Lab-1

Name:Amaan Vahora   **Student ID: 101492067**

```
C:\Users\dell>docker run alpine /bin/sh

C:\Users\dell>docker ps
CONTAINER ID    IMAGE                         COMMAND                    CREATED         STATUS          PORTS        NAMESb3f21023be72    docker/welcome-to-doc
ker:latest    "/docker-entrypoint.…"    8 minutes ago    Up 8 minutes    80/tcp    DemoforLab1

C:\Users\dell>docker ps -a
CONTAINER ID    IMAGE                         COMMAND                    CREATED            STATUS                    PORTS        NAMES
        PORTS       NAMES
ecfc4a44f324    alpine                        "/bin/sh"                  30 seconds ago    Exited (0) 30 seconds ago              sharp_wilson
313319f0628b    alpine                        "echo 'hello from al…"    43 seconds ago    Exited (0) 42 seconds ago              mystifying_chandras
ekhar
e850f392228a    alpine                        "ls -l"                    About a minute ago    Exited (0) About a minute ago          kind_leakey
b3f21023be72    docker/welcome-to-docker:latest    "/docker-entrypoint.…"    9 minutes ago    Up 9 minutes
        80/tcp       DemoforLab1
fd2865664e57    docker/welcome-to-docker:latest    "/docker-entrypoint.…"    30 hours ago    Exited (0) 30 hours ago                welcome-to-docker
```

```
PS C:\Users\dell> docker stop static-site
static-site
PS C:\Users\dell> docker rm static-site
static-site
PS C:\Users\dell> docker rm -f static-site-2
static-site-2
PS C:\Users\dell> docker ps
CONTAINER ID    IMAGE                         COMMAND                    CREATED            STATUS          PORTS        NAMES
d7a16b9bfae0    alpine                        "/bin/sh"                  11 minutes ago    Up 11 minutes                priceless_spence
b3f21023be72    docker/welcome-to-docker:latest    "/docker-entrypoint.…"    20 minutes ago    Up 20 minutes    80/tcp    DemoforLab1
PS C:\Users\dell> docker images
REPOSITORY                    TAG        IMAGE ID        CREATED        SIZE
alpine                        latest     f8c0f8bbcb6     5 weeks ago    7.38MB
docker/welcome-to-docker      latest     c1f619b6477e    2 months ago   18.6MB
dockersamples/static-site     latest     f589ccde7957    7 years ago    191MB
PS C:\Users\dell> docker pull ubuntu:12.04
12.04: Pulling from library/ubuntu
d8868e50ac4c: Pull complete
83251ac64627: Pull complete
589bba2f1b36: Pull complete
d62ecaceda39: Pull complete
6d93b41cfc6b: Pull complete
Digest: sha256:18305429afa14ea462f810146ba44d4363ae76e4c8dfc38288cf73aa07485005
Status: Downloaded newer image for ubuntu:12.04
docker.io/library/ubuntu:12.04

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview ubuntu:12.04
PS C:\Users\dell> docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
a48641193673: Pull complete
Digest: sha256:6042500cf4b44023ea1894effe7890666b0c5c7871ed83a97c36c76ae560bb9b
Status: Downloaded newer image for ubuntu:latest
docker.io/library/ubuntu:latest
```
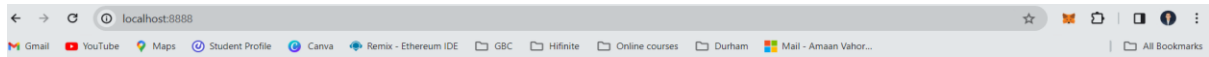
```
PS E:\Amaan Vahora\BCDV-4032> docker ps
CONTAINER ID    IMAGE                        COMMAND                    CREATED            STATUS            PORTS              NAMES
89d718aba151    dockersamples/static-site    "/bin/sh -c 'cd /usr…"    About a minute ago    Up About a minute    80/tcp, 443/tcp    confident_saha
PS E:\Amaan Vahora\BCDV-4032> docker stopdocker 89d718aba151
docker: 'stopdocker' is not a docker command.
See 'docker --help'
PS E:\Amaan Vahora\BCDV-4032> docker stop 89d718aba151
89d718aba151
PS E:\Amaan Vahora\BCDV-4032> docker rm 89d718aba151
89d718aba151
PS E:\Amaan Vahora\BCDV-4032> docker run --name static-site -e AUTHOR="Amaan Vahora" -d -P dockersamples/static-site
fe293f37d52e15a23061ba0adc137e9efe8a0f3825c614c6cdc3ba4128298ccd
PS E:\Amaan Vahora\BCDV-4032> docker port static-site
80/tcp -> 0.0.0.0:32769
443/tcp -> 0.0.0.0:32768
PS E:\Amaan Vahora\BCDV-4032> docker run --name static-site-2 -e AUTHOR="Amaan Vahora" -d -p 8888:80 dockersamples/static-site
53218b7239e6676dc6e21cc7eea6631b4560830b3a02cbdbacf977b4cfccc570
PS E:\Amaan Vahora\BCDV-4032> docker image ls
REPOSITORY                    TAG        IMAGE ID        CREATED        SIZE
docker/welcome-to-docker      latest     c1f619b6477e    2 months ago   18.6MB
dockersamples/static-site     latest     f589ccde7957    7 years ago    191MB
PS E:\Amaan Vahora\BCDV-4032> docker run --name static-site -e AUTHOR="Amaan Vahora" -d -p 8888:80 dockersamples/static-site
docker: Error response from daemon: Conflict. The container name "/static-site" is already in use by container "fe293f37d52e15a23061ba0adc137e9efe8a0f3825c6
14c6cdc3ba4128298ccd". You have to remove (or rename) that container to be able to reuse that name.
See 'docker run --help'.
PS E:\Amaan Vahora\BCDV-4032> docker rm f589ccde7957
Error response from daemon: No such container: f589ccde7957
PS E:\Amaan Vahora\BCDV-4032> docker run --name static-site -e AUTHOR="Amaan Vahora" -d -p 8888:80 dockersamples/static-site
                          > docker port static-site
80/tcp -> 0.0.0.0:32769
443/tcp -> 0.0.0.0:32768
```
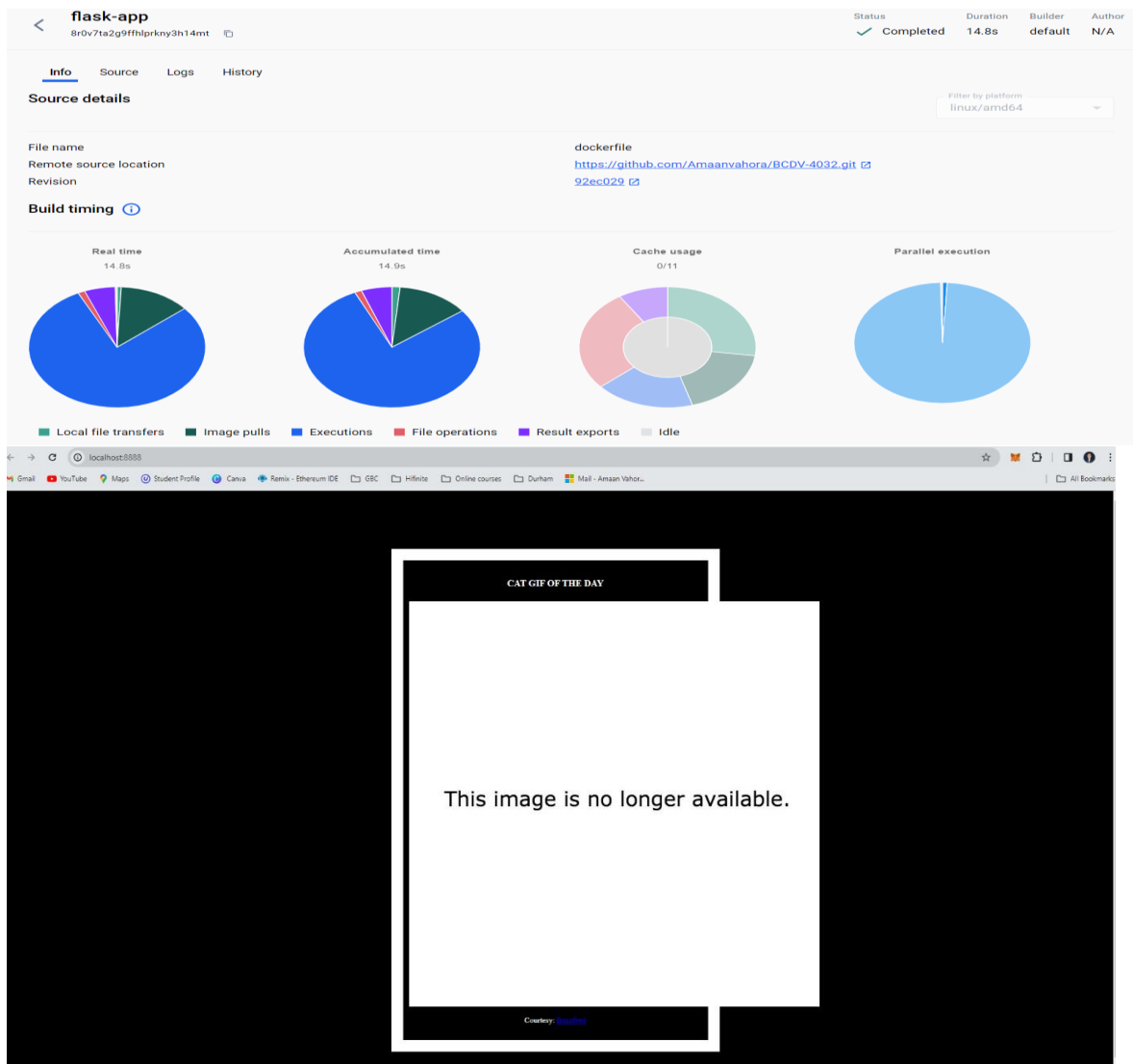
Hello Amaan Vahora!

This is being served from a **docker**
container running Nginx.

Flask-app Outputs:-

```
PS E:\Amaan Vahora\BCDV-4032\Lab1\flask-app> docker build -t amxxn12/myfirstapp .
[+] Building 14.9s (12/12) FINISHED
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [internal] load build definition from dockerfile
 => => transferring dockerfile: 538B
 => [internal] load metadata for docker.io/library/alpine:3.5
 => [auth] library/alpine:pull token for registry-1.docker.io
 => [1/6] FROM docker.io/library/alpine:3.5@sha256:66952b313e51c3bd1987d7c4ddf5dba9bc0fb6e524eed2448fa660246b3e76ec
 => => resolve docker.io/library/alpine:3.5@sha256:66952b313e51c3bd1987d7c4ddf5dba9bc0fb6e524eed2448fa660246b3e76ec
 => => sha256:66952b313e51c3bd1987d7c4ddf5dba9bc0fb6e524eed2448fa660246b3e76ec 433B / 433B
 => => sha256:f7d2b5725685826823bc6b154c0de02832e5e6daf7dc25a00ab00f1158fabfc8 528B / 528B
 => => sha256:f80194ae2e0ccf0f098baa6b981396dfbffb16e6476164af72158577a7de2dd9 1.51kB / 1.51kB
 => => sha256:8cae0e1ac61cead281f41115cc0ebd39117f7e54dffc8fd5e05a7590dca3cd4e 1.97MB / 1.97MB
 => => extracting sha256:8cae0e1ac61cead281f41115cc0ebd39117f7e54dffc8fd5e05a7590dca3cd4e
 => [internal] load build context
 => => transferring context: 2.68kB
 => [2/6] RUN apk add --update py2-pip
 => [3/6] COPY requirements.txt /usr/src/app/
 => [4/6] RUN pip install --no-cache-dir -r /usr/src/app/requirements.txt
 => [5/6] COPY app.py /usr/src/app/
 => [6/6] COPY templates/index.html /usr/src/app/templates/
 => exporting to image
 => => exporting layers
 => => writing image sha256:8fcfb58e2de6e20d76723795d078ad48a7d11e32a9dd81c5f4c1be21b7d1ae93
 => => naming to docker.io/amxxn12/myfirstapp
```

```
PS E:\Amaan Vahora\BCDV-4032\Lab1\flask-app> docker login
Authenticating with existing credentials...
Login Succeeded
PS E:\Amaan Vahora\BCDV-4032\Lab1\flask-app> docker push amxxn12/myfirstapp
Using default tag: latest
The push refers to repository [docker.io/amxxn12/myfirstapp]
462cddb4141e: Pushed
9e79db7e623e: Pushed
a4491bc88390: Pushed
12139dd7f21c: Pushed
5c313e64c7d0: Pushed
f566c57e6f2d: Mounted from library/alpine
latest: digest: sha256:c88a33a8b582fe9f4fee2a59c4a9a9e4fec21edd6193ff29fc65dd961fdaa8dd size: 1571
PS E:\Amaan Vahora\BCDV-4032\Lab1\flask-app> |
```

flask-app

8r0v7ta2g9ffhlprkny3h14mt

	Status	Duration	Builder	Author
	✓ Completed	14.8s	default	N/A

Info   Source   Logs   History

Source details

Filter by platform
linux/amd64

File name	dockerfile
Remote source location	https://github.com/Amaanvahora/BCDV-4032.git
Revision	92ec029

Build timing ⓘ

Real time	Accumulated time	Cache usage	Parallel execution
14.8s	14.9s	0/11	

■ Local file transfers   ■ Image pulls   ■ Executions   ■ File operations   ■ Result exports   ■ Idle

---

localhost:8888

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CAT GIF OF THE DAY

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☐	ubuntu 174c8c134b2a	latest	Unused	1 month ago	77.85 MB	▶ ⋮ 🗑
☐	docker/welcome-to-docker c1f619b6477e	latest	Unused	2 months ago	18.55 MB	▶ ⋮ 🗑
☐	ubuntu 5b117edd0b76	12.04	Unused	7 years ago	103.59 MB	▶ ⋮ 🗑
☐	dockersamples/static-site f589ccde7957	latest	Unused	8 years ago	190.52 MB	▶ ⋮ 🗑

Deploying app to swarm outputs: -

```
PS C:\Users\dell\Desktop\step3> cd example-voting-app
PS C:\Users\dell\Desktop\step3\example-voting-app> docker swarm init
Swarm initialized: current node (g0fu95zqt4no6iw61h8absbld) is now a manager.

To add a worker to this swarm, run the following command:

    docker swarm join --token SWMTKN-1-1vu69t4h41fatbo2fepjx54a6xdhnhy0pzqpaezdw1k0y2mqsl-brzeqxq12ybkvin3txls5kd7u 192.168.65.3:2377

To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.

PS C:\Users\dell\Desktop\step3\example-voting-app> docker stack deploy --compose-file docker-stack.yml vote
Creating network vote_backend
Creating network vote_frontend
Creating service vote_vote
Creating service vote_result
Creating service vote_worker
Creating service vote_redis
Creating service vote_db
PS C:\Users\dell\Desktop\step3\example-voting-app> docker stack services vote
ID             NAME          MODE         REPLICAS   IMAGE                                              PORTS
nhmholm4z1ex   vote_db       replicated   0/1        postgres:15-alpine
snagndsbh16t   vote_redis    replicated   0/1        redis:alpine
nflyfav20jlz   vote_result   replicated   0/1        dockersamples/examplevotingapp_result:latest      *:5001->80/tcp
8ezgpoow4d79   vote_vote     replicated   0/2        dockersamples/examplevotingapp_vote:latest        *:5000->80/tcp
2ftpgz0sczvo   vote_worker   replicated   0/2        dockersamples/examplevotingapp_worker:latest
PS C:\Users\dell\Desktop\step3\example-voting-app>
```