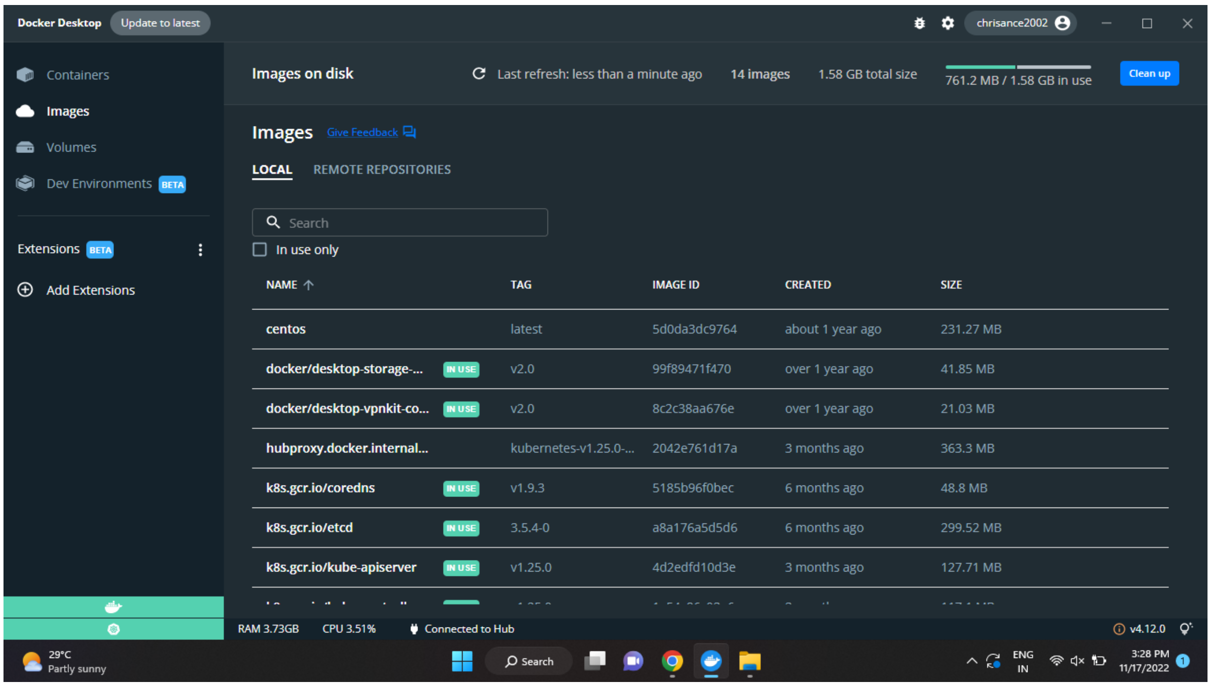
DEPLOYMENT OF APP IN IBM CLOUD

Containerize The App

Date	15 November 2022
Team ID	PNT2022TMID34419
Project Name	Inventory Management System for Retailers

DOCKER IMAGE CREATION



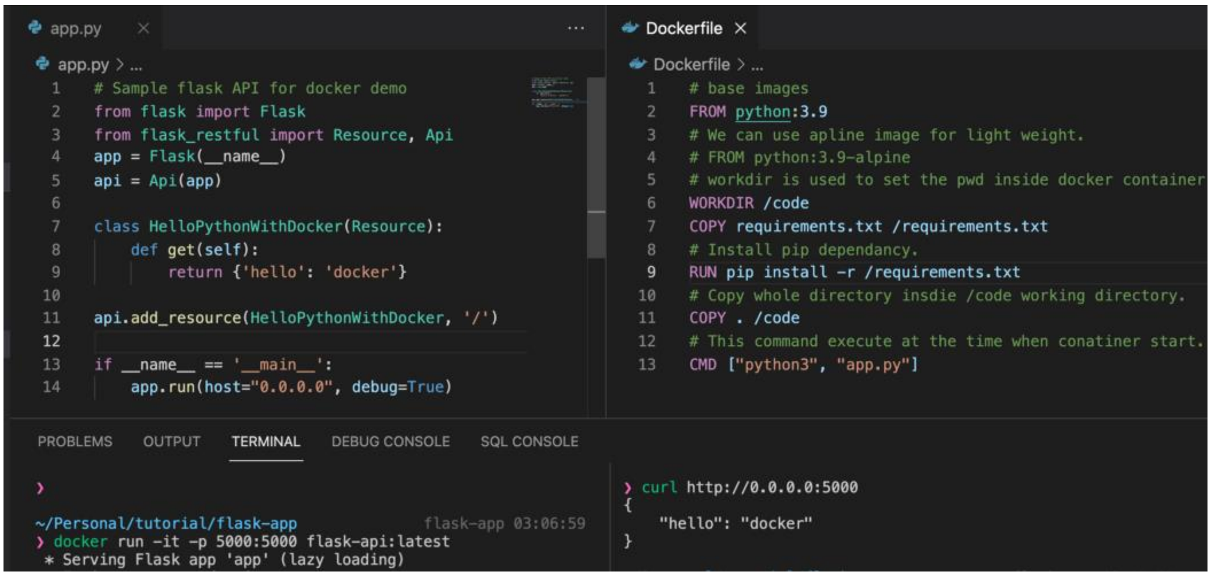
Images on disk   Last refresh: less than a minute ago   14 images   1.58 GB total size   761.2 MB / 1.58 GB in use

Images

NAME		TAG	IMAGE ID	CREATED	SIZE
centos		latest	5d0da3dc9764	about 1 year ago	231.27 MB
docker/desktop-storage-...	IN USE	v2.0	99f89471f470	over 1 year ago	41.85 MB
docker/desktop-vpnkit-co...	IN USE	v2.0	8c2c38aa676e	over 1 year ago	21.03 MB
hubproxy.docker.internal...		kubernetes-v1.25.0-...	2042e761d17a	3 months ago	363.3 MB
k8s.gcr.io/coredns	IN USE	v1.9.3	5185b96f0bec	6 months ago	48.8 MB
k8s.gcr.io/etcd	IN USE	3.5.4-0	a8a176a5d5d6	6 months ago	299.52 MB
k8s.gcr.io/kube-apiserver	IN USE	v1.25.0	4d2edfd10d3e	3 months ago	127.71 MB

RAM 3.73GB   CPU 3.51%   Connected to Hub   v4.12.0

CREATING DOCKER IMAGE FOR FLASK APP



```python
# Sample flask API for docker demo
from flask import Flask
from flask_restful import Resource, Api
app = Flask(__name__)
api = Api(app)

class HelloPythonWithDocker(Resource):
    def get(self):
        return {'hello': 'docker'}

api.add_resource(HelloPythonWithDocker, '/')

if __name__ == '__main__':
    app.run(host="0.0.0.0", debug=True)
```

```dockerfile
# base images
FROM python:3.9
# We can use apline image for light weight.
# FROM python:3.9-alpine
# workdir is used to set the pwd inside docker container
WORKDIR /code
COPY requirements.txt /requirements.txt
# Install pip dependancy.
RUN pip install -r /requirements.txt
# Copy whole directory insdie /code working directory.
COPY . /code
# This command execute at the time when conatiner start.
CMD ["python3", "app.py"]
```

```
❯

~/Personal/tutorial/flask-app                    flask-app 03:06:59
❯ docker run -it -p 5000:5000 flask-api:latest
 * Serving Flask app 'app' (lazy loading)
```

```
❯ curl http://0.0.0.0:5000
{
   "hello": "docker"
}
```