

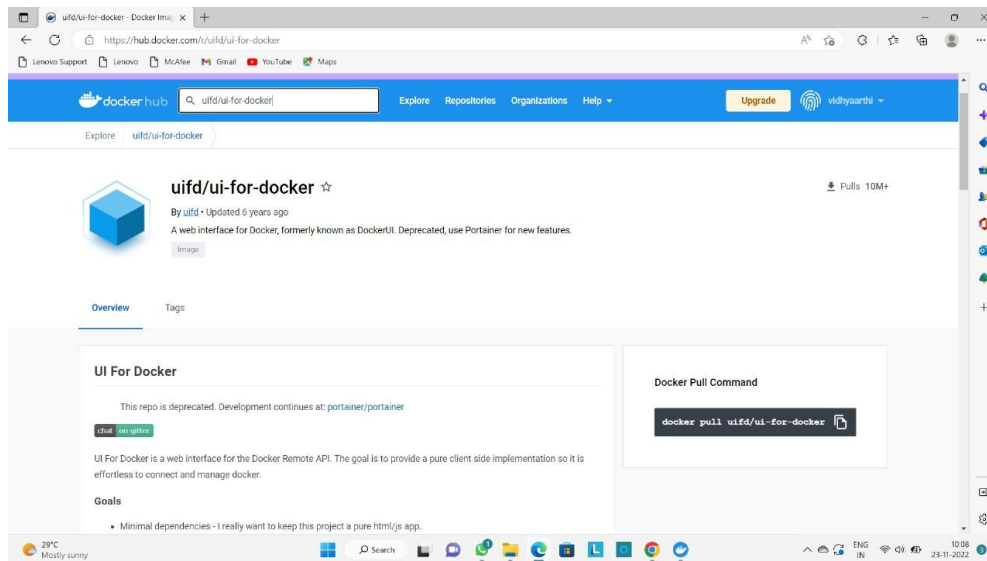
## Assignment – 4

### Docker and Kubernetes

Assignment Date	12 November 2022
Student Name	ARTHI.S
Student Roll Number	820319104008
Maximum Marks	2 Marks

#### Question-1:

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



The screenshot displays a Docker Playground environment. The top section shows a terminal window with the following commands and output:

```

[nsd@] (local) root@192.168.0.8 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
Error response from daemon: pull access denied for uifd/ui-for-docker, repository does not exist or may require 'docker login': denied: requested access to the resource is denied
[nsd@] (local) root@192.168.0.8 ~
$ docker run -d -p 8000:8000 --privileged --v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
Unable to find image 'uifd/ui-for-docker:latest' locally
latest: Pulling from uifd/ui-for-docker
541184d080c8: pull complete
Digest: sha256:f63711f0a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
48412ff132c519633c110e84dad04e2b2cd9b7e7c5eb9a27e2213e46b3148e
[nsd@] (local) root@192.168.0.8 ~

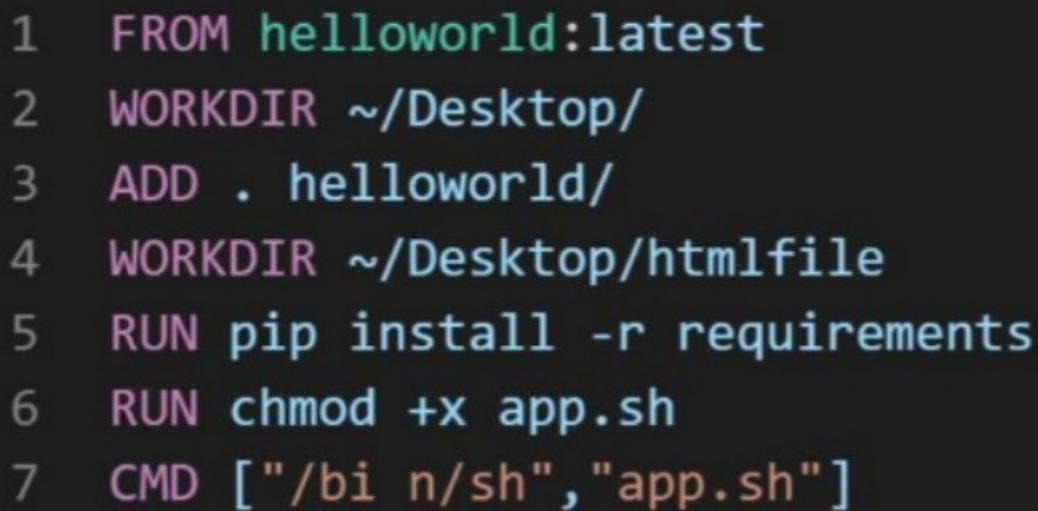
```

The bottom section shows the UI For Docker dashboard. It includes a navigation bar with tabs: Dashboard, Containers, Containers Network, Images, Networks, Volumes, and Info. The main content area displays:

- Running Containers:** A list showing one container named `laughing_pike` with a status of `Up 4 minutes`.
- Status:** A donut chart showing the status of containers. The legend indicates: Running (green), Stopped (red), and Ghost (grey).
- Containers created:** A vertical bar chart showing the number of containers created over time, with a peak of 1 container on 11/23/2022.
- Images created:** A vertical bar chart showing the number of images created over time, with a peak of 1 image on 11/23/2022.

## 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 a IBM container registry and deploy helloworld app or job portal app.

```

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
58644c29ef5a: Layer already exists
errors:
denied: requested access to the resource is denied
unauthorized: authentication required

C:\Users\reshmaa>docker pull docker.io/testcontainers/helloworld
Using default tag: latest
Error response from daemon: unknown image in /v1.41/images/create?fromImage=docker%2Ftestcontainers%2Fhelloworld&tag=latest

C:\Users\reshmaa>docker pull testcontainers/helloworld
Using default tag: latest
latest: Pulling from testcontainers/helloworld
Digest: sha256:4ee5a832ef6eee533df7224b80d4cce9ab219599014f408d0b69690be94c396
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
58644c29ef5a: 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 helloworld image or job portal image and also expose the same app to run in nodeport.

