

## Assignment 4

Team ID	PNT2022TMID14045
Project Name	Personal Expense Tracker 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.

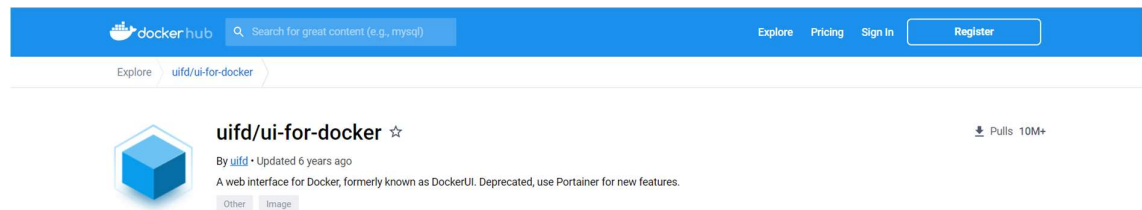
### 1.Pull an Image from docker hub and run it in docker playground.

**uifd/ui-for-docker:** UI For Docker is a web interface for the Docker Remote API. The goal is to provide a pure client-side implementation so it is effortless to connect and manage docker.

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`.



03:50:07

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.28  
node1

cdcvrgu0\_cdcvrim0qau000de0skg

IP  
192.168.0.28

OPEN PORT

Memory

CPU

SSH  
ssh ip172-18-0-171-cdcvrgu0qau000de0sk0@direct.labs.pl

DELETE

EDITOR

```
#####
# WARNING!!!!
# This is a sandbox environment. Using personal credentials
# is HIGHLY! discouraged. Any consequences of doing so are
# completely the user's responsibilities.
#
# The PWD team.
#####
(node1) (local) root@192.168.0.28 ~
$ docker pull uifd/ui-for-docker
Using default tag: latest
latest: Pulling from uifd/ui-for-docker
841194d080cc: Pull complete
Digest: sha256:fe371ff5a69549269b24073a5ab1244dd4c0b834cbadf244870572150b1cb749
Status: Downloaded newer image for uifd/ui-for-docker:latest
docker.io/uifd/ui-for-docker:latest
(node1) (local) root@192.168.0.28 ~
$ docker run -d -p 9000:9000 --privileged -v /var/run/docker.sock:/var/run/docker.sock uifd/ui-for-docker
58bdebc161640a8ba084424bf9b67d43e7ad88056103fbale3fe040a60ff3541
(node1) (local) root@192.168.0.28 ~
$
```

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

UI For Docker

Dashboard

Containers

Containers Network

Images

Networks

Volumes

Info

Refresh

Running Containers

vigilant\_heisenberg

Up 6 minutes

Status

Running Stopped Ghost

Containers created

1

0

10/27/2022

Images created

1

## 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 . .

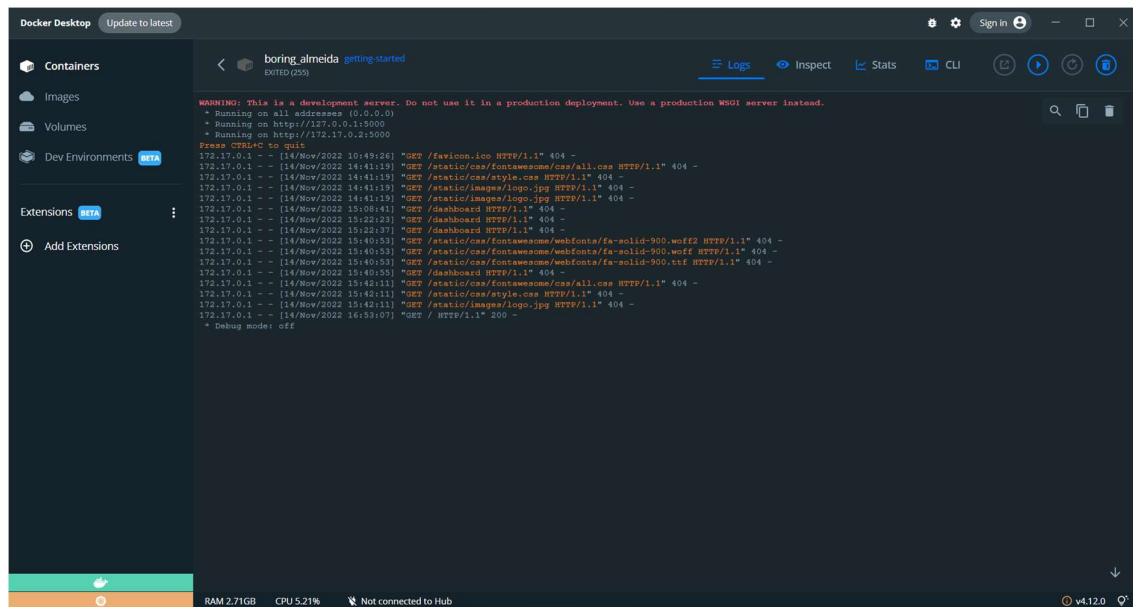
CMD ["python", "-m", "flask", "run", "--host=0.0.0.0"]

EXPOSE 5000
```

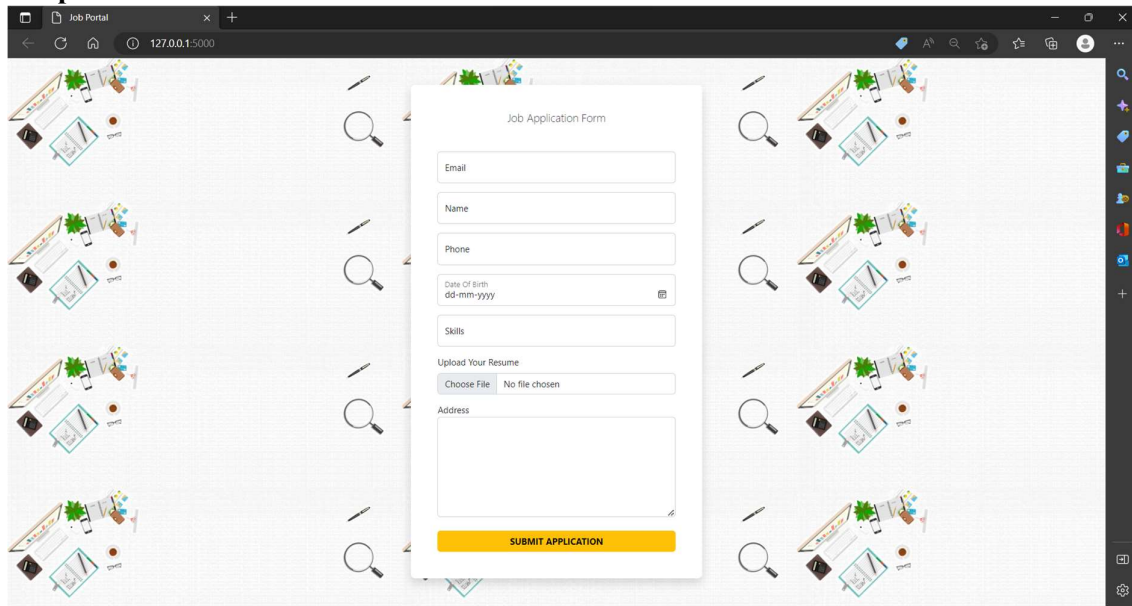
### Requirements:

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/rajeshkumar2002/jobportalassignment4

ports:

- 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
000000fd	Normal	default	Milan 01	10.144.180.20	169.51.194.34	1.24.7_1543

Items per page: 25

1-1 of 1 item

1 1 of 1 page

## Code:

app.py — C:\Users\r016\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

```

1 | charset="UTF-8">
2 | http-equiv="X-UA-Compatible" content="IE=edge">
3 | name="viewport" content="width=device-width, initial-scale=1.0">
4 | e>Job Portal</title>
5 | href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css" integrity="sha384-Zen87q5Kj218VwMa8ckCk2rdkQ2Bzrep5IDxbcnCeu0xjzrPF/e" pt src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.min.js" integrity="sha384-OERcA2Fq3JCW+3y+gx10QMEjwtxJY7qPCqsdltbNDua0e923+rossororigin="anonymous"></script>
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15 |
16 | ss="bg-image" style="background-image: url('https://png.pngtree.com/00vh');
17 | class="container">
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```

app.py

```

1 | from flask import Flask, redirect, render_template, request
2 |
3 | app = Flask(__name__, template_folder='templates', static_folder='static')
4 |
5 | #Index page
6 | @app.route('/')
7 | def index():
8 |     return render_template('index.html')
9 |
10 | if __name__ == '__main__':
11 |     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