

Assignment -4

Docker and Kubernetes

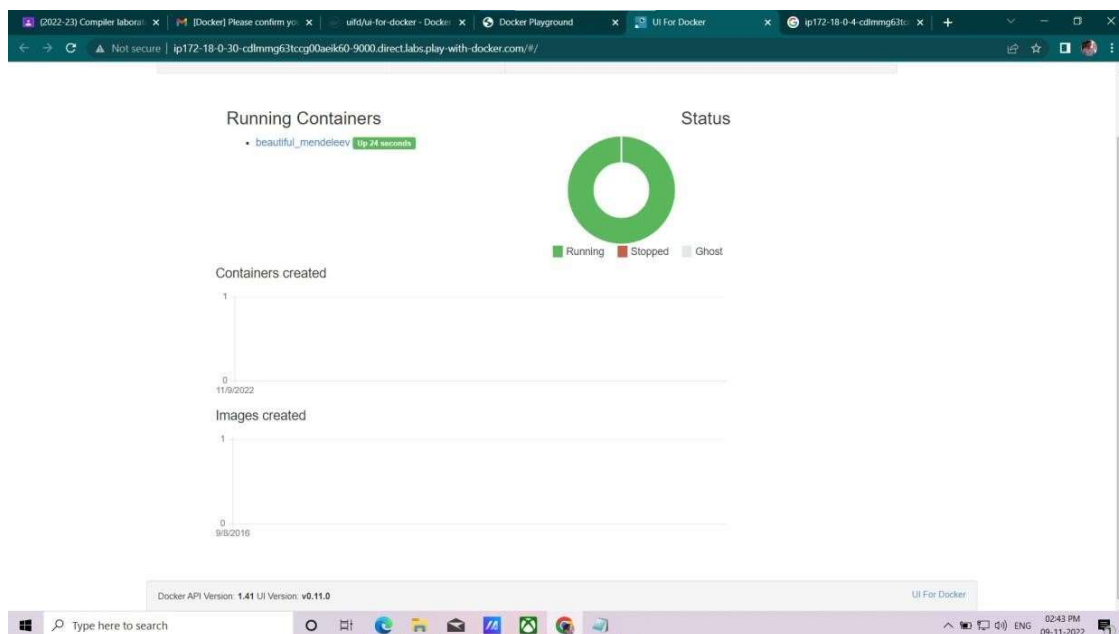
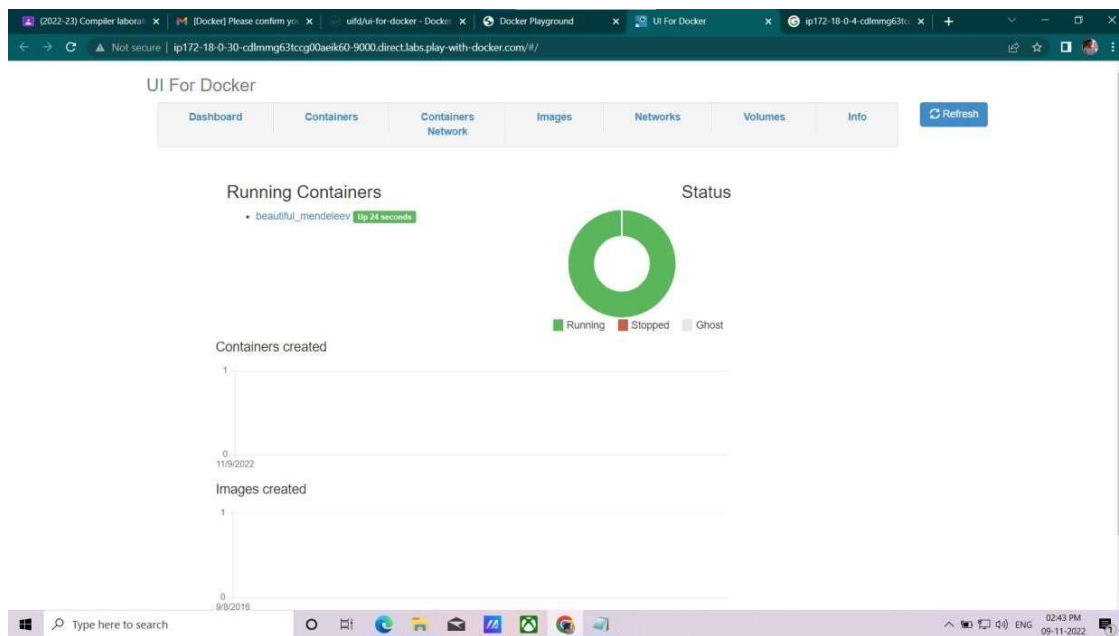
Assignment Date	21 October 2022
Student Name	Harsha Vardhan Yerneni
Student Roll Number	CITC19 05 084
Maximum Marks	2 Marks

1. Pull an image from docker hub and run it in docker Playground

The screenshot shows the Docker Hub page for the `uifd/ui-for-docker` image. The page includes a blue header with 'Explore' and 'uifd/ui-for-docker' tabs. Below the header is a blue cube icon and the text 'uifd/ui-for-docker' with a star icon and 'Pulls 10M+'. A note states 'By uifd • Updated 6 years ago' and 'A web interface for Docker, formerly known as DockerUI. Deprecated, use Portainer for new features.' There is a 'Tags' section with 'Overview' and 'Tags' tabs. The main content area has a section titled 'UI For Docker' with a warning that the repo is deprecated and development continues at `portainer/portainer`. It also mentions 'UI For Docker is a web interface for the Docker Remote API. The goal is to provide a pure client side implementation so it is effortless to connect and manage docker.' Under 'Goals', it lists 'Minimal dependencies - I really want to keep this project a pure html/js app.' On the right, there is a 'Docker Pull' section with a 'Pull command copied' button and a code block showing `docker pull uifd/ui-for-docker`.

The screenshot shows the Docker Playground interface. On the left, there is a sidebar with a clock showing '03:53:31', a 'CLOSE SESSION' button, and an 'Instances' section. The main area displays the details of a container named `cdlmmg63_cdlmmhm3tcg00aiek6g`. It shows the IP address `192.168.0.18`, memory usage `1.61% (64.32MiB / 3.906GiB)`, and CPU usage `4.05%`. Below this, 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.
#####
[rodel] (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:fe371f1fae949269b34073a5b1244d4c0b834badf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
[rodel] (local) root@192.168.0.18 ~
$ docker run -d --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
a975f963e20f7df6e6625151625f418f0f258eed7a4e405516eb31ae22cd366
[rodel] (local) root@192.168.0.18 ~
$
```



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

```

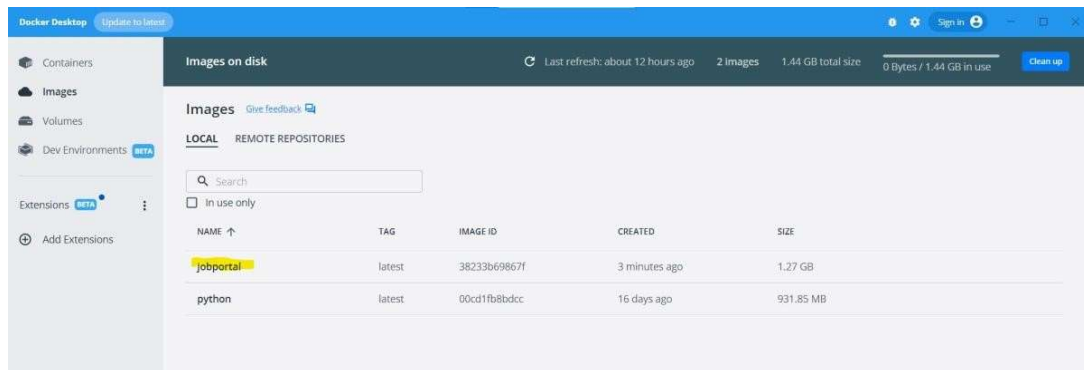
1
2 FROM python
3 WORKDIR /ibmlast
4 COPY requirements.txt requirements.txt
5 RUN /usr/local/bin/python -m pip install --upgrade pip
6 RUN /usr/local/bin/python -m pip install ibm_db
7 RUN /usr/local/bin/python -m pip install flask
8 ENV IBM_DB_HOME /ibmlast/db2_license/licenses/clidriver
9 ENV LD_LIBRARY_PATH /ibmlast/db2_license/licenses/clidriver/lib:$LD_LIBRARY_PATH
10 EXPOSE 5000
11 COPY . .
12 CMD [ "python3", "-m", "flask", "--debug", "run" ]
13

```

```
Build Log  Dashboard

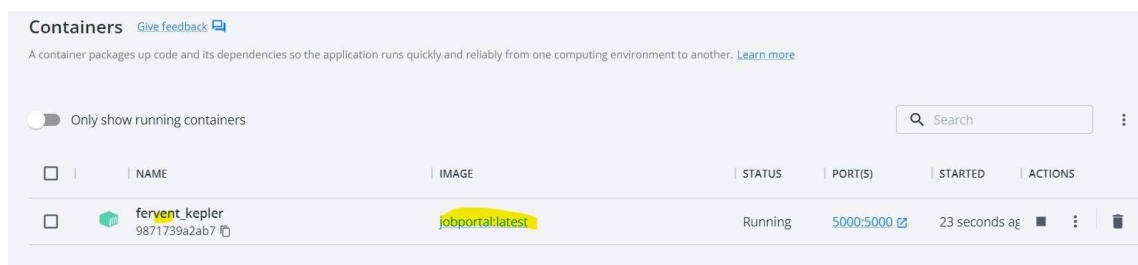
Step 9/11 : EXPOSE 5000
---> Using cache
---> 22526517563c
Step 10/11 : COPY . .
---> 933590780154
Step 11/11 : CMD [ "python3", "-m", "flask", "--debug", "run"]
---> Running in 720bc49aaf0f
Removing intermediate container 720bc49aaf0f
---> 38233b69867f

Successfully built 38233b69867f
Successfully tagged jobportal:latest
'jobportal Dockerfile: Dockerfile' has been deployed successfully.
```



```
C:\Users>docker run -d -p 5000:5000 jobportal
9871739a2ab7c15ed9bbe2431037be7d3612d9b2407ce771eb47250e630eae84

C:\Users>
```





Registration

<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="password"/>
<input type="submit" value="Submit"/>

3. Create a IBM container registry and deploy helloworld app or jobportal

