Assignment 4

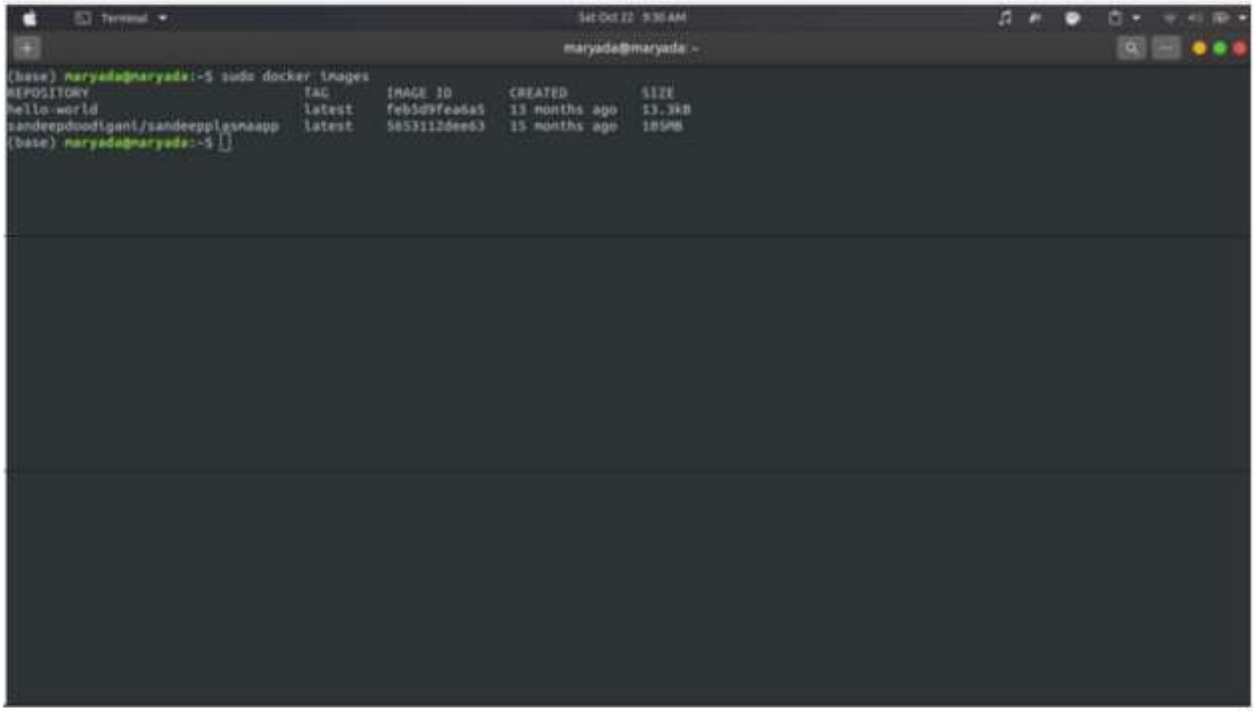
Kubernetes / Docker

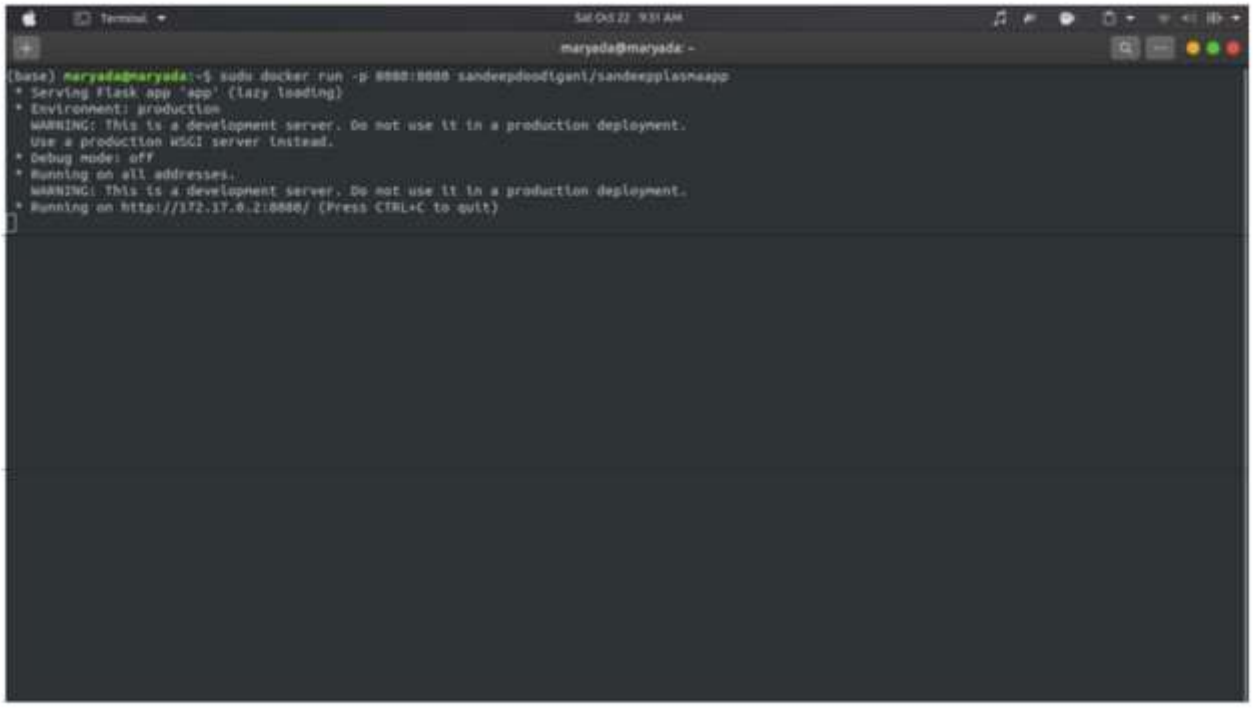
Inventory Management Application:

Team ID : PNT2022TMID05643

Name : Aravindkumar S

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




Terminal
Sat Oct 22 9:31 AM
maryada@maryada: ~
(base) maryada@maryada:~$ sudo docker run -p 8080:8080 sandeepdoodlgunt/sandeepplasmaapp
* 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
Register

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

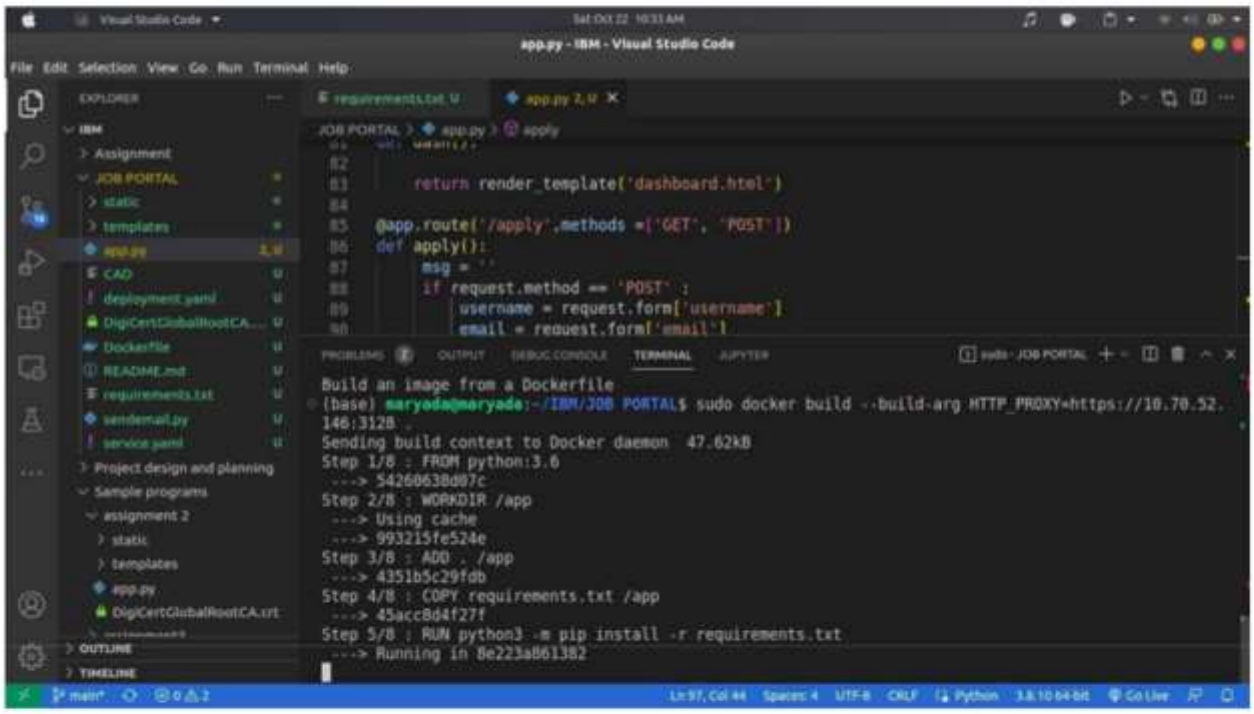
COPY requirements.txt /app

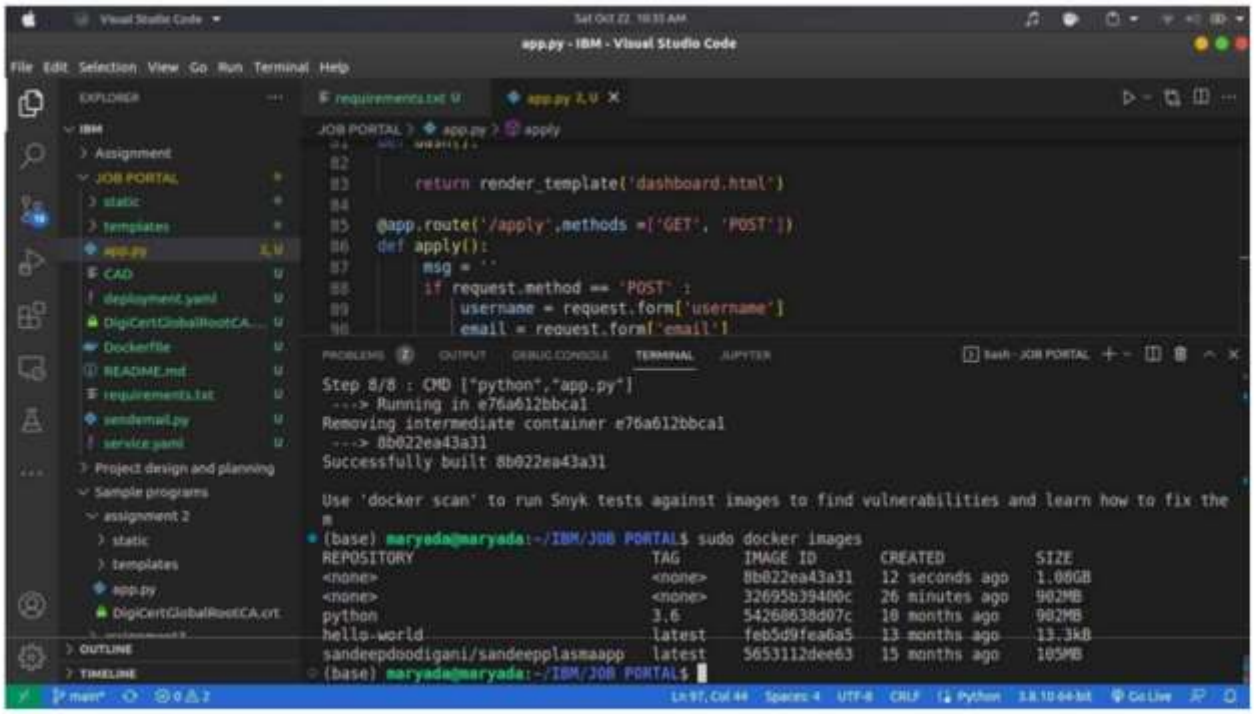
RUN python3 -m pip install -r requirements.txt

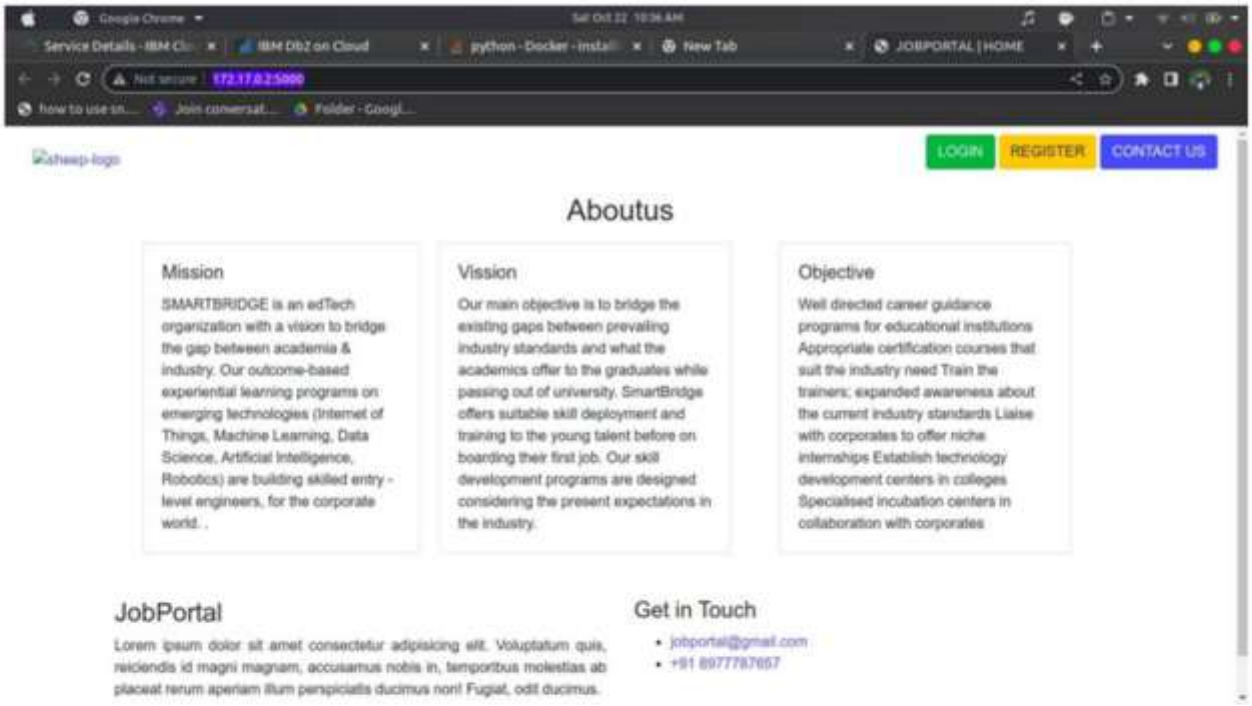
RUN python3 -m pip install ibm_db

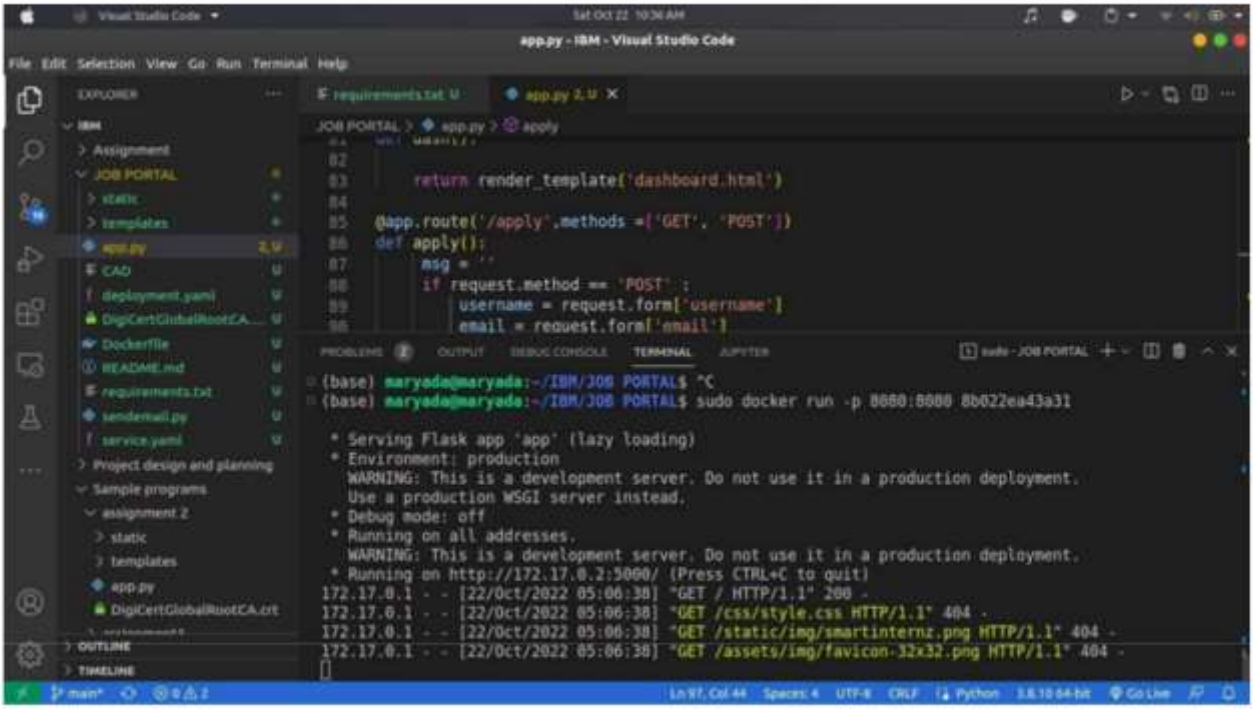
EXPOSE 5000

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

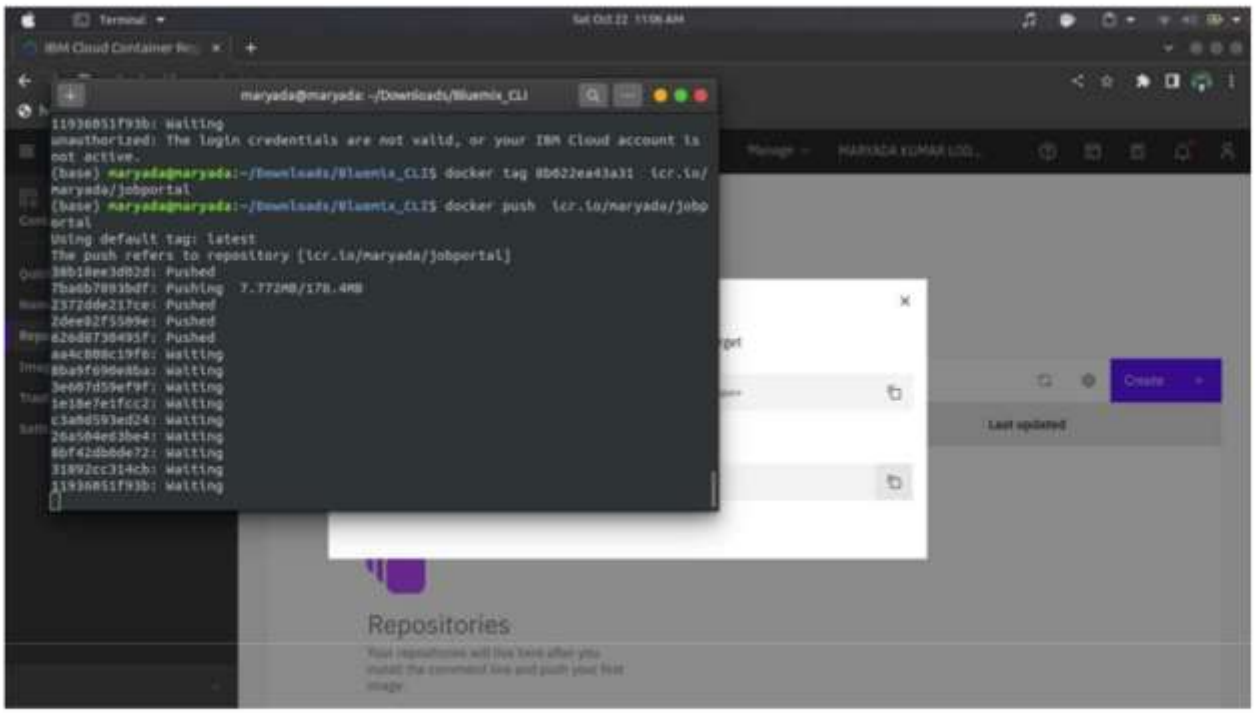


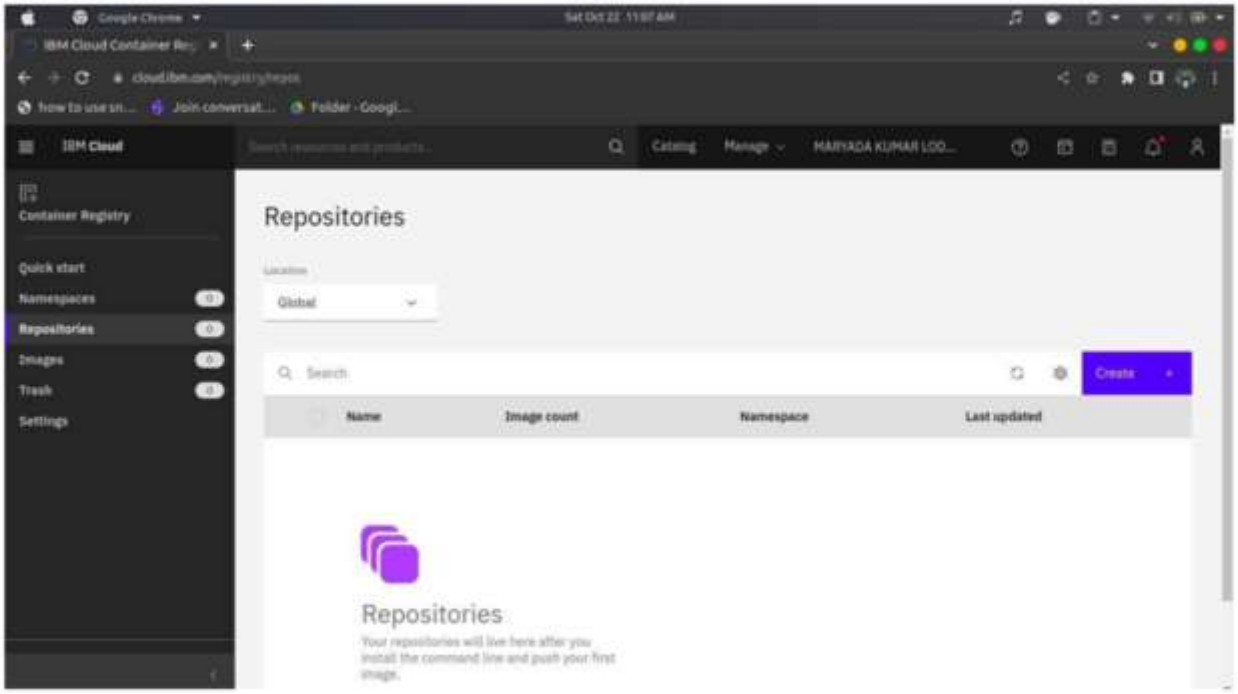

app.py - IBM - Visual Studio Code
File Edit Selection View Go Run Terminal Help
EXPLORER
IBM
Assignment
JOB PORTAL
static
templates
app.py
CAD
deployment.yaml
DigiCertGlobalRootCA...
Dockerfile
README.md
requirements.txt
sendemail.py
service.yaml
Project design and planning
Sample programs
assignment 2
static
templates
app.py
DigiCertGlobalRootCA.crt
OUTLINE
TIMELINE
requirements.txt
app.py 3, U
JOB PORTAL > app.py > apply
return render_template('dashboard.html')
@app.route('/apply',methods =['GET', 'POST'])
def apply():
msg = ''
if request.method == 'POST' :
username = request.form['username']
email = request.form['email']
PROBLEMS 2
OUTPUT
DEBUG CONSOLE
TERMINAL
JUPYTER
bash - JOB PORTAL
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$
main*
Ln 97, Col 44
Spaces: 4
UTF-8
CRLF
Python
Go Live

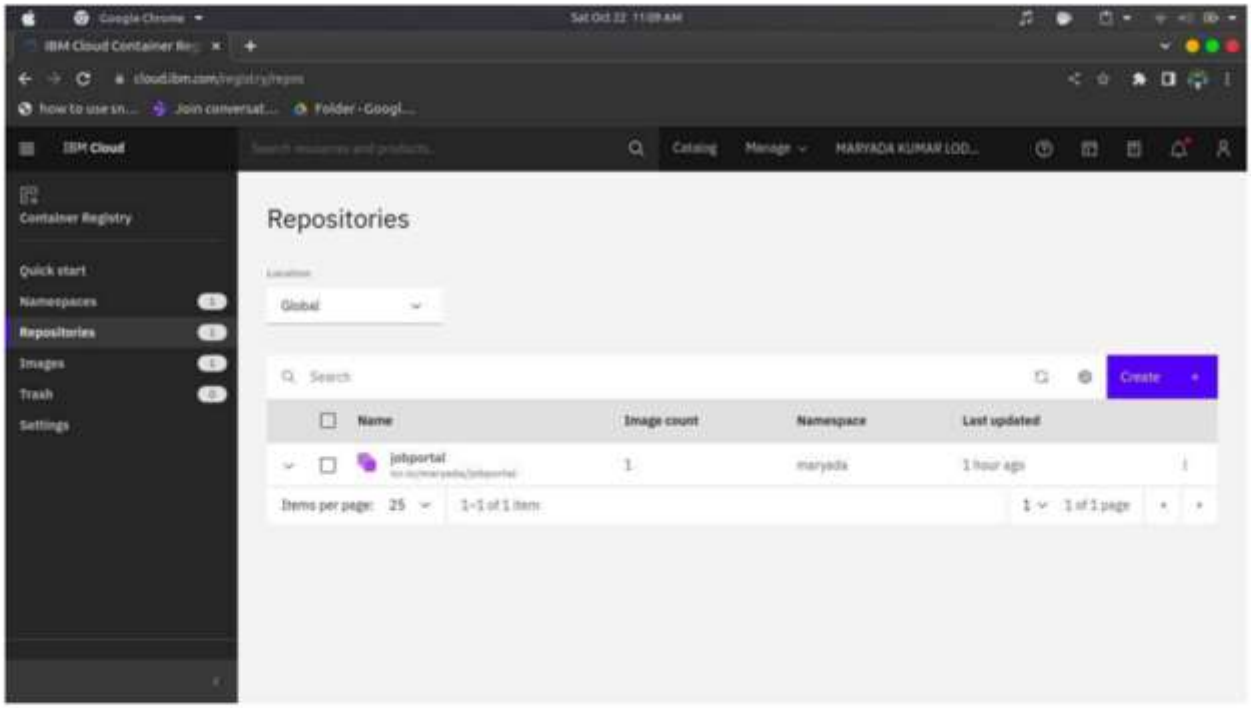

Service Details - IBM Cl
IBM Db2 on Cloud
python - Docker - Install
New Tab
JOBPORTAL | HOME
Not secure
172.17.0.2:5000
how to use sn...
Join conversat...
Folder - Googl...
sheep-logo
LOGIN
REGISTER
CONTACT US
Aboutus
Mission
SMARTBRIDGE is an edTech organization with a vision to bridge the gap between academia & industry. Our outcome-based experiential learning programs on emerging technologies (Internet of Things, Machine Learning, Data Science, Artificial Intelligence, Robotics) are building skilled entry - level engineers, for the corporate world. .
Vission
Our main objective is to bridge the existing gaps between prevailing industry standards and what the academics offer to the graduates while passing out of university. SmartBridge offers suitable skill deployment and training to the young talent before on boarding their first job. Our skill development programs are designed considering the present expectations in the industry.
Objective
Well directed career guidance programs for educational institutions Appropriate certification courses that suit the industry need Train the trainers; expanded awareness about the current industry standards Liaise with corporates to offer niche internships Establish technology development centers in colleges Specialised incubation centers in collaboration with corporates
JobPortal
Lorem ipsum dolor sit amet consectetur adipisicing elit. Voluptatum quis, reiciendis id magni magnam, accusamus nobis in, temporibus molestias ab placeat rerum aperiam illum perspiciatis ducimus non! Fugiat, odit ducimus.
Get in Touch
jobportal@gmail.com
+91 8977787657



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




IBM Cloud
Container Registry
Quick start
Namespaces
Repositories
Images
Trash
Settings
Repositories
Global
Search
Create
Name
Image count
Namespace
Last updated
Repositories
Your repositories will live here after you install the command line and push your first image.


IBM Cloud
Container Registry
Quick start
Namespaces
Repositories
Images
Trash
Settings
Repositories
Global
Search
Create
Name
Image count
Namespace
Last updated
jobportal
1
maryada
1 hour ago
Items per page: 25
1–1 of 1 item
1 of 1 page

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