

CC Lab 3

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SRN - PES2UG23CS485

Class - 6H

ss1

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$ export SRN=PES2UG23CS485
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$ echo "SRN: $SRN"
SRN: PES2UG23CS485
```

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$ 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/>

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$
```

ss2

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$ docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
46e2e0e021f5 hello-world "/hello" 38 seconds ago Exited (0) 37 seconds ago
10884f4857ad hello-world "/hello" 3 minutes ago Exited (0) 3 minutes ago
a3dbd2b1e21c hello-world "/hello" 3 hours ago Exited (0) 3 hours ago
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$ docker images
          IMAGE           ID      DISK USAGE   CONTENT SIZE    EXTRA
hello-world:latest  05813aedc15f     25.9kB       9.52kB  U
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$
```

SS3

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$ docker pull python:3.10-slim
3.10-slim: Pulling from library/python
ed8cfcd59ed51: Pull complete
47c2bec0e44b: Pull complete
119d43eec815: Pull complete
af233a02f79e: Pull complete
f81c64c75055: Download complete
b3e684e4d1bb: Download complete
Digest: sha256:f5d029fe39146b08200bcc73595795ac19b85997ad0e5001a02c7c32e8769efa
Status: Downloaded newer image for python:3.10-slim
docker.io/library/python:3.10-slim
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$ docker images
  INFO    U  In Use
IMAGE          ID             DISK USAGE   CONTENT SIZE   EXTRA
hello-world:latest 05813aedc15f      25.9kB     9.52kB   U
python:3.10-slim   f5d029fe3914    185MB      47.1MB
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485$
```

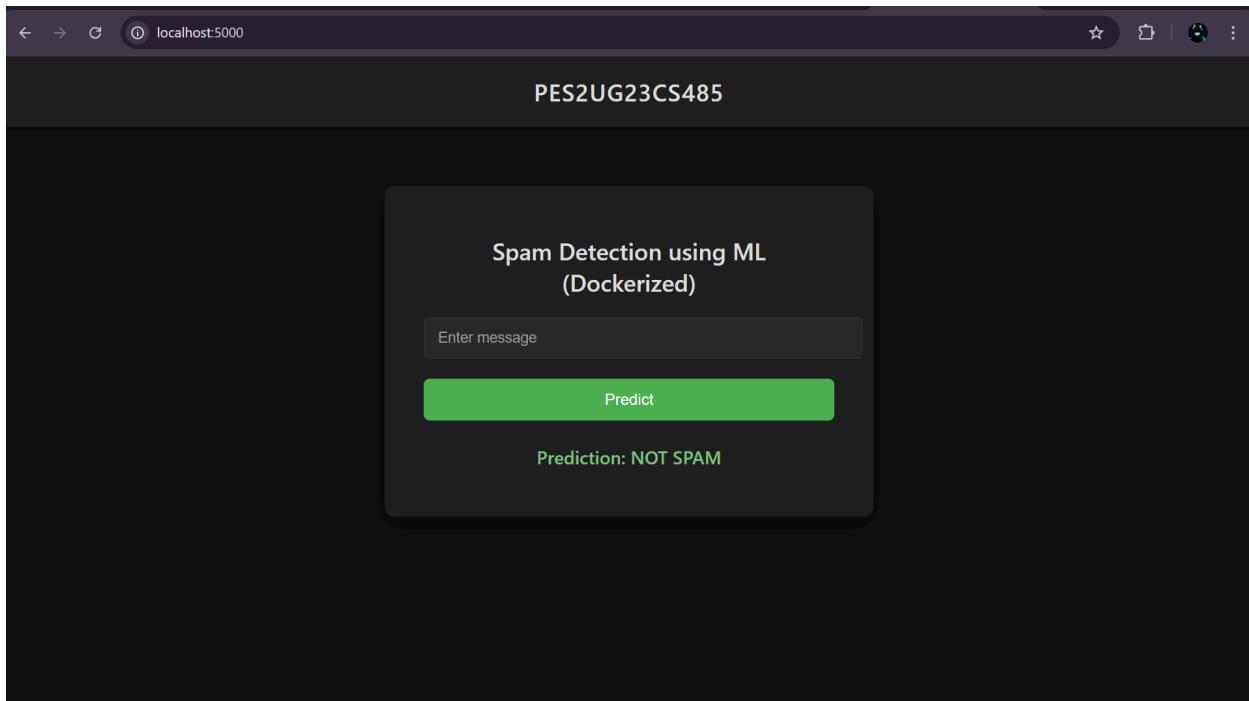
SS4

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker build -t spam-web-app-pes2ug23cs485 .
[+] Building 88.5s (12/12) FINISHED
  => [internal] load build definition from Dockerfile
  => => transferring dockerfile: 809B
  => [internal] load metadata for docker.io/library/python:3.9-slim
  => [internal] load .dockerrcignore
  => => transferring context: 2B
  => [internal] load build context
  => => transferring context: 398.78kB
  => [1/7] FROM docker.io/library/python:3.9-slim@sha256:2d97f6910b16bd338d3060f261f53f144965f755599aab1acd1e13c
  => => docker:default
  => => sha256:ea56f685404adf81680322f152d2cfec62115b30dda481c2c450078315beb508 251B / 251B 0.1s
  => => sha256:fc74430849022d13b6dd44b8969a953f842f59cc9d1a0c2c83d710affa286c08 13.88MB / 13.88MB 0.1s
  => => sha256:38513bd7256313495ccdd83b3b0915a633cf4475dc2a07072ab2c8d191020ca5d 29.78MB / 29.78MB 1.5s
  => => sha256:b3ec39b36ae8c03a3e09854de4ec4aa08381dfed84a9daa075048c2e3df3881d 1.29MB / 1.29MB 0.0s
  => => extracting sha256:38513bd7256313495ccdd83b3b0915a633cf4475dc2a07072ab2c8d191020ca5d 1.29MB / 1.29MB 0.2s
  => => extracting sha256:b3ec39b36ae8c03a3e09854de4ec4aa08381dfed84a9daa075048c2e3df3881d 1.29MB / 1.29MB 0.2s
  => => extracting sha256:fc74430849022d13b6d44b8969a953f842f59c6e9d1a0c2c83d710affa286c08 1.29MB / 1.29MB 0.1s
  => => extracting sha256:ea56f685404adf81680322f152d2cfec62115b30dda481c2c450078315beb508 1.29MB / 1.29MB 0.1s
  => [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 sha256:73a8ac9a17174e6f63b2d9715f3d7ca2a81660f2b4abed24a0229a9b317d016a
  => => exporting config sha256:94eba023a1681465b082b666063835e1ld991f48b7142201d5709b2c7f0fff31
  => => exporting attestation manifest sha256:395ad2e271889ff3bcfabcb2857d7524ce8d9afab96172382348d443c127254f
  => => exporting manifest list sha256:15394677a102ed2b52274f0cd2e3781b648a5999bda5b031b47b09a9e7a242e
  => => naming to docker.io/library/spam-web-app-pes2ug23cs485:latest
  => => unpacking to docker.io/library/spam-web-app-pes2ug23cs485:latest
  => [8/8] FINISHED
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$
```

SS5

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker run -d -p 5000:5000 spam-web-app-pes2ug23cs485
5619510eff70  spam-web-app-pes2ug23cs485  "python app.py"  17 seconds ago  Up 16 seconds  0.0.0.0:5000->5000/tcp, [::]:5000->5000
0/tcp  pensive_cartwright
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS
 NAMES
5619510eff70      spam-web-app-pes2ug23cs485   "python app.py"   17 seconds ago   Up 16 seconds   0.0.0.0:5000->5000/tcp, [::]:5000->5000
0/tcp  pensive_cartwright
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$
```

ss6



ss7

```
rtk@RithvikYoga:/mnt/c/Users/rithv/se6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker login
Authenticating with existing credentials... [Username: rtk5]
[Info → To login with a different account, run 'docker logout' followed by 'docker login']

Login Succeeded
rtk@RithvikYoga:/mnt/c/Users/rithv/se6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$
```

ss8

```
rtk@RithvikYoga:/mnt/c/Users/rithv/se6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker tag spam-web-app-pes2ug23cs485 rtk5
spam-web-app-pes2ug23cs485:v1
rtk@RithvikYoga:/mnt/c/Users/rithv/se6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker images
rtk5/spam-web-app-pes2ug23cs485:v1
rtk5/spam-web-app-pes2ug23cs485:latest
rtk5@RithvikYoga:/mnt/c/Users/rithv/se6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$
```

ss9

```
rtk@RithvikYoga:/mnt/c/Users/rithv/se6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker push rtk5/spam-web-app-pes2ug23cs485
5:1
The push refers to repository [docker.io	rtk5/spam-web-app-pes2ug23cs485]
e4a11fd88683: Pushed
fc7443084902: Pushed
9acfea91974b: Pushed
448dd7f42667: Pushed
eedecaclee87: Pushed
8376e3590094: Pushed
ea56f685404a: Pushed
7d666ba4cdd5: Pushed
38513bd72563: Pushed
b3ec39b36ae8: Pushed
14430d3fc30: Pushed
v1: digest: sha256:15394677a102edb52274f0cd52e3781b648a5999bdaf5b031b47b09a9e7a242e size: 856
rtk@RithvikYoga:/mnt/c/Users/rithv/se6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$
```

SS10

The screenshot shows the Docker Hub interface for the namespace 'rt5'. The left sidebar includes sections for 'Repositories' (selected), 'Hardened Images', 'Collaborations', 'Settings' (with 'Default privacy' and 'Notifications'), 'Billing', 'Usage' (with 'Pulls' and 'Storage'), and a search bar. The main area is titled 'Repositories' and displays one entry: 'rtk5/spam-web-app-pes2ug23cs485' (Last Pushed: 2 minutes ago, Status: IMAGE, Visibility: Public, Scout: Inactive). A 'Create a repository' button is visible at the top right.

SS11

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
5619510eff70 spam-web-app-pes2ug23cs485 "python app.py" 6 minutes ago Up 6 minutes 0.0.0.0:5000->5000/tcp, [::]:5000->5000/tcp pensive_cartwright
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker stop 5619510eff70
5619510eff70
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$
```

SS12

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
5619510eff70 spam-web-app-pes2ug23cs485 "python app.py" 8 minutes ago Exited (137) 39 seconds ago pensive_cartwright
dd8941b77d8c spam-web-app-pes2ug23cs485 "python app.py" 10 minutes ago Exited (0) 9 minutes ago mystifying_paszur
013416ba648e spam-web-app-pes2ug23cs485 "python app.py" 13 minutes ago Exited (0) 10 minutes ago stupefied_pike
46e2e0e021f5 hello-world "/hello" 35 minutes ago Exited (0) 35 minutes ago stoic_nightingale
10884f4857ad hello-world "/hello" 39 minutes ago Exited (0) 39 minutes ago mystifying_elgam
a3dbd2b1e21c hello-world "/hello" 3 hours ago Exited (0) 3 hours ago nervous_easley
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker rm 5619510eff70
5619510eff70
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
dd8941b77d8c spam-web-app-pes2ug23cs485 "python app.py" 11 minutes ago Exited (0) 9 minutes ago mystifying_paste
013416ba648e spam-web-app-pes2ug23cs485 "python app.py" 14 minutes ago Exited (0) 11 minutes ago stupefied_pike
46e2e0e021f5 hello-world "/hello" 36 minutes ago Exited (0) 36 minutes ago stoic_nightingale
10884f4857ad hello-world "/hello" 39 minutes ago Exited (0) 39 minutes ago mystifying_elgam
a3dbd2b1e21c hello-world "/hello" 3 hours ago Exited (0) 3 hours ago nervous_easley
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$
```

SS13

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker images
[Info → U In Use]
IMAGE           ID          DISK USAGE   CONTENT SIZE   EXTRA
hello-world:latest 05813aedc15f    25.9kB      9.52kB   U
python:3.10-slim  f5d029fe3914    185MB       47.1MB   U
rtk5/spam-web-app-pes2ug23cs485:v1 15394677a102  564MB       132MB   U
spam-web-app-pes2ug23cs485:latest  15394677a102  564MB       132MB   U
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker rmi spam-web-app-pes2ug23cs485:latest
Untagged: spam-web-app-pes2ug23cs485:latest
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker images
[Info → U In Use]
IMAGE           ID          DISK USAGE   CONTENT SIZE   EXTRA
hello-world:latest 05813aedc15f    25.9kB      9.52kB   U
python:3.10-slim  f5d029fe3914    185MB       47.1MB   U
rtk5/spam-web-app-pes2ug23cs485:v1 15394677a102  564MB       132MB   U
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ |
```

SS14

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker images
[Info → U In Use]
IMAGE           ID          DISK USAGE   CONTENT SIZE   EXTRA
hello-world:latest 05813aedc15f    25.9kB      9.52kB   U
python:3.10-slim  f5d029fe3914    185MB       47.1MB   U
rtk5/spam-web-app-pes2ug23cs485:v1 15394677a102  564MB       132MB   U
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker rmi rtk5/spam-web-app-pes2ug23cs485:v1
Untagged: rtk5/spam-web-app-pes2ug23cs485:v1
Deleted: sha256:15394677a102edb52274f0cd52e3781b648a5999bdaf5b031b47b09a9e7a242e
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker images
[Info → U In Use]
IMAGE           ID          DISK USAGE   CONTENT SIZE   EXTRA
hello-world:latest 05813aedc15f    25.9kB      9.52kB   U
python:3.10-slim  f5d029fe3914    185MB       47.1MB   U
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ |
```

SS14

```
CC > CC-Lab-3 > PES2UG23CS485 > ml-docker-PES2UG23CS485 > ≡ answer.txt
1  PES2UG23CS485
2
3  docker rmi $(docker images -q)
```

SS15

```
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker pull rtk5/spam-web-app-pes2ug23cs485:v1
5:v1
v1: Pulling from rtk5/spam-web-app-pes2ug23cs485
e4a11fd88683: Pull complete
8376e3590094: Pull complete
14430d3fcf30: Pull complete
fc7443084902: Pull complete
448dd7f42667: Pull complete
ea56f685404a: Pull complete
38513bd72563: Pull complete
7d666ba4cdd5: Pull complete
b3ec39b36ae8: Pull complete
9acfea91974b: Pull complete
eedecaclee87: Download complete
Digest: sha256:15394677a102edb52274f0cd52e3781b648a5999bda5b031b47b09a9e7a242e
Status: Downloaded newer image for rtk5/spam-web-app-pes2ug23cs485:v1
docker.io	rtk5/spam-web-app-pes2ug23cs485:v1
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$ docker images
  ID          IMAGE           CREATED        SIZE
15394677a102  rtk5/spam-web-app-pes2ug23cs485:v1  2 days ago   564MB
132MB
rtk@RithvikYoga:/mnt/c/Users/rithv/sem6/CC/CC-Lab-3/PES2UG23CS485/ml-docker-PES2UG23CS485$
```