

# Assignment-4

## PLASMA DONOR APPLICATION

TEAM ID - PNT2022TMID26173

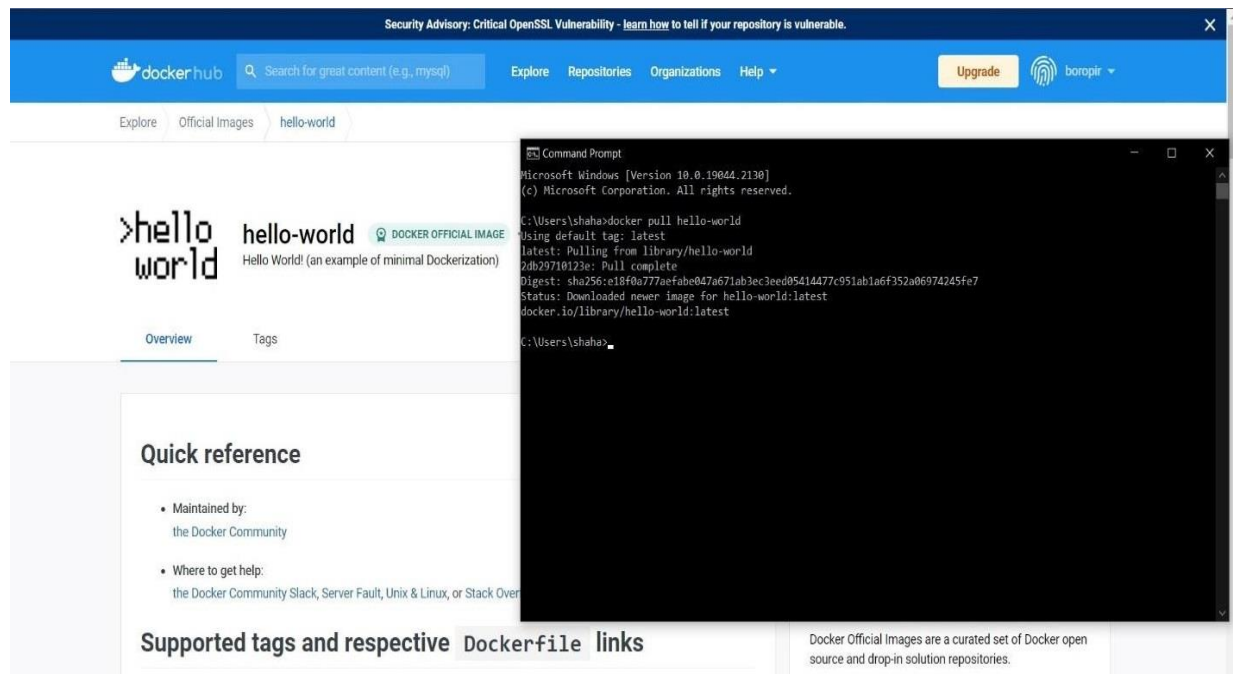
TEAM LEADER : DHILEEPAN P

TEAM MEMBER : CHARAN G

TEAM MEMBER: DHANUSH R

TEAM MEMBER: DHARUN I

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



The screenshot displays the Docker Hub interface for the 'hello-world' image. The page shows the 'hello-world' image with a 'DOCKER OFFICIAL IMAGE' badge and a description: 'Hello World! (an example of minimal Dockerization)'. Below this, there is a 'Quick reference' section with links to 'Maintained by: the Docker Community' and 'Where to get help: the Docker Community Slack, Server Fault, Unix & Linux, or Stack Overflow'. At the bottom, there is a section for 'Supported tags and respective Dockerfile links'. Overlaid on the right side of the screenshot is a Windows Command Prompt window. The command prompt shows the execution of the command 'docker pull hello-world', which successfully pulls the latest version of the 'hello-world' image from the Docker Hub library. The output of the command is displayed in the prompt, including the digest and status of the pull operation.

Security Advisory: Critical OpenSSL Vulnerability - [learn how to tell if your repository is vulnerable.](#)

dockerhub Search for great content (e.g., mysql) Explore Repositories Organizations Help Upgrade boropir

Explore Official Images hello-world

>hello world hello-world DOCKER OFFICIAL IMAGE Hello World! (an example of minimal Dockerization)

Overview Tags

Quick reference

- Maintained by: the Docker Community
- Where to get help: the Docker Community Slack, Server Fault, Unix & Linux, or Stack Overflow

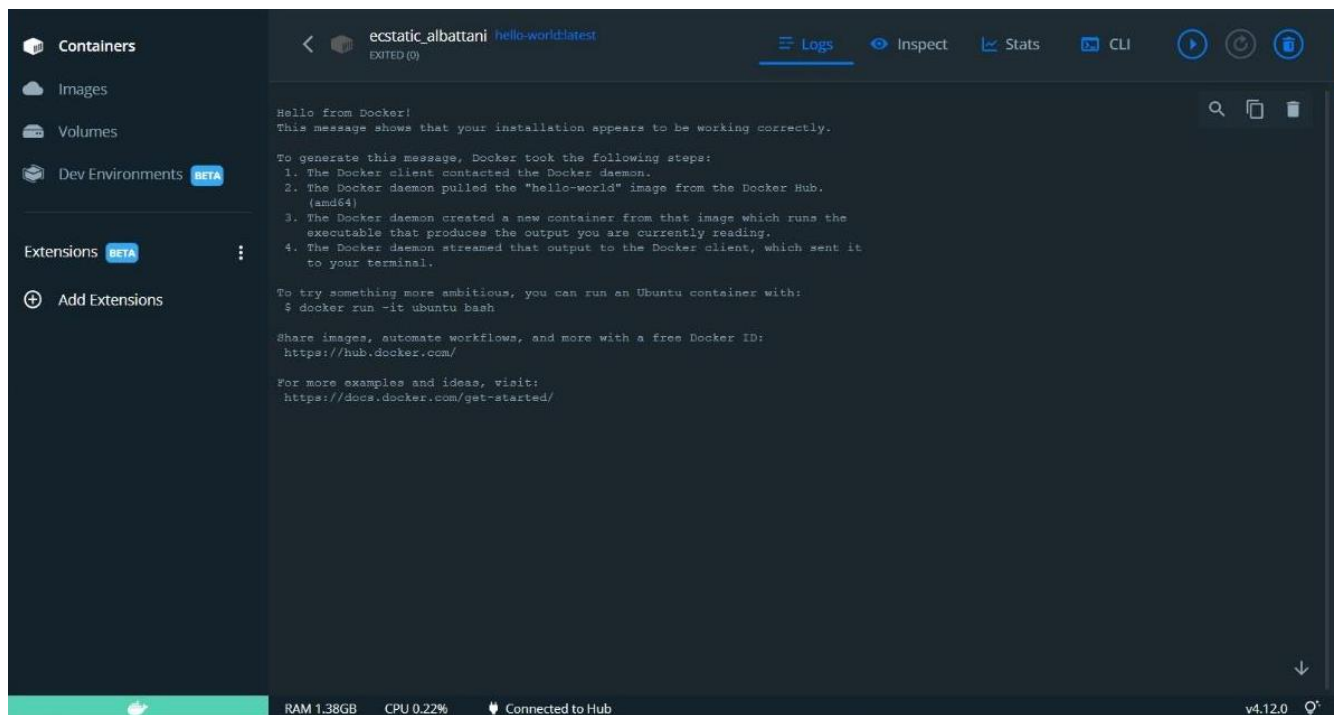
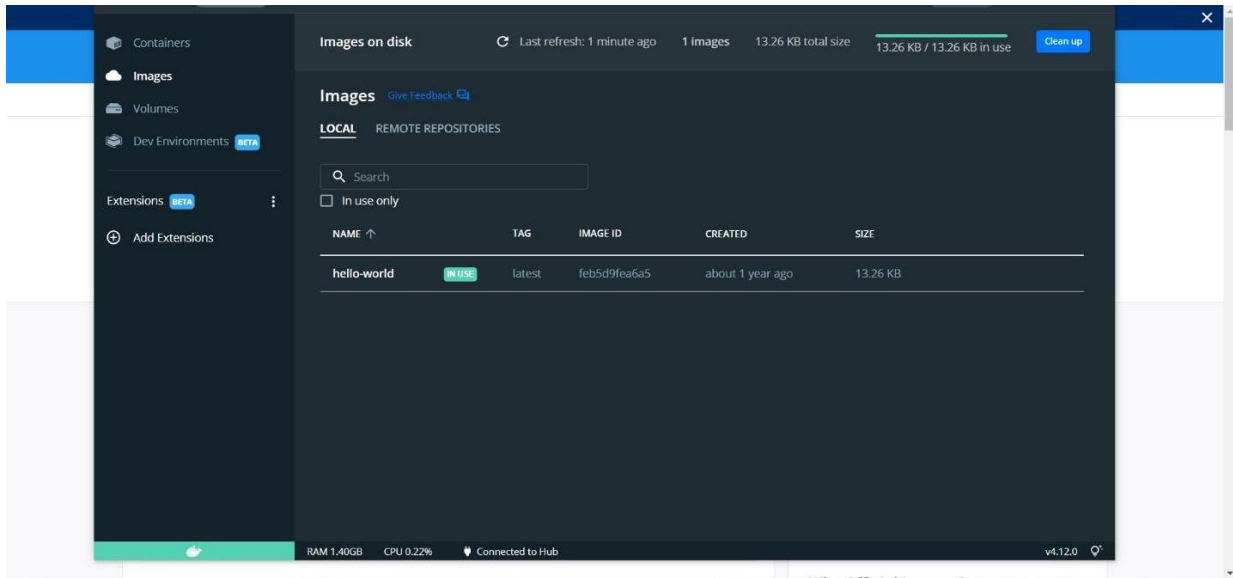
Supported tags and respective Dockerfile links

Docker Official Images are a curated set of Docker open source and drop-in solution repositories.

```
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\shaha>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:e18f0a777aefabe047a671ab3ec3eed05414477c951ab1a6f352a06974245fe7
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest

C:\Users\shaha>
```



2. Create a docker file for the jobportal application and deploy it in Docker desktop application.  
Dockerfile:

FROM python:3.6

WORKDIR /app

ADD . /app

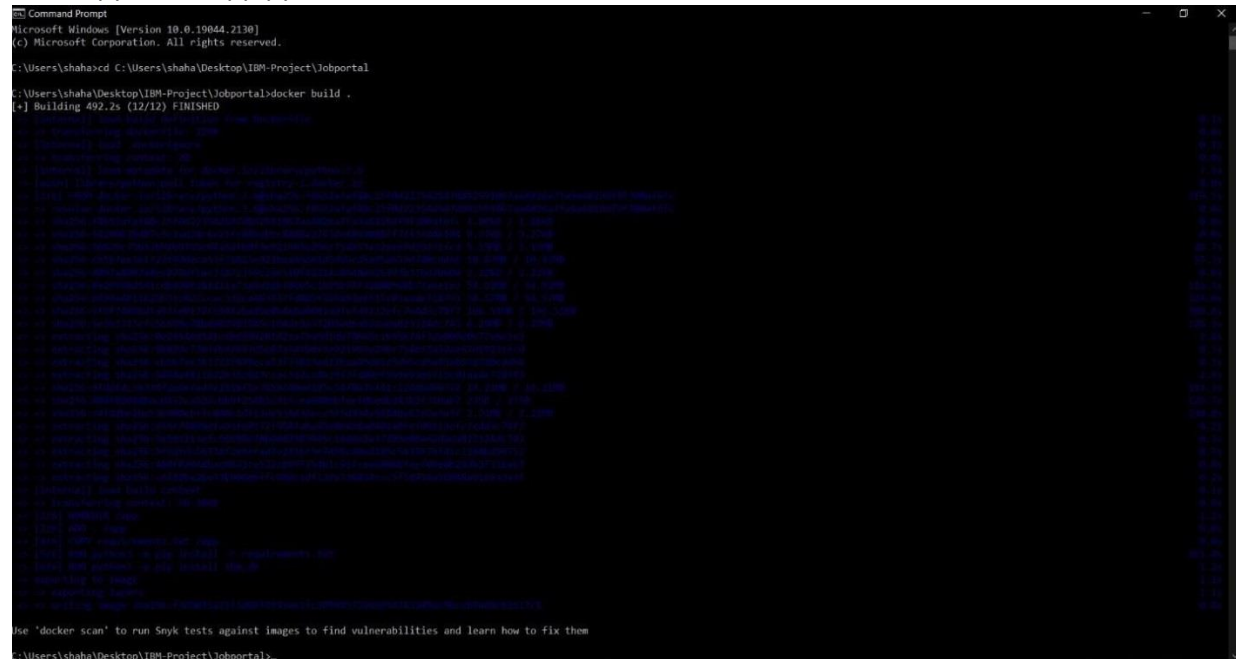
COPY requirements.txt /app

RUN python3 -m pip install -r requirements.txt

RUN python3 -m pip install ibm\_db

EXPOSE 5000

CMD ["python","app.py"]



```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\shaha>cd C:\Users\shaha\Desktop\IBM-Project\Jobportal

C:\Users\shaha\Desktop\IBM-Project\Jobportal>docker build .
[+] Building 492.2s (12/12) FINISHED
#0 FROM python:3.6
#1 WORKDIR /app
#2 ADD . /app
#3 COPY requirements.txt /app
#4 RUN python3 -m pip install -r requirements.txt
#5 RUN python3 -m pip install ibm_db
#6 EXPOSE 5000
#7 CMD ["python","app.py"]
Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
C:\Users\shaha\Desktop\IBM-Project\Jobportal>
```

```
Command Prompt - docker run f3d9015a21f3
C:\Users\shaha\Desktop\IBM Project\jobportal>docker images
REPOSITORY                                TAG                                IMAGE ID            CREATED            SIZE
none>                                     <none>                            f3d9015a21f3       2 minutes ago     1.8MB
hubproxy.docker.internal:5000/docker/desktop-kubernetes  kubernetes-v1.25.0-cni-v1.3.1-critools-v1.24.2-cri-dockersd-v0.2.5-1-debian  2042e761d17a       2 months ago      163MB
k8s.gcr.io/kube-apiserver                  v1.25.0                          4d2edfd10d3e       2 months ago      128MB
k8s.gcr.io/kube-scheduler                  v1.25.0                          bf2cf311509        2 months ago      56.6MB
k8s.gcr.io/kube-controller-manager         v1.25.0                          1a54c86c0946       2 months ago      117MB
k8s.gcr.io/kube-proxy                      v1.25.0                          58d99f6c696f       2 months ago      61.7MB
k8s.gcr.io/pause                           3.8                              4073874c98ef       4 months ago      721kB
k8s.gcr.io/etcd                            3.5.4-0                          a8a176a5d5d5       5 months ago      300MB
k8s.gcr.io/coredns                         v1.9.3                           518596f0bec        5 months ago      48.8MB
docker/desktop-vpnkit-controller           v2.0                              8c2c38aa676e       18 months ago     21MB
docker/desktop-storage-provisioner         v2.0                              99f83d71f47b       18 months ago     41.9MB

C:\Users\shaha\Desktop\IBM Project\jobportal>docker run f3d9015a21f3
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on all addresses.
  WARNING: This is a development server. Do not use it in a production deployment.
* Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)
```



## Available Jobs

Home

←

jovial\_proskuriakova f3d9015a21f3

EXITED (137)

Logs

Inspect

Stats

CLI

▶

🔄

🗑️

☁️

💻

📦

EXT

⊕

🔄

📶

\* Serving Flask app 'app' (lazy loading)

\* Environment: production

WARNING: This is a development server. Do not use it in a production deployment.

Use a production WSGI server instead.

\* Debug mode: off

\* Running on all addresses.

WARNING: This is a development server. Do not use it in a production deployment.

\* Running on http://172.17.0.2:5000/ (Press CTRL+C to quit)

RAM 4.89GB

CPU 2.44%

📶 Connected to Hub

v4.12.0

🔊

### 3. Create a IBM container registry and deploy jobportalapp.

```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\shaha>ibmcloud login
API endpoint: https://cloud.ibm.com

Email> 410619104029@smartinternz.com

Password>
Authenticating...
OK

Targeted account Raad Chowdhury's Account (3828f847bb644584acc551e935d0e383)

Select a region (or press enter to skip):
1. au-syd
2. in-che
3. jp-osa
4. jp-tok
5. kr-seo
6. eu-de
7. eu-gb
8. ca-tor
9. us-south
10. us-east
11. br-sao
Enter a number>

API endpoint: https://cloud.ibm.com
Region:
User: 410619104029@smartinternz.com
Account: Raad Chowdhury's Account (3828f847bb644584acc551e935d0e383)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
If API endpoint:
Org:
Space:

C:\Users\shaha>
```

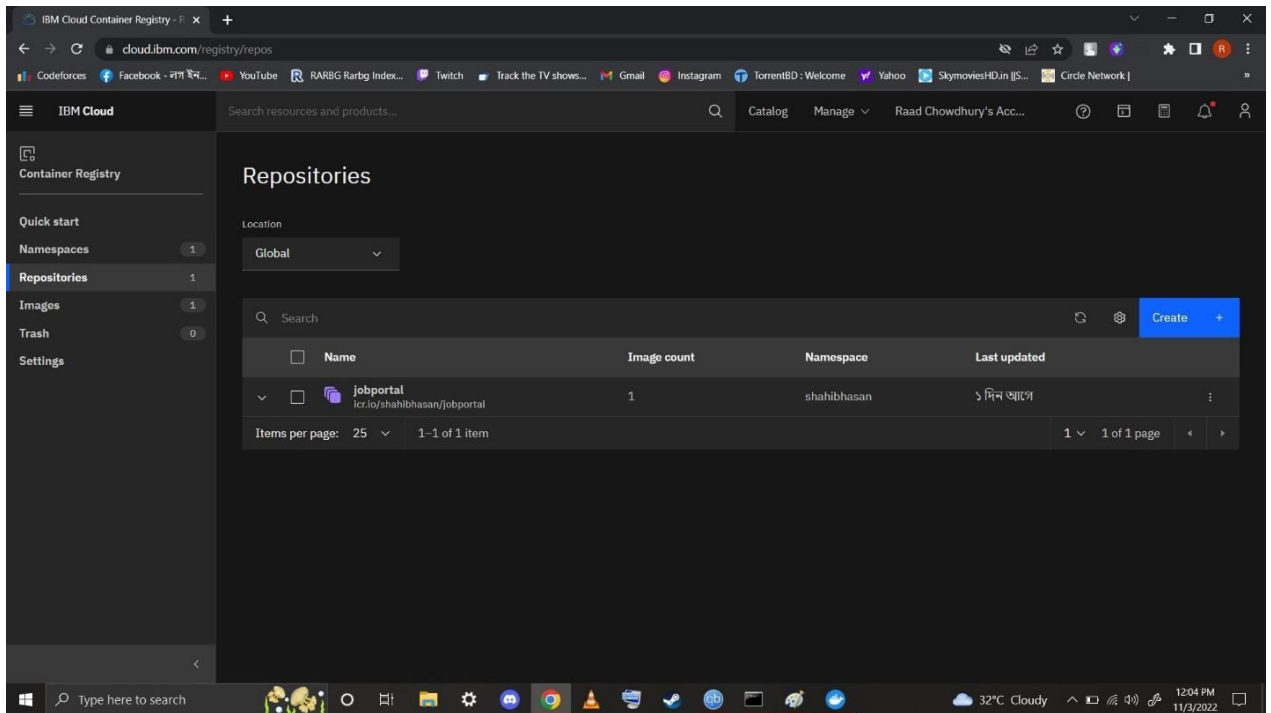
```
Command Prompt
C:\Users\shaha>ibmcloud cr login
Logging 'docker' in to 'icr.io'...
Logged in to 'icr.io'.

OK

C:\Users\shaha>docker tag f3d9015a21f3 icr.io/shahibhasan/jobportal

C:\Users\shaha>docker push icr.io/shahibhasan/jobportal
Using default tag: latest
The push refers to repository [icr.io/shahibhasan/jobportal]
21d888e119b: Pushed
ef5059251a61: Pushed
ba5fa7349894: Pushed
21a1ndecfa41: Pushed
6c702597ab0c: Pushed
aa4c808c19f6: Pushed
3ba9f690e8ba: Pushed
1e607d59ef9f: Pushed
e118e7e1fcc2: Pushed
3a0b593ed24: Pushed
26a504e63be4: Pushed
3bf42db0de72: Pushed
31892cc314cb: Pushed
11036051f93b: Pushed
latest: digest: sha256:910c91f1fe2226ae9306e48d02426c6c513bf54cfad9b960a8cb02bcb0926143 size: 3260

C:\Users\shaha>
```



4. Create a Kubernetes cluster in IBM cloud and deploy jobportal image and also expose the same app to run in nodeport.

