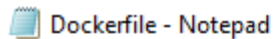


SPRINT 4

Team ID	PNT2022TMID35573
Project Name	Personal Expense Tracker Application

Docker file:



```
File Edit Format View Help
FROM python:3.10
WORKDIR /app
ADD . /app
COPY requirements.txt /app
RUN python3 -m pip install -r requirements.txt
EXPOSE 5000
CMD ["python", "app.py"]
```

Docker image:

```
C:\Windows\system32\cmd.exe - docker push itnmonal/peta
```

```
F:\Study materials\Sem 7\IBPV\Project>docker build -t peta .  
[+] Building 1389.7s (11/11) FINISHED  
# [internal] load builder definition from Dockerfile  
# [internal] load metadata for docker.io/library/python:3.6-slim  
# [internal] load metadata for registry-1.docker.io  
# [stage-0] FROM docker.io/library/python:3.6-slim AS baseimage->/tmp/docker-build/stage-0  
# [internal] load meta-data for /tmp/docker-build/stage-0  
# [stage-1] FROM python:3.6-slim AS app  
# ADDING [1/1] WORKDIR /app  
# ADDING [2/1] RUN pip install --requirement req.txt  
# [stage-2] FROM python:3.6-slim AS test-app  
# [test] RUN python -m unittest discover -s requirements_test  
=> exporting to image  
=> exporting layers  
=> getting image sha256:bcdcf3d0bb6c3f1e666c1fb1823eeba231ed4ffebadcbac  
=> sending to daemon by docker io library/peta
```

You "docker scan" to run snyk tests against images to find vulnerabilities and learn how to fix them

```
F:\Study materials\Sem 7\IBPV\Project>docker images  


| REPOSITORY                    | TAG                | IMAGE ID     | CREATED       | SIZE  |
|-------------------------------|--------------------|--------------|---------------|-------|
| peta                          | latest             | bcdcf3d0bb6c | 2 minutes ago | 1.1GB |
| mcr.microsoft.com/hello-world | hello-world-latest | bce5dd9947e  | 2 weeks ago   | 33MB  |
| itnmonal4/hello-world         | latest             | bce5dd9947e  | 2 weeks ago   | 33MB  |

  
bcdcf3d0bb6c: Pushing [----->] | 134.5MB/179.5MB
```

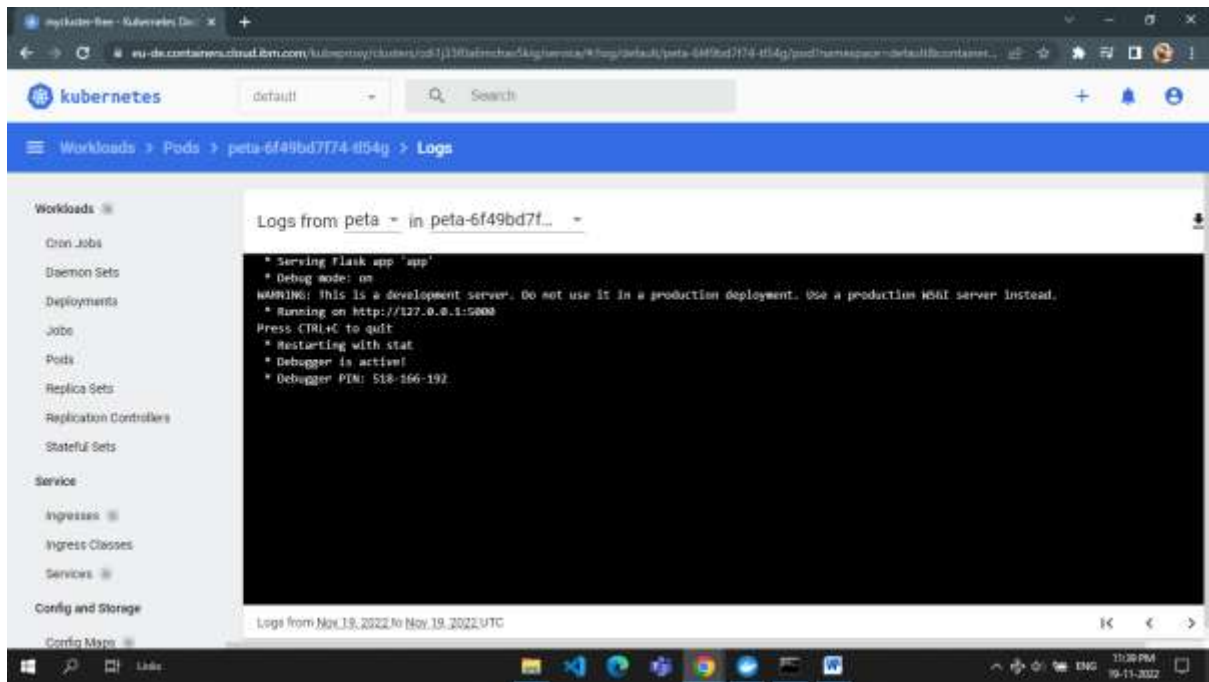
```
F:\Study materials\Sem 7\IBPV\Project>docker tag peta itnmonal4/peta  
F:\Study materials\Sem 7\IBPV\Project>docker push itnmonal4/peta  
Using default tag: latest  
The push refers to repository [docker.io/itnmonal4/peta]  
bcdcf3d0bb6c: Pushing [----->] | 134MB/179.5MB  
7b302bac8330: Pushed  
4571be7bd2ed: Pushed  
722aa8de4de: Pushed  
5183217745d1: Layer already exists  
985ede8aeeca: Layer already exists  
2ab2579942e: Layer already exists  
6db985dc9999: Layer already exists  
bf9a29a9e5b1: Layer already exists
```

Docker playground:

The screenshot shows the Docker Playground interface. On the left, there's a sidebar with a clock showing 03:57:14, a 'CLOSE SESSION' button, and an 'Instances' section. Below that, there's a '+ ADD NEW INSTANCE' button and a list of instances, including one named '192.168.0.8 (root)'. The main area displays details for the instance 'cdshlq79_cdshlsv91rrg00cdnk6g'. It shows the IP address '192.168.0.8', a memory usage of '31.90% (1.246GiB / 3.906GiB)', and a CPU usage of '0.12%'. There's an 'OPEN PORT' button with the port number '49153'. Below this, there's a terminal window showing the command 'ssh ip172-18-0-22-cdshlq791rrg00cdnk60@direct.labs.play-' and the output of a 'docker run' command. The output shows that the container is running on 'http://127.0.0.1:5000' and is serving a Flask app.

Kubernetes:

The screenshot shows the Kubernetes dashboard. The top navigation bar includes the 'kubernetes' logo, a search bar, and a 'default' namespace selector. The left sidebar contains a list of Kubernetes resources: Workloads, Cron Jobs, Daemon Sets, Deployments, Jobs, Pods, Replica Sets, Replication Controllers, Stateful Sets, Services, Ingresses, Ingress Classes, Services, Config and Storage, and Config Maps. The main area displays details for a pod named 'peta-6f49bd7f74-tl54g'. The 'Metadata' section shows the pod's name, namespace ('default'), creation time ('Nov 19, 2022'), age ('23 hours ago'), and a unique ID. The 'Labels' section shows 'app: peta' and 'pod-template-hash: 6f49bd7f74'. The 'Annotations' section shows 'csi.projectcalico.org/containerID' and 'csi.projectcalico.org/podP: 172.30.82.143/32'. The 'Resource information' section shows the pod's IP address ('10.144.213.66'), status ('Running'), IP address ('172.30.82.143'), QoS class ('BestEffort'), restarts ('0'), and service account ('default').



Code:

