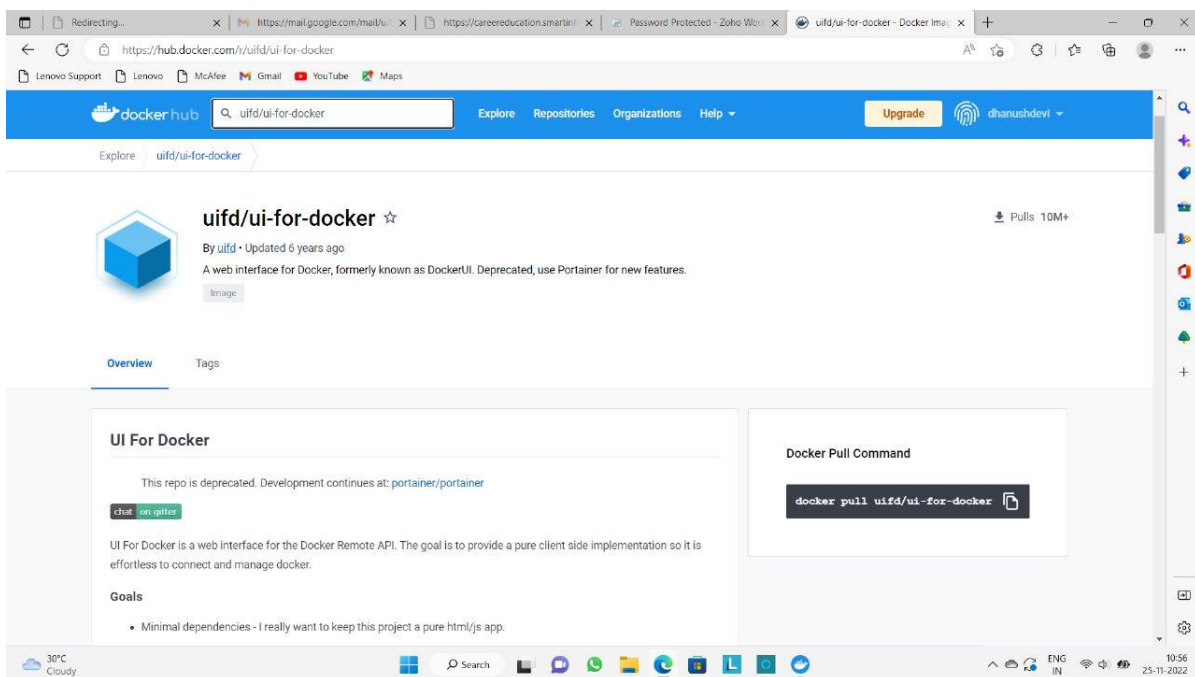
Assignment -4

DOCKER AND KUBERNETES

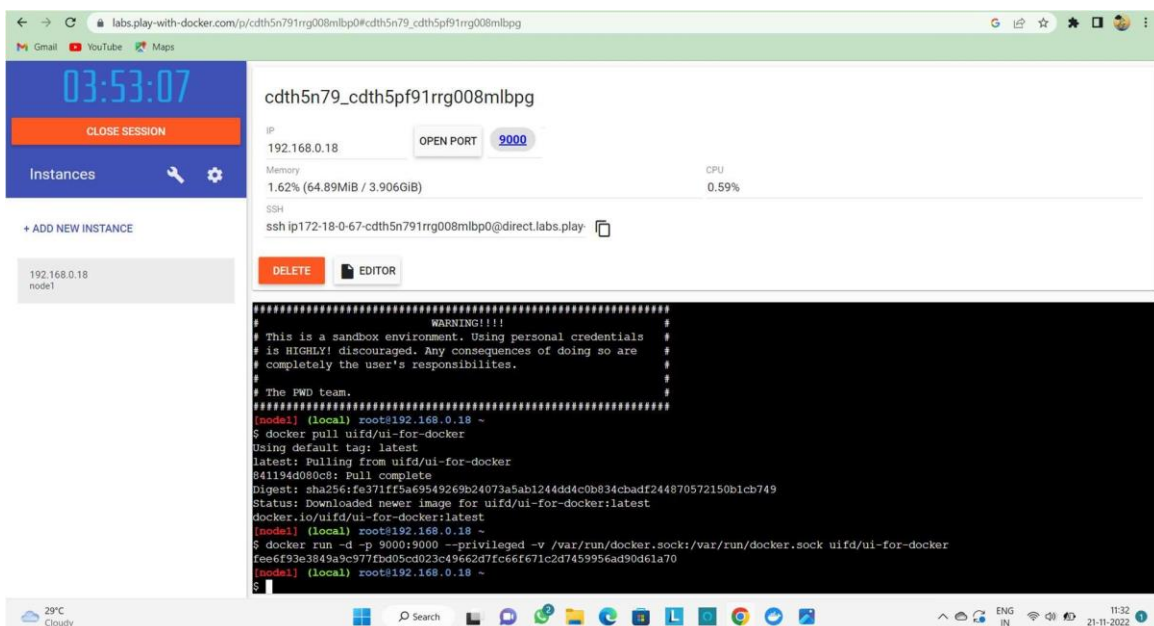
Assignment Date	25 November 2022
Student Name	DEERAJ KUMAR.T
Student Roll Number	820319104012
Maximum Marks	2 Marks

Question-1:

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



The screenshot shows the Docker Hub page for the repository `uifd/ui-for-docker`. The page header includes the Docker Hub logo, a search bar with the text `uifd/ui-for-docker`, and navigation links for Explore, Repositories, Organizations, and Help. The repository name `uifd/ui-for-docker` is prominently displayed, along with a star icon and the text "Pulls: 10M+". Below the repository name, it states "By uifd · Updated 6 years ago" and "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 project and its goals. A "Docker Pull Command" box displays the command `docker pull uifd/ui-for-docker`. The page also includes links for "chat" and "on github".

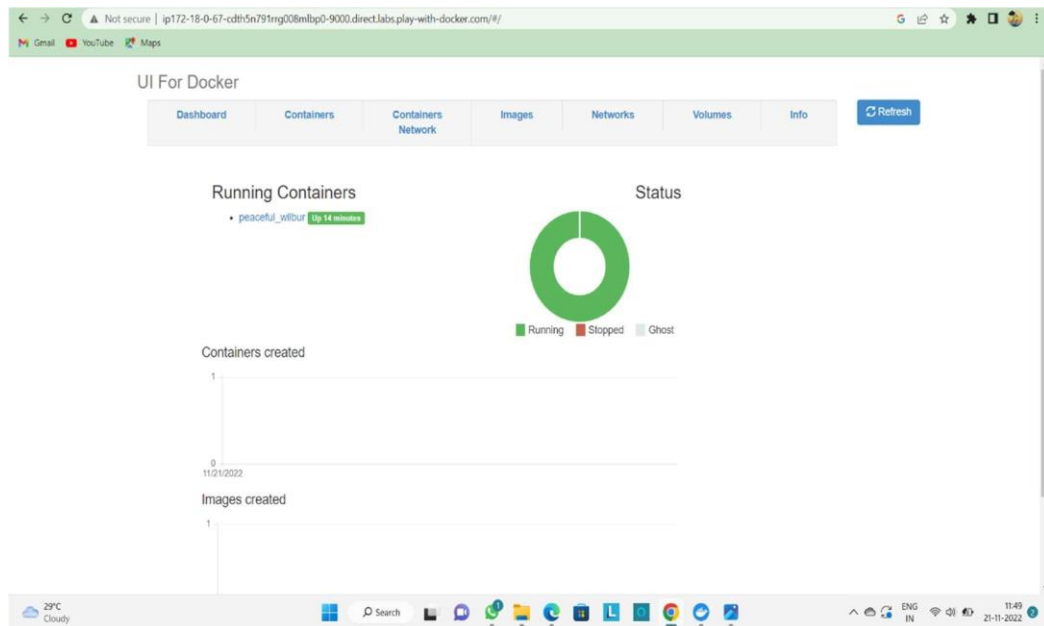


The screenshot shows the Docker Playground interface. On the left, there is a sidebar with a clock showing `03:53:07`, a "CLOSE SESSION" button, and a list of instances. The main area displays the details of a container named `cdth5n79_cdth5pf91rrg008mlbpg`. The container's IP address is `192.168.0.18`, and it has a memory usage of `1.62% (64.89MiB / 3.906GiB)` and a CPU usage of `0.59%`. The SSH command is `ssh ip172-18-0-67-cdth5n791rrg008mlbpg@direct.labs.play`. Below the container details, there is a terminal window showing the following commands and output:

```
WARNING!!!!
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.

(root@1) (local) root@192.168.0.18 ~
$ 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
(root@1) (local) root@192.168.0.18 ~
$ docker run -d -p 9000:9000 --privileged --v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
fee6f93e3849a3c977fb0d05cd023c49662d7fc66f71c2d7459956ad90d61a70
(root@1) (local) root@192.168.0.18 ~
$
```



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 10.0.22000.1219]
(c) Microsoft Corporation. All rights reserved.

C:\Users\reshmaa>docker pull testcontainers/helloworld
Using default tag: latest
latest: Pulling from testcontainers/helloworld
Digest: sha256:4ee5a832ef6eee533df7224b80d4cceb9ab219599014f408d0b69690be94c396
Status: Image is up to date for testcontainers/helloworld:latest
docker.io/testcontainers/helloworld:latest

C:\Users\reshmaa>docker push docker.io/testcontainers/helloworld
Using default tag: latest
The push refers to repository [docker.io/testcontainers/helloworld]
802cc11a560: Layer already exists
80b7fe966245: Layer already exists
80844c29ef5a: Layer already exists
errors:
denied: requested access to the resource is denied
unauthorized: authentication required

C:\Users\reshmaa>
```

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

Containers

Images

Volumes

Dev Environments

Extensions

Add Extensions

Give feedback

Images

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

LOCAL

REMOTE REPOSITORIES

108.41 MB / 108.41 MB in use

4 Images

Last refresh: 2 days ago

Search

	NAME	TAG	STATUS	CREATED	SIZE	ACTIONS
<input type="checkbox"/>	<div>docker101tutorial</div> <div>3edaaa2413c3</div>	latest	In use	5 days ago	28.91 MB	<div></div> <div></div> <div></div>
<input type="checkbox"/>	<div>alpine/git</div> <div>22d84a65cda4</div>	latest	In use	5 days ago	43.61 MB	<div></div> <div></div> <div></div>
<input type="checkbox"/>	<div>docker/getting-started</div> <div>cb90f98fd791</div>	latest	In use	8 months ago	28.78 MB	<div></div> <div></div> <div></div>
<input type="checkbox"/>	<div>testcontainers/helloworld</div> <div>69746690e52b</div>	latest	In use	about 2 years ago	12.66 MB	<div></div> <div></div> <div></div>

Showing 4 items

30°C

Cloudy

RAM 1.47GB

CPU 0.22%

Connected to Hub

Search

ENG

IN

11:03

25-11-2022