

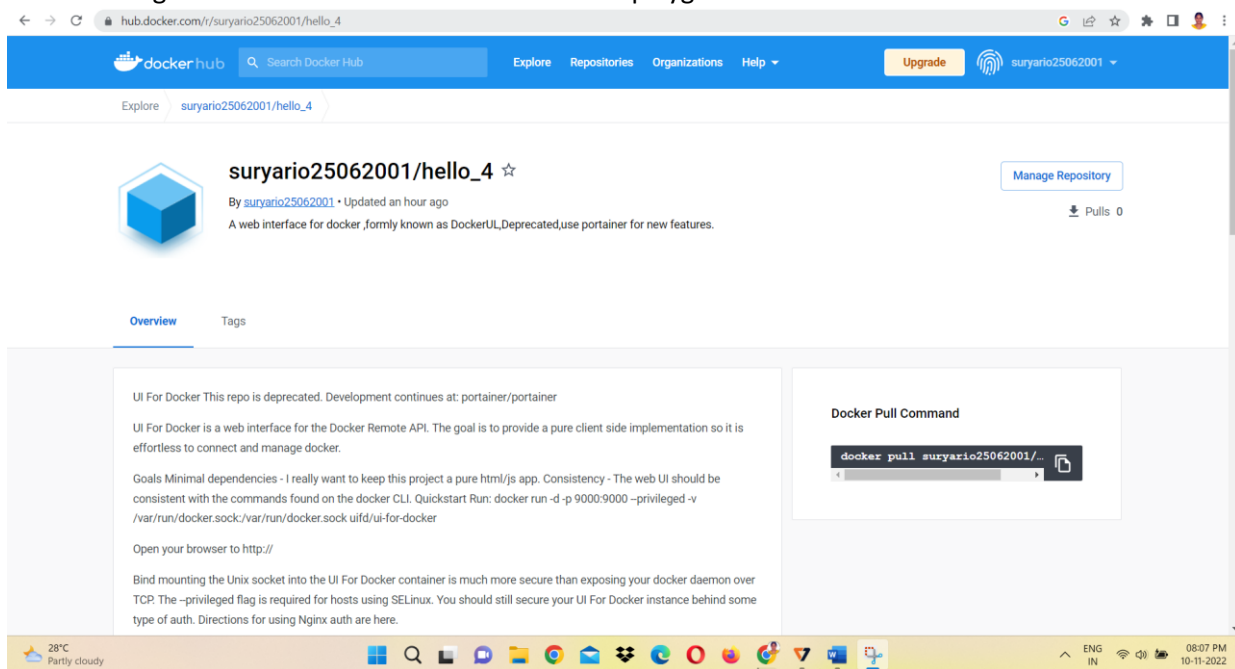
Assignment – 4

Docker and Kubernetes

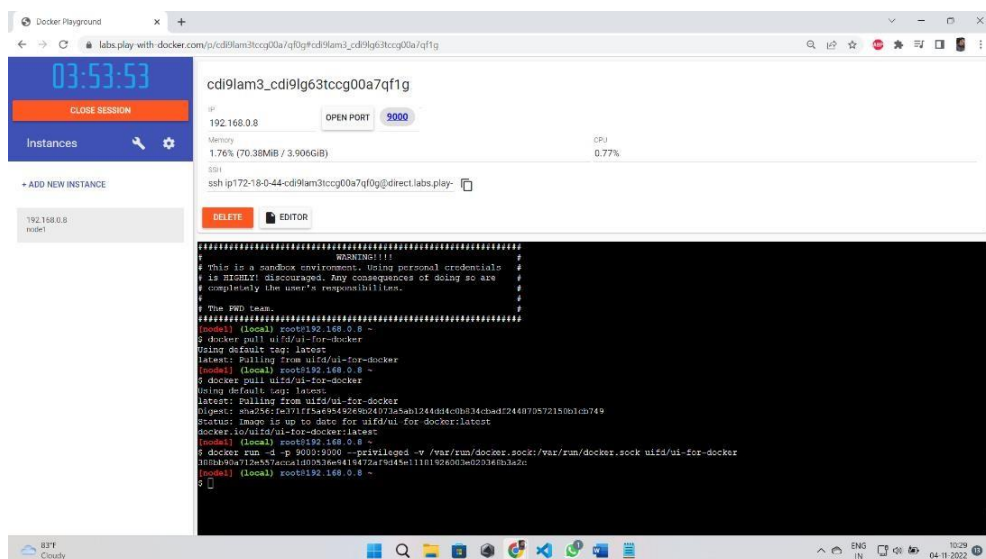
Assignment Date	04 November 2022
Student Name	Suryaprakash M
Student Roll Number	927619BIT4112
Maximum Marks	2 Marks

Question-1:

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

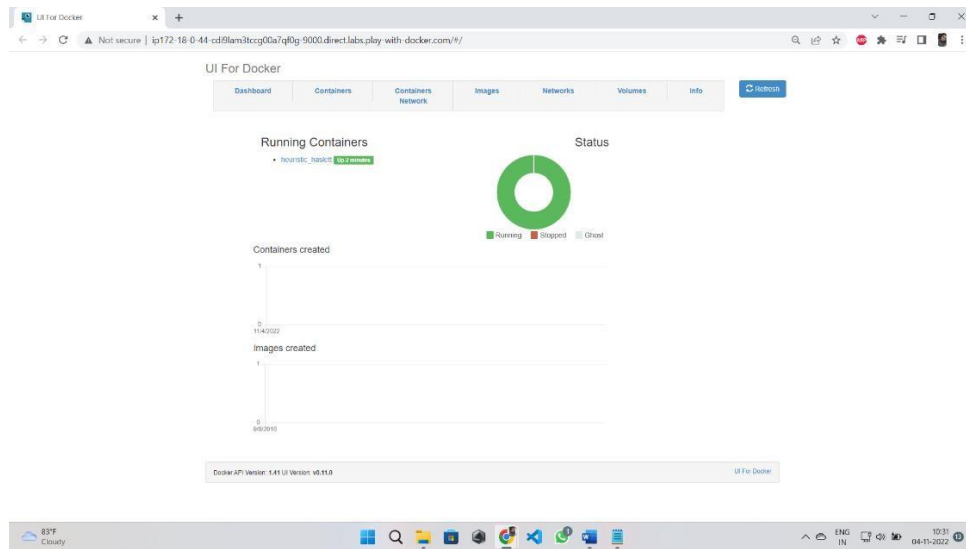


The screenshot shows the Docker Hub repository page for 'suryario25062001/hello_4'. The page includes a search bar, navigation links (Explore, Repositories, Organizations, Help), and a 'Manage Repository' button. The repository description states: 'A web interface for docker, formerly known as DockerUI. Deprecated, use portainer for new features.' The 'Overview' tab is selected, showing a 'Docker Pull Command' section with the command: `docker pull suryario25062001/...`



The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:53:53, a 'CLOSE SESSION' button, and an 'Instances' section. The main area displays a container named 'cd9lam3_cdi9lg63tccg00a7qf1g' with IP '192.168.0.8'. The container's resources are shown: Memory 1.76% (70.38MB / 3.906GB) and CPU 0.77%. The container's status is 'Running'. The terminal output shows the following commands and their results:

```
root@192.168.0.8 ~# docker pull ui5d/ui-for-docker
latest: Pulling from ui5d/ui-for-docker
Digest: sha256:fe371f1fae954526a24773a5a1244d4cbb34c4ad724487057215b1ch749
Status: Image is up to date for ui5d/ui-for-docker:latest
root@192.168.0.8 ~# docker run -d -p 9000:9000 --privileged --v /var/run/docker.sock:/var/run/docker.sock ui5d/ui-for-docker
18bb8da712a557ac6a1403836e416472a7d45e11b1928003ed20346b3a2c
root@192.168.0.8 ~#
```



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.

```
PS C:\Users\HP> docker tag hello-world icr.io/0034ns/helloworld
PS C:\Users\HP> docker push icr.io/0034ns/helloworld
Using default tag: latest
The push refers to repository [icr.io/0034ns/helloworld]
e07ee1baac5f: Pushed
latest: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525
```

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.

