Assignment - 4

Date	21 October 2022
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Project Name	Plasma Donor Application
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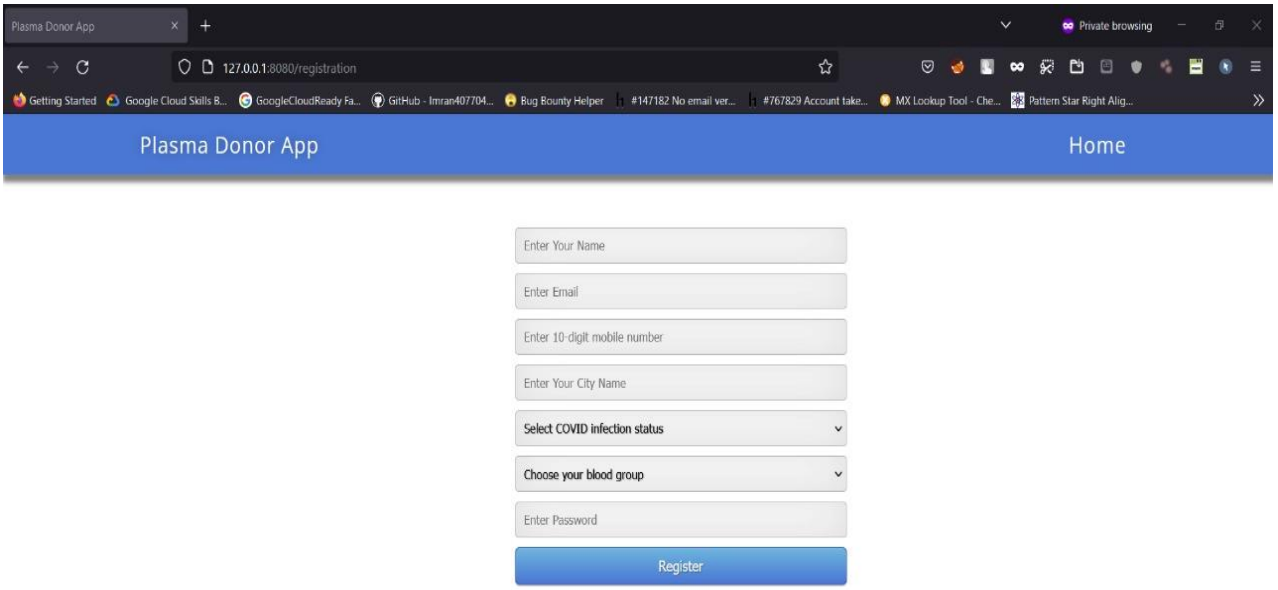
➔ **Pull an Image from docker hub and run it in docker playground.**

```
C:\Users\acer>docker run -p 8080:8080 plasmaa
 * 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://172.17.0.3:8080/ (Press CTRL+C to quit)
```

->



> 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"]
```

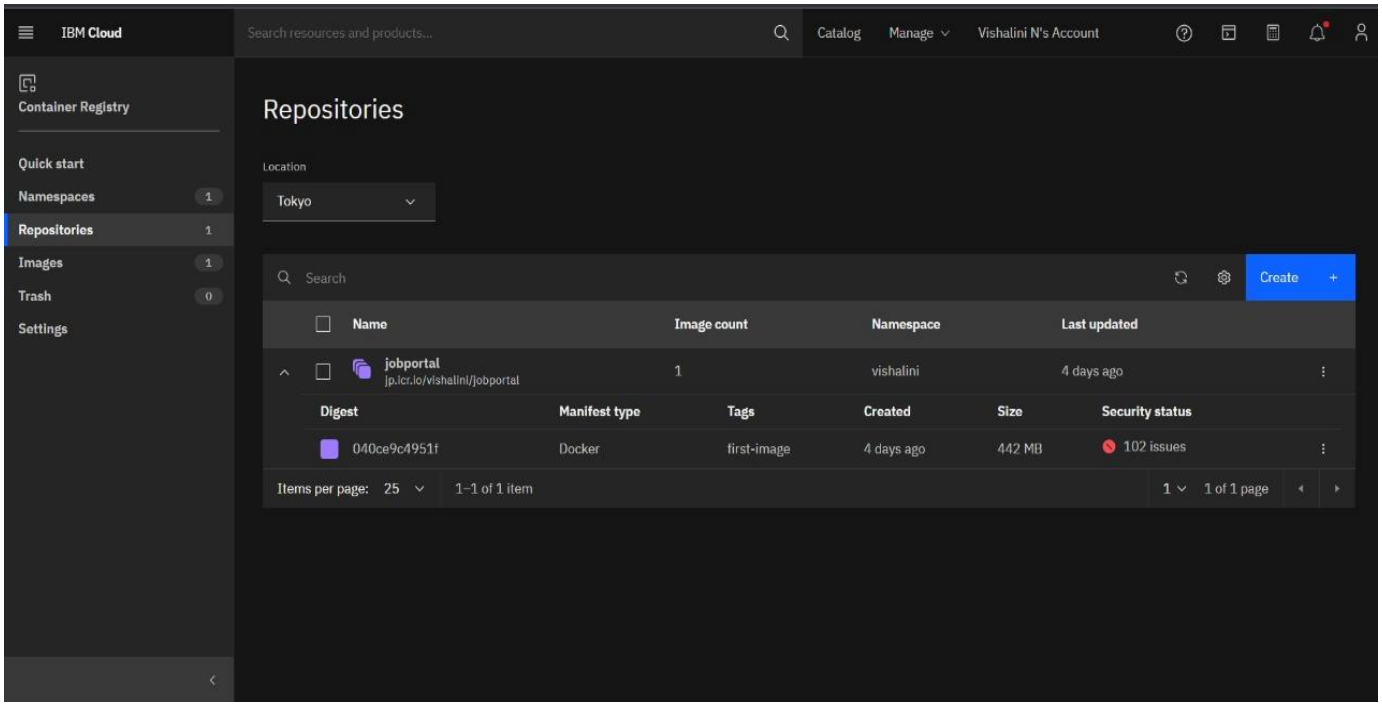
```
F:\ibm final project\4 assignment\Assignment 4\job-portal>docker build -t jobportal .
[+] Building 998.7s (12/12) FINISHED
 => [internal] load build definition from Dockerfile                                                    0.5s
 => => transferring dockerfile: 229B                                                                    0.4s
 => [internal] load .dockerignore                                                                       0.4s
 => => transferring context: 2B                                                                         0.4s
 => [internal] load metadata for docker.io/library/python:3.6                                           9.8s
 => [auth] library/python:pull token for registry-1.docker.io                                           0.0s
 => [1/6] FROM docker.io/library/python:3.6@sha256:f8652afaf88c25f0d22354d547d892591067aa4026a7fa9a6819df9f300af6  0.0s
 => [internal] load build context                                                                       5.8s
 => => transferring context: 19.27MB                                                                    5.6s
 => CACHED [2/6] WORKDIR /app                                                                           0.0s
 => [3/6] ADD . /app                                                                                    2.0s
 => [4/6] COPY requirements.txt /app                                                                    0.1s
 => [5/6] RUN python3 -m pip install -r requirements.txt                                              976.5s
 => [6/6] RUN python3 -m pip install ibm_db                                                             2.6s
 => exporting to image                                                                                  1.2s
 => => exporting layers                                                                                 1.1s
 => => writing image sha256:207e0bd0dda8b2cd2650896ed1999287d943302b2fdd490358dc942731da8f41            0.0s
 => => naming to docker.io/library/jobportal                                                            0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
```

->Create a IBM container registry and deploy helloworld app or jobportalapp

```
F:\ibm final project\4 assignment\Assignment 4\job-portal>docker tag jobportal jp.icr.io/vishalini/jobportal:first-image

F:\ibm final project\4 assignment\Assignment 4\job-portal>docker push jp.icr.io/vishalini/jobportal:first-image
The push refers to repository [jp.icr.io/vishalini/jobportal]
da7228922456: Pushed
ee25a24fef62: Pushing [==>                                                ]  8.806MB/178.4MB
b77cdf4d199b: Pushed
9fd66c6a19bb: Pushed
d42e96e84c4c: Pushed
aa4c808c19f6: Pushing [=========================>                         ]  4.237MB/8.054MB
8ba9f690e8ba: Pushed
3e607d59ef9f: Waiting
1e18e7e1fcc2: Waiting
c3a0d593ed24: Waiting
26a504e63be4: Waiting
8bf42db0de72: Waiting
31892cc314cb: Waiting
11936051f93b: Waiting
```



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

```
F:\ibm final project\4 assignment\Assignment 4\job-portal>kubectl expose deployment jobportal --type=NodePort --name=job
portal
service/jobportal exposed
```