

## Assignment-4

### PLASMA DONOR APPLICATION

TEAM ID:PNT2022TMID40310

#### Questions:

1. Pull an Image from docker hub and run it in docker playground.
2. Create a docker file for the jobportal application and deploy it in Docker desktop application
3. Create a docker file for the jobportal application and deploy it in Docker desktop application.
4. Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

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

```
(base) naryada@naryada:~$ sudo docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
hello-world         latest             feb5d9fea6a5       13 months ago      13.3kB
sandeepdoodigani/sandeeplasmaapp latest             5653112dee63       15 months ago      105MB
(base) naryada@naryada:~$
```

```
(base) maryada@maryada:~$ sudo docker run -p 8080:8080 sandeepdoodigani/sandeeplasmaapp
* 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://172.17.0.2:8080/ (Press CTRL+C to quit)
```

Plasma Donor App Home

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Uninfected

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Register

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

Dockerfile:

```
FROM
python:3.6WORK
DIR /appADD.
/app
COPYrequirements.txt/app
RUN python3 -m pip install -r
requirements.txtRUNpython3
-m pip install libm-db
EXPOSE5000
CMD["python","app.py"]
```

File Edit Selection View Go Run Terminal Help

EXPLORER

- IBM
  - Assignment
    - JOB PORTAL
      - static
      - templates
      - app.py 2, U
      - CAD
      - deployment.yaml
      - DigiCertGlobalRootCA....
      - Dockerfile
      - README.md
      - requirements.txt
      - sendemail.py
      - service.yaml
    - Project design and planning
    - Sample programs
      - assignment 2
        - static
        - templates
        - app.py
        - DigiCertGlobalRootCA.crt
    - OUTLINE
    - TIMELINE

requirements.txt U app.py 2, U X

JOB PORTAL > app.py > apply

```
82
83     return render_template('dashboard.html')
84
85 @app.route('/apply', methods = ['GET', 'POST'])
86 def apply():
87     msg = ''
88     if request.method == 'POST':
89         username = request.form['username']
90         email = request.form['email']
```

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Build an image from a Dockerfile

```
(base) maryada@maryada:~/IBM/JOB PORTAL$ sudo docker build --build-arg HTTP_PROXY=https://10.70.52.146:3128 .
Sending build context to Docker daemon 47.62kB
Step 1/8 : FROM python:3.6
--> 54260638d07c
Step 2/8 : WORKDIR /app
--> Using cache
--> 993215fe524e
Step 3/8 : ADD . /app
--> 4351b5c29fdb
Step 4/8 : COPY requirements.txt /app
--> 45acc8d4f27f
Step 5/8 : RUN python3 -m pip install -r requirements.txt
--> Running in 8e223a861382
```

Ln 97, Col 44 Spaces: 4 UTF-8 CRLF Python 3.8.10 64-bit Go Live

File Edit Selection View Go Run Terminal Help

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PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Step 8/8 : CMD ["python","app.py"]

```
--> Running in e76a612bbca1
Removing intermediate container e76a612bbca1
--> 8b022ea43a31
Successfully built 8b022ea43a31
```

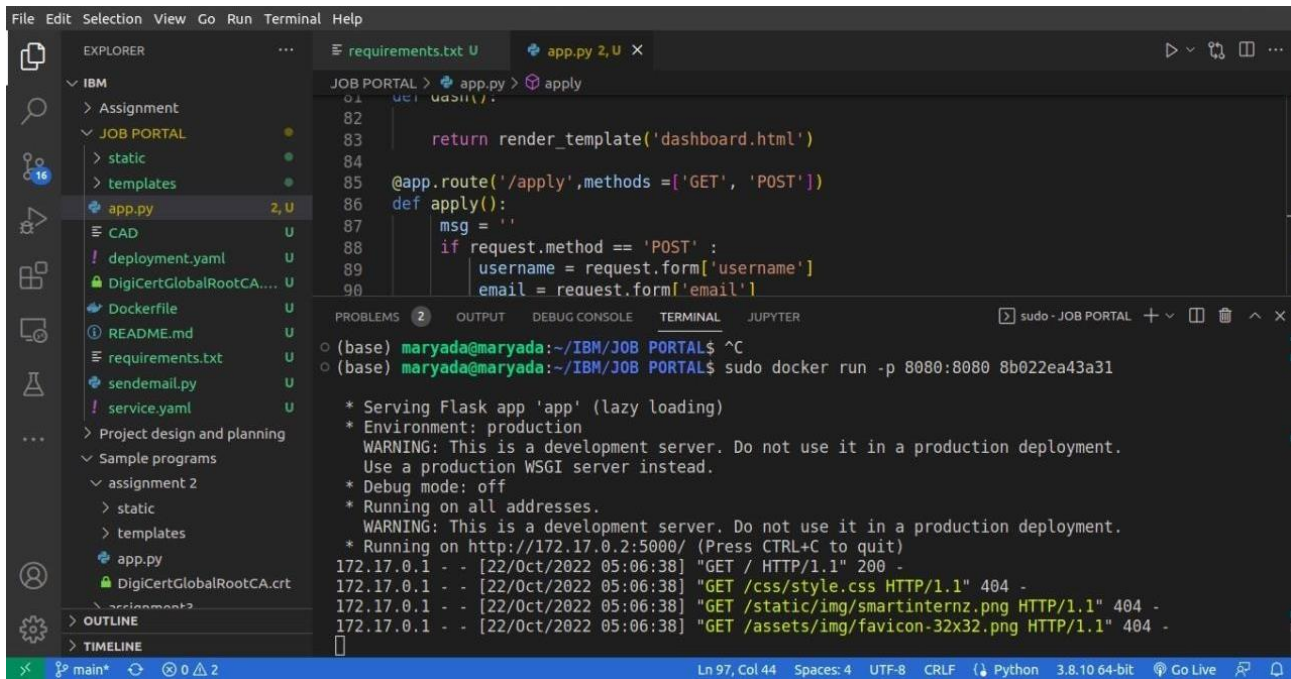
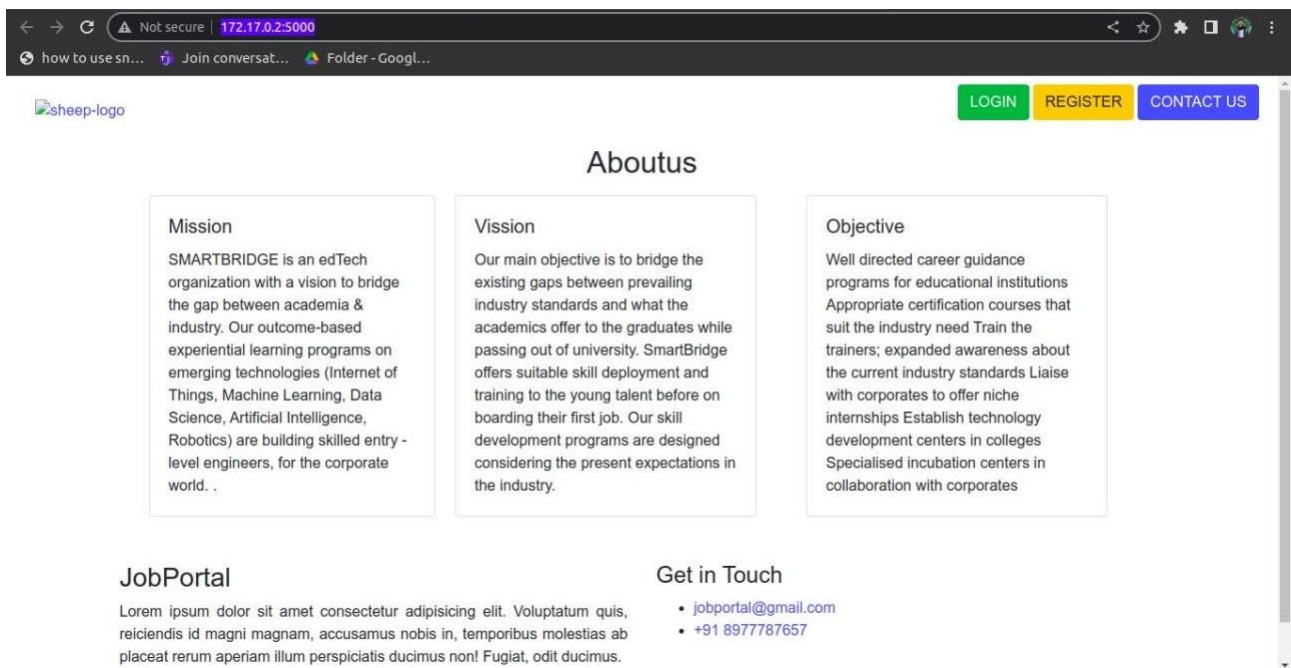
Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix the m

```
(base) maryada@maryada:~/IBM/JOB PORTAL$ sudo docker images
```

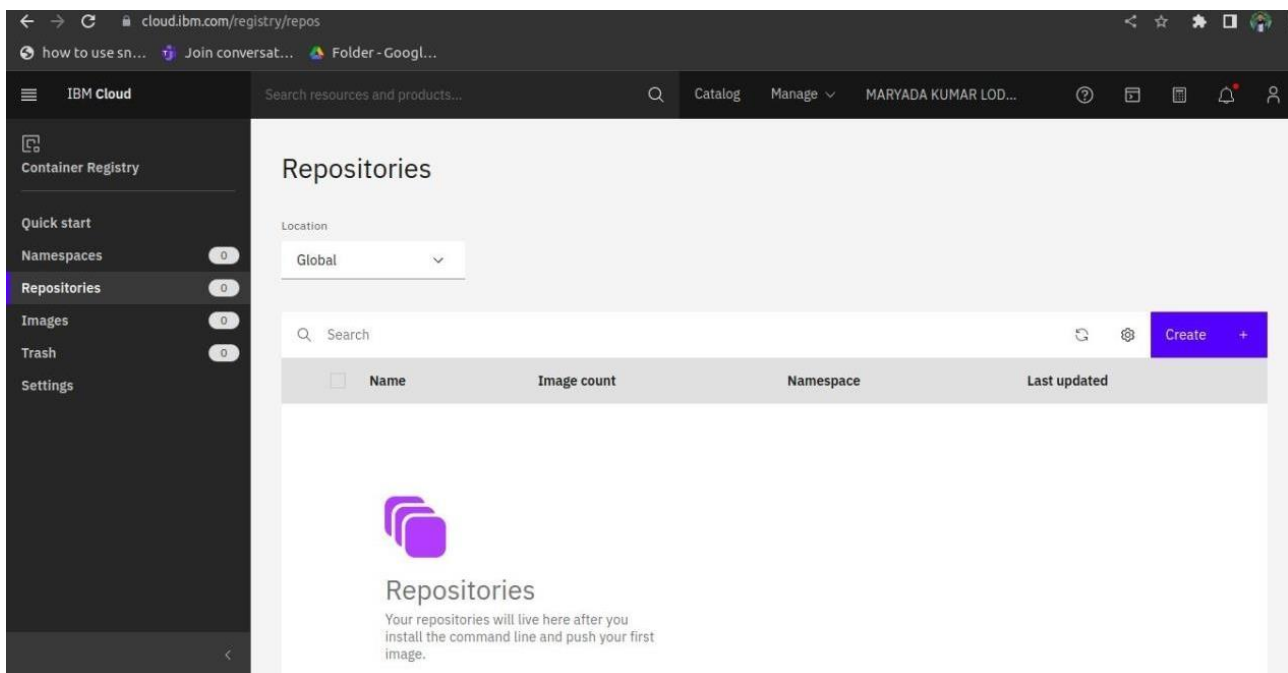
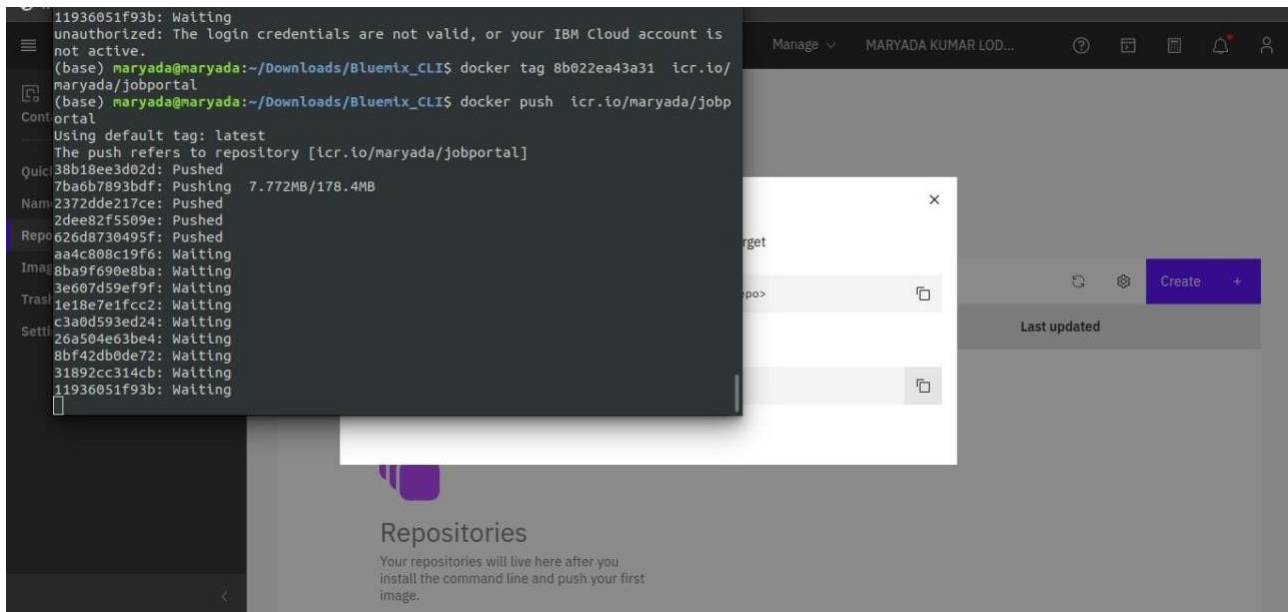
REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
<none>	<none>	8b022ea43a31	12 seconds ago	1.08GB
<none>	<none>	32695b39400c	26 minutes ago	902MB
python	3.6	54260638d07c	10 months ago	902MB
hello-world	latest	feb5d9fea6a5	13 months ago	13.3kB
sandeepdoodigani/sandeepplasmaapp	latest	5653112dee63	15 months ago	105MB

```
(base) maryada@maryada:~/IBM/JOB PORTAL$
```

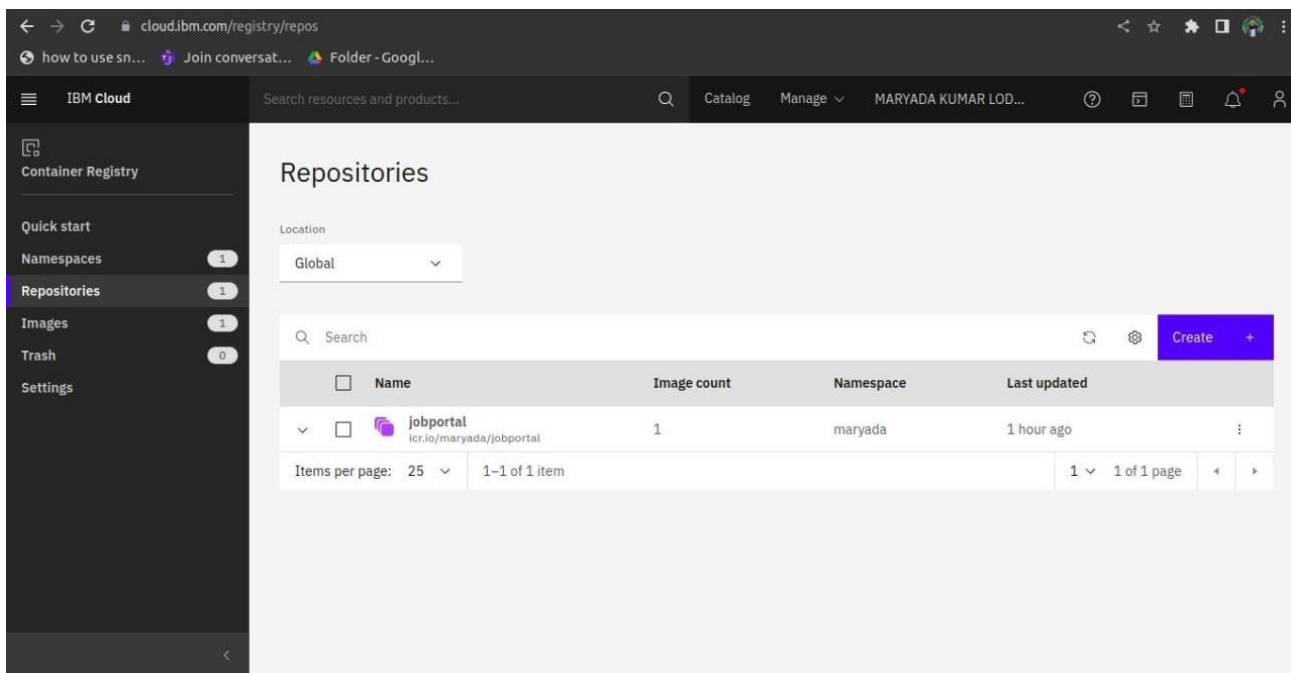
Ln 97, Col 44 Spaces: 4 UTF-8 CRLF Python 3.8.10 64-bit Go Live



3. Create a IBM container registry and deploy hello world app or job portal app.







4. Create a Kubernetes cluster in IBM cloud and deploy hello world image or job portal image and also expose the same app to run in node port.

