

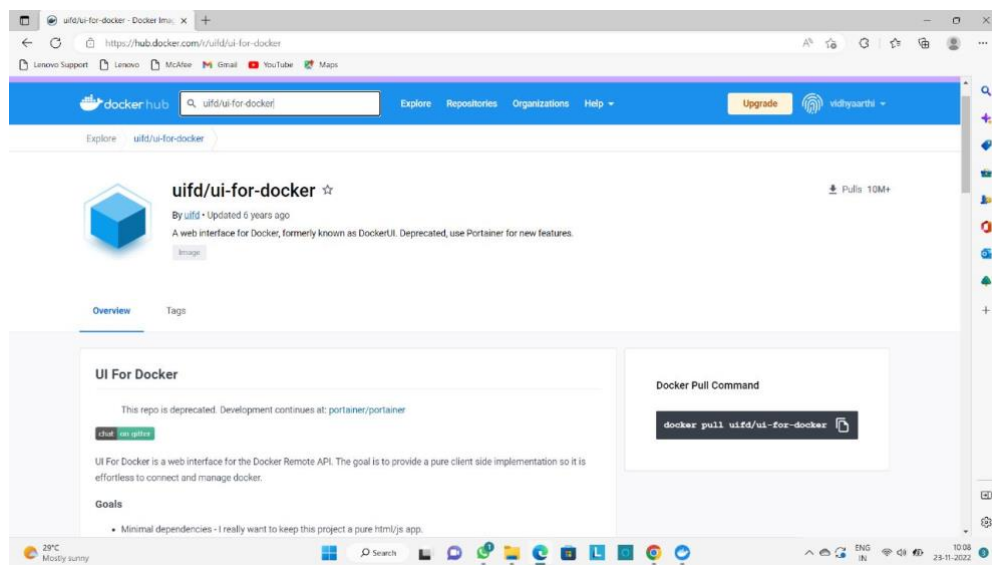
Assignment – 4

Docker and Kubernetes

Assignment Date	12 November 2022
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Student Roll Number	820319104046
Maximum Marks	2 Marks

Question-1:

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



The image shows a Docker Playground session and the Docker Desktop UI. The top part is a terminal window titled 'cduq8863_cduq8j60qau0009mjheg' with IP '192.168.0.8'. It shows a terminal session where the user attempts to pull the 'uifd/ui-for-docker' image. The terminal output shows a warning about the sandbox environment, followed by a successful pull of the image 'uifd/ui-for-docker:latest' from Docker Hub. The bottom part is the Docker Desktop UI, showing the 'UI For Docker' dashboard. The dashboard includes a 'Running Containers' section with a donut chart showing 100% running containers, and a 'Containers created' section showing a list of containers.

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 FWD team. #
#####
[roote] (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': de
nied: requested access to the resource is denied
[roote] (local) root@192.168.0.8 ~
$ docker run -d -p 9000:9000 --privileged --w/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
841194d06bdc: pull complete
Digest: sha256:10371f5c49269b24073a5ab1244d44c0b834cbad244870572158b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
48412ff132c519613c110e84da04e2bd2cd9b7e7c5eb9a27e2213e46b3148e
[roote] (local) root@192.168.0.8 ~
```

Docker Desktop UI:

The Docker Desktop UI shows the 'UI For Docker' dashboard. The dashboard includes a 'Running Containers' section with a donut chart showing 100% running containers. The 'Containers created' section shows a list of containers.

Question-2:

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



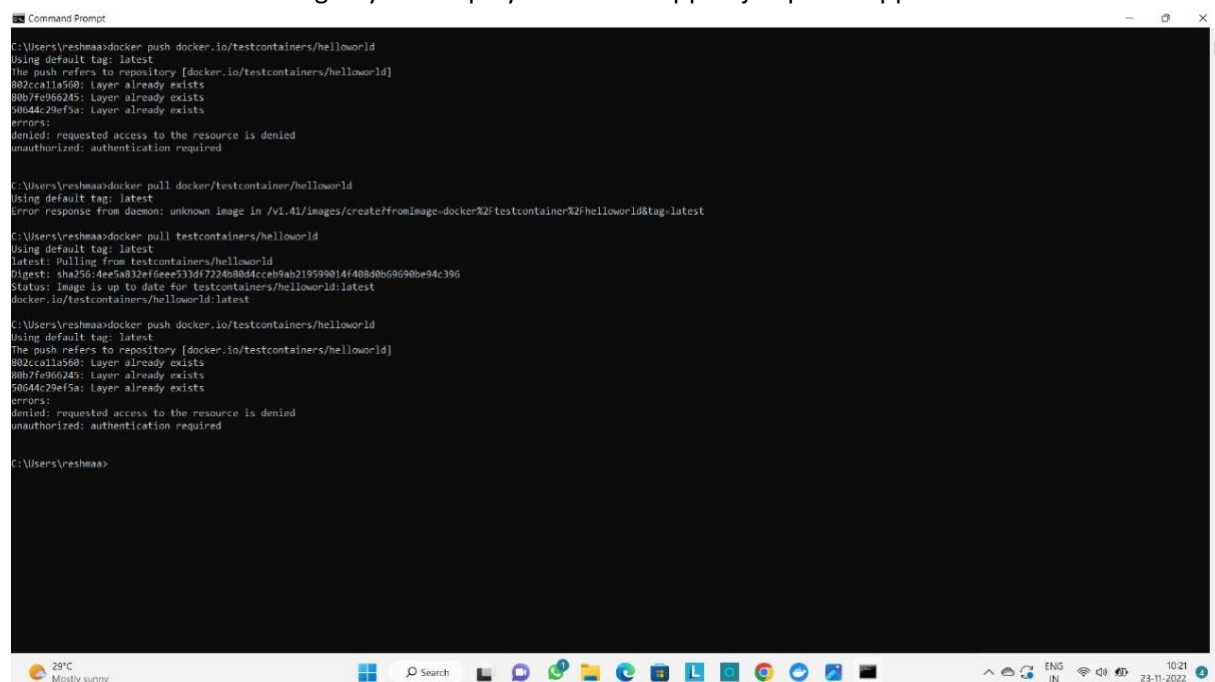
```

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
50644c29ef5a: 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: sha256:4ee5a832ef6eee533df7224b80d4cceb9ab219599014f408d0b69690be94c396
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
50644c29ef5a: 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.

