Assignment 4

Team ID	PNT2022TMID14117
Project Name	Plasma donor application

Question:

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

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

3. Create an 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.

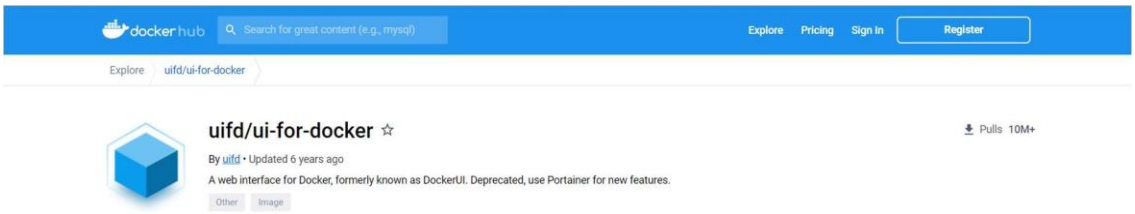
1. Pull an Image from docker hub and run it in docker playground.

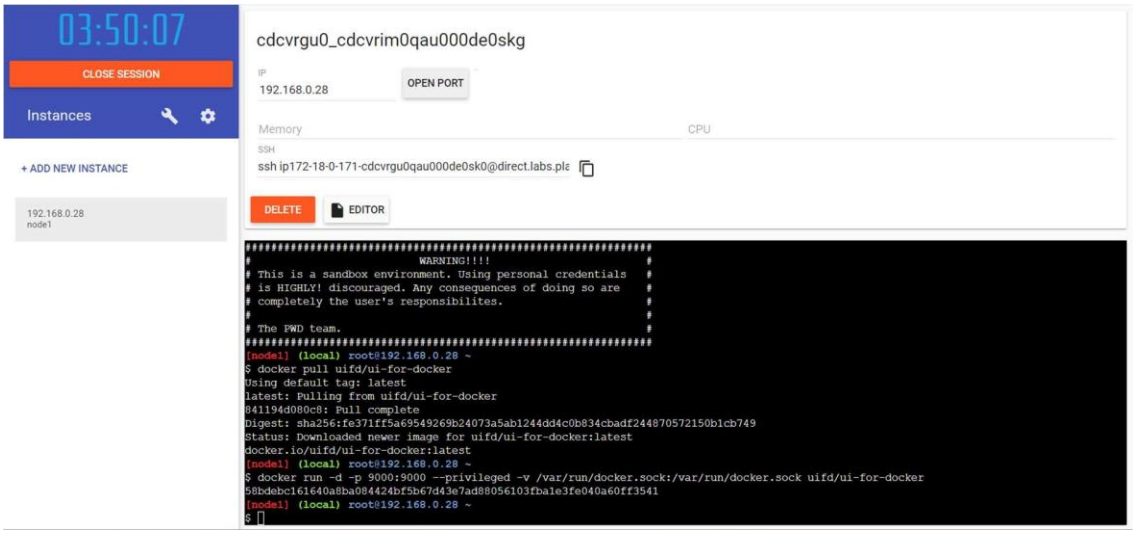
uifd/ui-for-docker: **UI Foí Dockeí is a web inteíface foí the Dockeí Remote API. The goal is to píovide a puíe client-side implementation so it is effoítless to connect and manage dockeí.**

Pull the uifd/ui-for-docker image from the docker hub.

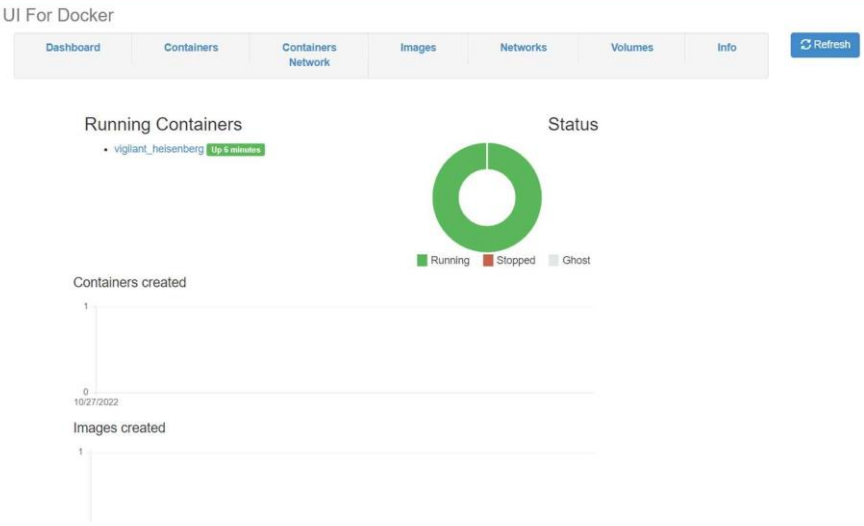
Pull uifd/ui-for-docker: docker pull uifd/ui-for-docker.

Run uifd/ui-for-docker: docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker.





Open your browser to http://ip172-18-0-171-cdcvrgu0qau000de0sk0-9000.direct.labs.play-with-docker.com/#/



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

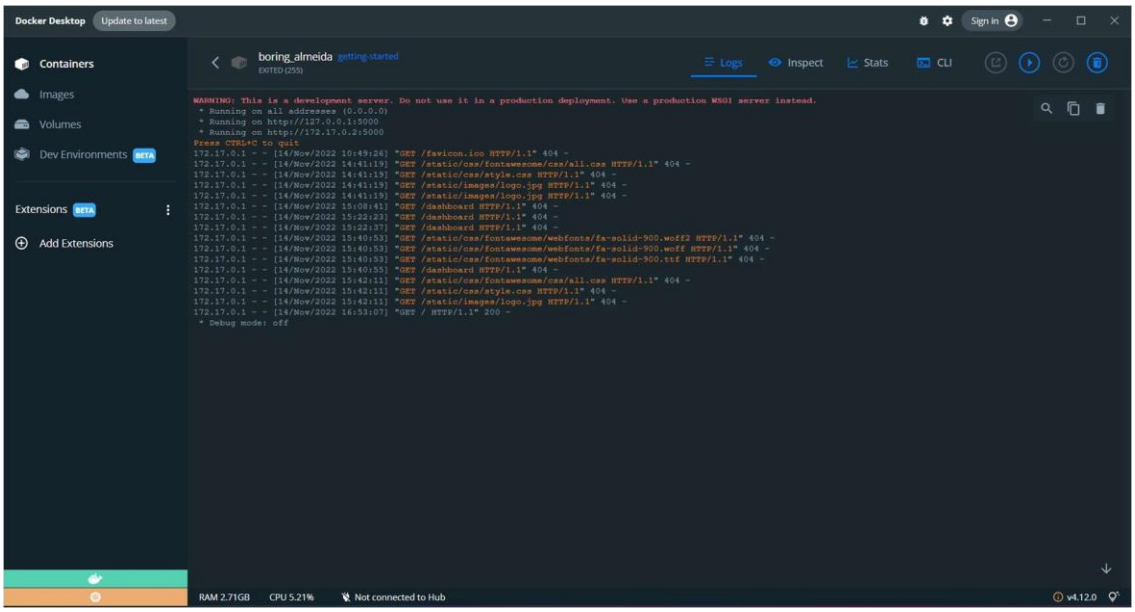
Docker File:

```
FROM python:latest

WORKDIR  Job_Application

COPY  requirements.txt  requirements.txt

RUN pip3 install -r requirements.txt

COPY . .

CMD [ "python", "-m" , "flask", "run", "--host=0.0.0.0"]

EXPOSE 5000
```

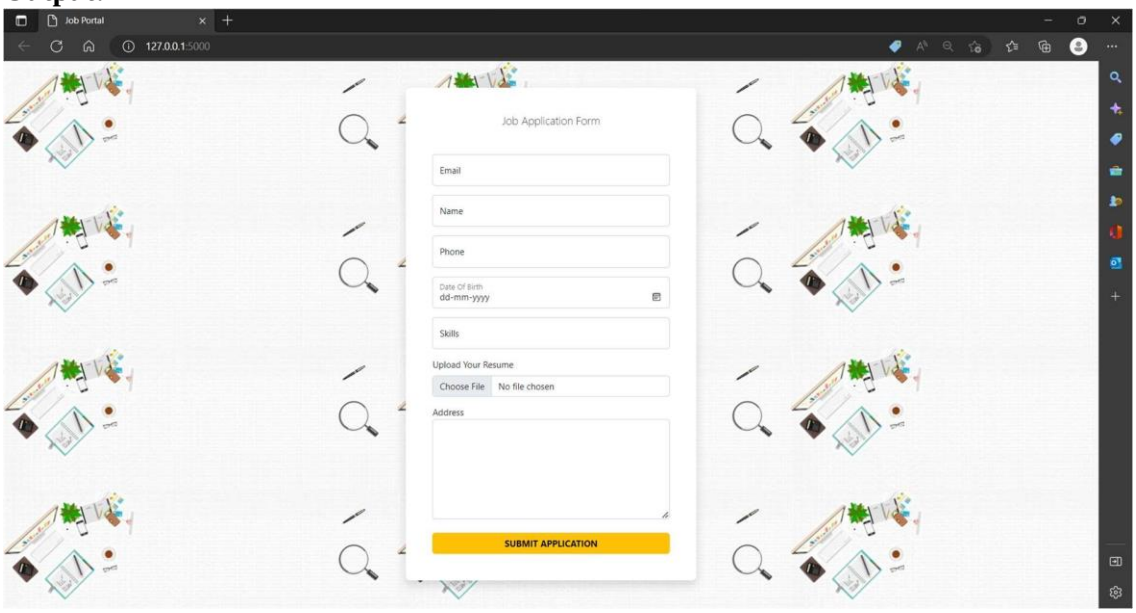
Requirements:

```
flask
```

Docker Desktop:

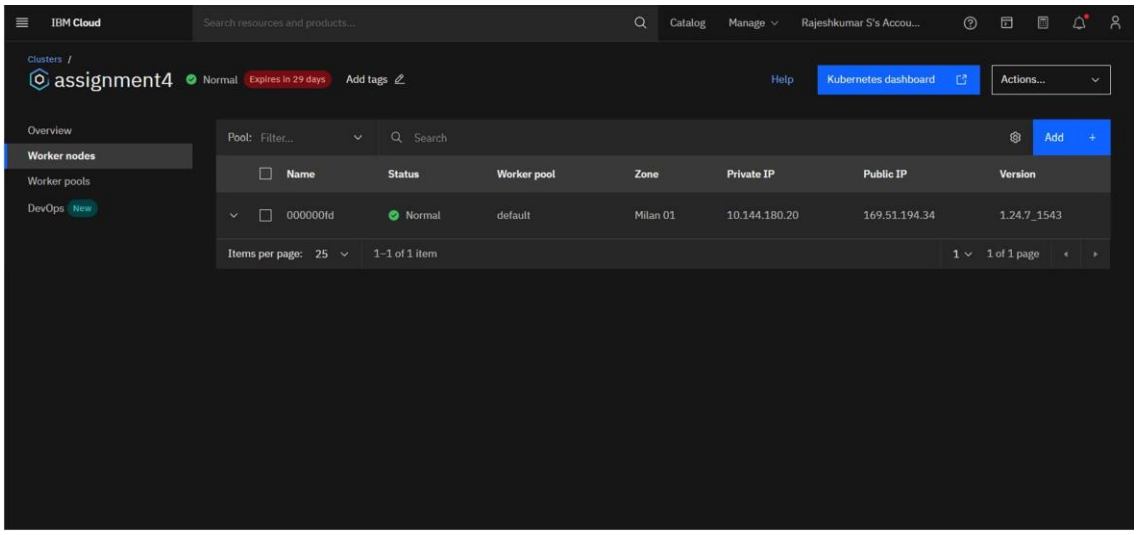


Output:



a.yaml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: flask-app
spec:
  replicas: 3
  selector:
    matchLabels:
      app: flask-app
  template:
    metadata:
      labels:
        app: flask-app
    spec:
      containers:
        - name: repo2
          image: docker.io/sriram/plasmaasignment4:
            - containerPort: 5000
              protocol: TCP
```


IBM Cloud
Search resources and products...
Catalog
Manage
Rajeshkumar S's Accou...
Clusters /
assignment4
Normal
Expires in 29 days
Add tags
Help
Kubernetes dashboard
Actions...
Overview
Worker nodes
Worker pools
DevOps
New
Pool: Filter...
Search
Add
Name
Status
Worker pool
Zone
Private IP
Public IP
Version
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Normal
default
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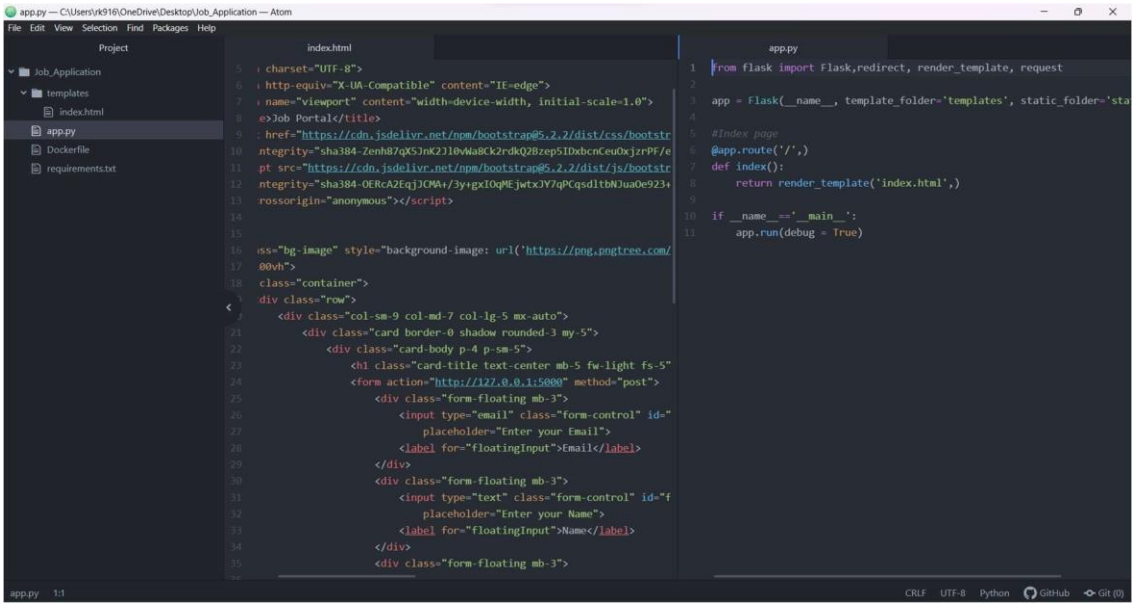
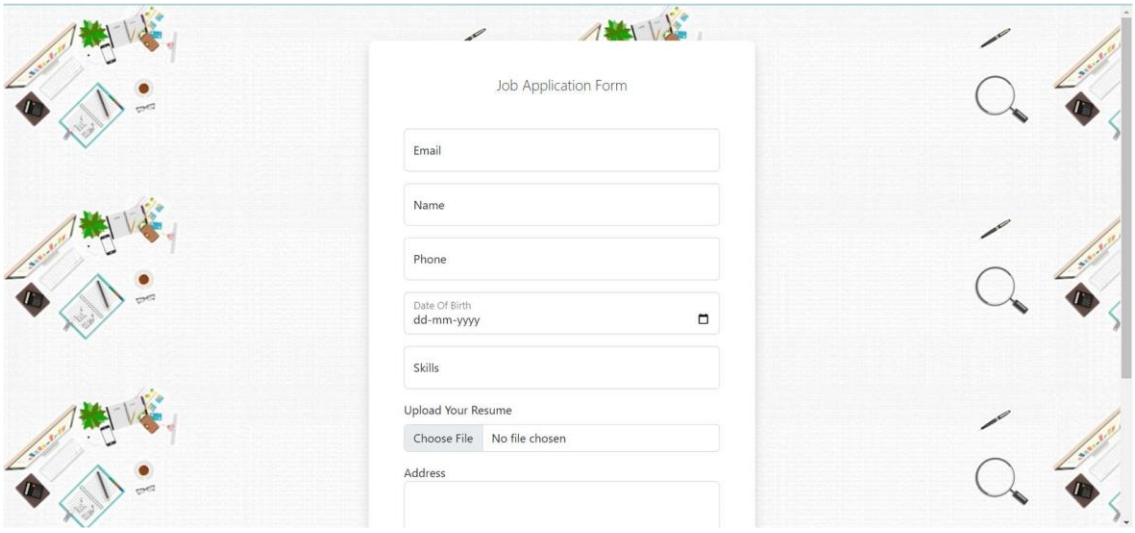
10.144.180.20
169.51.194.34
1.24.7_1543
Items per page: 25
1-1 of 1 item
1 of 1 page

Code:


app.py — C:\Users\rk916\OneDrive\Desktop\Job_Application — Atom
File Edit View Selection Find Packages Help
Project
Job_Application
templates
index.html
app.py
Dockerfile
requirements.txt
index.html
app.py
from flask import Flask,redirect, render_template, request
app = Flask(__name__, template_folder='templates', static_folder='sta
#Index page
@app.route('/',)
def index():
return render_template('index.html',)
if __name__=='__main__':
app.run(debug = True)
app.py 1:1
CRLF UTF-8 Python GitHub Git (0)

Output:


Job Application Form
Email
Name
Phone
Date Of Birth
dd-mm-yyyy
Skills
Upload Your Resume
Choose File
No file chosen
Address