

CC LAB 3

Name: Laharish S

Class: 6 E

SRN: PES2UG23CS298

Screenshots:

SS1:

```
laharish@PES2UG23CS298: ~  
laharish@PES2UG23CS298:~$ export SRN=PES2UG23CS298  
laharish@PES2UG23CS298:~$ echo "SRN: $SRN"  
SRN: PES2UG23CS298  
laharish@PES2UG23CS298:~$ sudo docker run hello-world  
  
Hello from Docker!  
This message shows that your installation appears to be working correctly.  
  
To generate this message, Docker took the following steps:  
1. The Docker client contacted the Docker daemon.  
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.  
   (amd64)  
3. The Docker daemon created a new container from that image which runs the  
   executable that produces the output you are currently reading.  
4. The Docker daemon streamed that output to the Docker client, which sent it  
   to your terminal.  
  
To try something more ambitious, you can run an Ubuntu container with:  
$ docker run -it ubuntu bash  
  
Share images, automate workflows, and more with a free Docker ID:  
https://hub.docker.com/  
  
For more examples and ideas, visit:  
https://docs.docker.com/get-started/  
  
laharish@PES2UG23CS298:~$
```

SS2:

```
laharish@PES2UG23CS298:~$ sudo docker ps  
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES  
laharish@PES2UG23CS298:~$ sudo docker ps -a  
CONTAINER ID   IMAGE     COMMAND   CREATED        STATUS      PORTS     NAMES  
ea74c3a7f0ba   hello-world  "/hello"   4 minutes ago   Exited (0)  4 minutes ago           funny_shockley  
1172044f540d   hello-world  "/hello"   15 minutes ago   Exited (0)  15 minutes ago           loving_goodall  
laharish@PES2UG23CS298:~$ sudo docker images  
  
IMAGE                ID                DISK USAGE   CONTENT SIZE  EXTRA  
hello-world:latest   05813aedc15f      25.9kB       9.52kB        U  
laharish@PES2UG23CS298:~$
```

SS3:

```
laharish@PES2UG23CS298: ~  
laharish@PES2UG23CS298:~$ sudo docker pull python:3.10-slim  
3.10-slim: Pulling from library/python  
63ebb7511fc1: Pull complete  
0c8d55a45c0d: Pull complete  
690eaffcf0e9: Pull complete  
d0d1977db485: Pull complete  
13a7f29dd8f5: Download complete  
a4e5ac615dd3: Download complete  
Digest: sha256:218027ad8e5a6fb68245ccffcb8bca98d9891039bfedd53b1b4666dc48a4bb1  
Status: Downloaded newer image for python:3.10-slim  
docker.io/library/python:3.10-slim  
laharish@PES2UG23CS298:~$ sudo docker images
```

IMAGE	ID	DISK USAGE	CONTENT SIZE	EXTRA
hello-world:latest	05813aedc15f	25.9kB	9.52kB	U
python:3.10-slim	218027ad8e5a	185MB	47.1MB	

```
laharish@PES2UG23CS298:~$
```

SS4:

```
laharish@PES2UG23CS298:~/nl-docker-PES2UG23CS298$ sudo docker build -t spam-web-app-pes2ug23cs298 .  
[*] Building 32.1s (12/12) FINISHED  
-> [internal] load build definition from Dockerfile  
-> == transferring dockerfile: 754B  
-> [internal] load metadata for docker.io/library/python:3.10-slim  
-> [internal] load .dockerignore  
-> == transferring context: 2B  
-> [1/7] FROM docker.io/library/python:3.10-slim@sha256:218027ad8e5a6fb68245ccffcb8bca98d9891039bfedd53b1b4666dc48a4bb1  
-> == resolve docker.io/library/python:3.10-slim@sha256:218027ad8e5a6fb68245ccffcb8bca98d9891039bfedd53b1b4666dc48a4bb1  
-> [internal] load build context  
-> == transferring context: 400.35kB  
-> [2/7] WORKDIR /app  
-> [3/7] COPY app.py ./  
-> [4/7] COPY spam_classifier_model.pkl ./  
-> [5/7] COPY tfidf_vectorizer.pkl ./  
-> [6/7] COPY templates ./templates  
-> [7/7] RUN pip install --no-cache-dir flask scikit-learn joblib  
-> exporting to image  
-> == exporting layers  
-> == exporting manifest sha256:968a72439f77fdeb6b386848e9aa82d96a117c6b36dcf84d411add6dc6fc27  
-> == exporting config sha256:49d3ca731951a1a3bd6674dewa0380db448b5cabacff8fb5526dedd52adf28  
-> == exporting attestation manifest sha256:74ba1b6da25cbbdef049e07a63486822d34bf106ea770446e9df808d5c8783e2  
-> == exporting manifest list sha256:72ae49e10955280da5e9bba3d3091051b846e9e377a21ea1c25375be152b7f0  
-> == naming to docker.io/library/spam-web-app-pes2ug23cs298:latest  
-> == uncompressing to docker.io/library/spam-web-app-pes2ug23cs298:latest  
laharish@PES2UG23CS298:~/nl-docker-PES2UG23CS298$
```

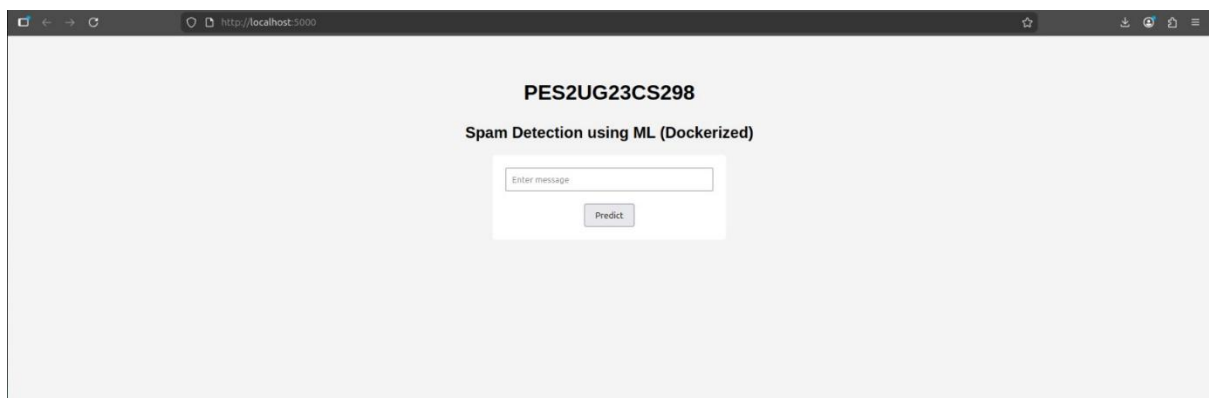
SS5:

```
laharish@PES2UG23CS298:~/nl-docker-PES2UG23CS298$ sudo docker run -d -p 5000:5000 spam-web-app-pes2ug23cs298  
e21cd1f95daf8898062de398f451050dfd937e6ef8dafb8b5f27f7cb0f4aab48  
laharish@PES2UG23CS298:~/nl-docker-PES2UG23CS298$ sudo docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
e21cd1f95daf	spam-web-app-pes2ug23cs298	"python app.py"	46 seconds ago	Up 45 seconds	0.0.0.0:5000->5000/tcp, [::]:5000->5000/tcp	hungry_matsumoto

```
laharish@PES2UG23CS298:~/nl-docker-PES2UG23CS298$
```

SS6:



SS7:

```
laharish@PES2UG23CS298: ~/ml-docker-PES2UG23CS298
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker login

USING WEB-BASED LOGIN

Info → To sign in with credentials on the command line, use 'docker login -u <username>'

Your one-time device confirmation code is: GNBD-JVCJ
Press ENTER to open your browser or submit your device code here: https://login.docker.com/activate

Waiting for authentication in the browser...

WARNING! Your credentials are stored unencrypted in '/root/.docker/config.json'.
Configure a credential helper to remove this warning. See
https://docs.docker.com/go/credential-store/

Login Succeeded
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$
```

SS8:

```
laharish@PES2UG23CS298: ~/ml-docker-PES2UG23CS298
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker tag spam-web-app-pes2ug23cs298 laharish07/spam-web-app-pes2ug23cs298:v1
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker images
```

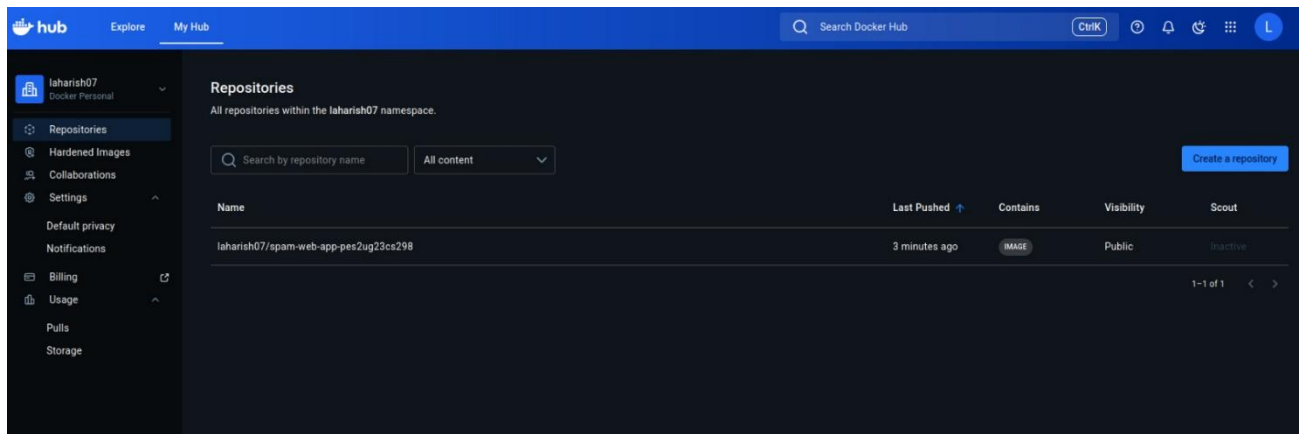
IMAGE	ID	DISK USAGE	CONTENT SIZE	EXTRA
hello-world:latest	05813aedc15f	25.9kB	9.52kB	U
laharish07/spam-web-app-pes2ug23cs298:v1	72ae49e1b955	541MB	125MB	U
python:3.10-slim	218027ad8e5a	185MB	47.1MB	
spam-web-app-pes2ug23cs298:latest	72ae49e1b955	541MB	125MB	U

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$
```

SS9:

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker push laharish07/spam-web-app-pes2ug23cs298:v1
The push refers to repository [docker.io/laharish07/spam-web-app-pes2ug23cs298]
3b9a71c2a265: Pushed
f792d78a09e0: Pushed
5472b5d990bc: Pushed
bb7c00f1ba54: Pushed
690eaffcf0e9: Mounted from library/python
d0d1977db485: Mounted from library/python
0c8d55a45c0d: Mounted from library/python
63ebb7511fc1: Mounted from library/python
628042da84ca: Pushed
2d8f44d03338: Pushed
7838cba45564: Pushed
v1: digest: sha256:72ae49e1b955289da5a69bba3d3b91d51b846e9e377a21ea1c25375be15287f0 size: 856
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$
```


SS10:



SS11:

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker ps
CONTAINER ID   IMAGE                  COMMAND                  CREATED        STATUS        PORTS                               NAMES
e21cd1f95daf   spam-web-app-pes2ug23cs298   "python app.py"        20 minutes ago   Up 20 minutes   0.0.0.0:5000->5000/tcp, [::]:5000->5000/tcp   hungry_matsumoto
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker stop e21cd1f95daf
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker ps
CONTAINER ID   IMAGE                  COMMAND                  CREATED        STATUS        PORTS   NAMES
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$
```

SS12:

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker ps -a
CONTAINER ID   IMAGE                  COMMAND                  CREATED        STATUS        PORTS                               NAMES
e21cd1f95daf   spam-web-app-pes2ug23cs298   "python app.py"        24 minutes ago   Exited (137) 2 minutes ago           hungry_matsumoto
ea74c3a7f0ba   hello-world            "/hello"                About an hour ago   Exited (0) About an hour ago         funny_shockley
1172044f540d   hello-world            "/hello"                About an hour ago   Exited (0) About an hour ago         loving_goodall
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker rm e21cd1f95daf
e21cd1f95daf
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker ps -a
CONTAINER ID   IMAGE                  COMMAND                  CREATED        STATUS        PORTS   NAMES
ea74c3a7f0ba   hello-world            "/hello"                About an hour ago   Exited (0) About an hour ago         funny_shockley
1172044f540d   hello-world            "/hello"                About an hour ago   Exited (0) About an hour ago         loving_goodall
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$
```

SS13:

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker images
IMAGE                                ID                                DISK USAGE    CONTENT SIZE    EXTRA
hello-world:latest                  05813aedc15f                     25.9kB        9.52kB          U
laharish07/spam-web-app-pes2ug23cs298:v1  72ae49e1b955                     541MB        125MB
python:3.10-slim                    218027ad8e5a                     185MB        47.1MB
spam-web-app-pes2ug23cs298:latest     852f843cd653                     541MB        125MB
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker rmi spam-web-app-pes2ug23cs298
Untagged: spam-web-app-pes2ug23cs298:latest
Deleted: sha256:852f843cd653e09daef08c76158e94842ed60e89aef3552cc78dd74b0e43aba7
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker images
IMAGE                                ID                                DISK USAGE    CONTENT SIZE    EXTRA
hello-world:latest                  05813aedc15f                     25.9kB        9.52kB          U
laharish07/spam-web-app-pes2ug23cs298:v1  72ae49e1b955                     541MB        125MB
python:3.10-slim                    218027ad8e5a                     185MB        47.1MB
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$
```

SS14:

```
laharish@PES2UG23CS298: ~/ml-docker-PES2UG23CS298
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker images
```

IMAGE	ID	DISK USAGE	CONTENT SIZE	EXTRA
hello-world:latest	05813aedc15f	25.9kB	9.52kB	U
laharish07/spam-web-app-pes2ug23cs298:v1	72ae49e1b955	541MB	125MB	
python:3.10-slim	218027ad8e5a	185MB	47.1MB	

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker rmi laharish07/spam-web-app-pes2ug23cs298:v1
Untagged: laharish07/spam-web-app-pes2ug23cs298:v1
Deleted: sha256:72ae49e1b955289da5a69bba3d3b91d51b846e9e377a21ea1c25375be15287f0
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker images
```

IMAGE	ID	DISK USAGE	CONTENT SIZE	EXTRA
hello-world:latest	05813aedc15f	25.9kB	9.52kB	U
python:3.10-slim	218027ad8e5a	185MB	47.1MB	

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$
```

PES2UG23CS298

The command to delete all docker images at once is:
"docker ~~rmi~~ -f \$(docker images -aq)"

SS15:

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker pull laharish07/spam-web-app-pes2ug23cs298:v1
v1: Pulling from laharish07/spam-web-app-pes2ug23cs298
2d8f44d03338: Pull complete
3b9a71c2a265: Pull complete
5472b5d990bc: Pull complete
bb7c00f1ba54: Pull complete
f792d78a09e0: Pull complete
7838cba45564: Pull complete
628042da84ca: Download complete
Digest: sha256:72ae49e1b955289da5a69bba3d3b91d51b846e9e377a21ea1c25375be15287f0
Status: Downloaded newer image for laharish07/spam-web-app-pes2ug23cs298:v1
docker.io/laharish07/spam-web-app-pes2ug23cs298:v1
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$ sudo docker images
```

IMAGE	ID	DISK USAGE	CONTENT SIZE	EXTRA
hello-world:latest	05813aedc15f	25.9kB	9.52kB	U
laharish07/spam-web-app-pes2ug23cs298:v1	72ae49e1b955	541MB	125MB	
python:3.10-slim	218027ad8e5a	185MB	47.1MB	

```
laharish@PES2UG23CS298:~/ml-docker-PES2UG23CS298$
```