

2.3 Create your first image

2.3.1 Create a Python Flask app that displays random cat pix

```
dhiuhu@DESKTOP-ATLGL31: ~/flask-app

dhiuhu@DESKTOP-ATLGL31:~$ mkdir flask-app
dhiuhu@DESKTOP-ATLGL31:~$ ls
best_mount  example-voting-app  flask-app  minikube-linux-amd64
dhiuhu@DESKTOP-ATLGL31:~$ cd flask-app
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano app.py
```

```
Select dhiuhu@DESKTOP-ATLGL31: ~/flask-app
GNU nano 6.2
from flask import Flask, render_template
import random

app = Flask(__name__)

# list of cat images
images = [
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26388-1381844103-11.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr01/15/9/anigif_enhanced-buzz-31540-1381844535-8.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26390-1381844163-18.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr06/15/10/anigif_enhanced-buzz-1376-1381846217-0.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr03/15/9/anigif_enhanced-buzz-3301-1381844136-26.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr06/15/10/anigif_enhanced-buzz-20111-1381845968-0.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr03/15/9/anigif_enhanced-buzz-3409-1381844582-13.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr02/15/9/anigif_enhanced-buzz-19667-1381844937-10.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26358-1381845043-13.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr06/15/9/anigif_enhanced-buzz-19774-1381844445-6.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr06/15/9/anigif_enhanced-buzz-25158-1381844793-0.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr03/15/10/anigif_enhanced-buzz-11980-1381846269-1.gif"
]

@app.route('/')
def index():
    url = random.choice(images)
    return render_template("index.html", url=url)

if __name__ == "__main__":
    app.run(hosts="0.0.0.0")

File Name to Write: app.py
M-D DOS Format M-M Mac Format M-A Append M-P Prepend M-B Backup File M-B Browse
```

```
dhiuhu@DESKTOP-ATLGL31: ~/flask-app
GNU nano 6.2
from flask import Flask, render_template
import random

app = Flask(__name__)

# list of cat images
images = [
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26388-1381844103-11.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr01/15/9/anigif_enhanced-buzz-31540-1381844535-8.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26390-1381844163-18.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr06/15/10/anigif_enhanced-buzz-1376-1381846217-0.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr03/15/9/anigif_enhanced-buzz-3391-1381844336-26.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr06/15/10/anigif_enhanced-buzz-29111-1381845968-0.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr03/15/9/anigif_enhanced-buzz-3409-1381844582-13.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr02/15/9/anigif_enhanced-buzz-19667-1381844937-10.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr05/15/9/anigif_enhanced-buzz-26358-1381845043-13.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr06/15/9/anigif_enhanced-buzz-18774-1381844645-6.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr06/15/9/anigif_enhanced-buzz-25158-1381844793-0.gif",
    "http://img.buzzfeed.com/buzzfeed-static/static/2013-10/enhanced/webdr03/15/10/anigif_enhanced-buzz-11980-1381846269-1.gif"
]

app.route('/')
def index():
    url = random.choice(images)
    return render_template('index.html', url=url)

if __name__ == "__main__":
    app.run(host="0.0.0.0")

[ Write 28 lines ]
NG Help  NG Write Out  NG Where Is  NG Cut  NG Execute  NG Location  M-U Undo  M-A Set Mark  M-] To Bracket  M-Q Previous
NX Exit  NG Read File  NG Replace  NG Paste  NG Justify  NG Go To Line  M-E Redo  M-C Copy  NG Where Was  M-W Next
```

```
dhiuhu@DESKTOP-ATLGL31: ~/flask-app
dhiuhu@DESKTOP-ATLGL31:~$ mkdir flask-app
dhiuhu@DESKTOP-ATLGL31:~$ ls
best_mount  example-voting-app  flask-app  minikube-linux-amd64
dhiuhu@DESKTOP-ATLGL31:~$ cd flask-app
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt

dhiuhu@DESKTOP-ATLGL31: ~/flask-app
GNU nano 6.2
Flask==0.10.1
```

```
dhiuhu@DESKTOP-ATLGL31: ~/flask-app
dhiuhu@DESKTOP-ATLGL31:~$ mkdir flask-app
dhiuhu@DESKTOP-ATLGL31:~$ ls
best_mount  example-voting-app  flask-app  minikube-linux-amd64
dhiuhu@DESKTOP-ATLGL31:~$ cd flask-app
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py  requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$
```

dhiuhu@DESKTOP-ATLGL31: ~/flask-app

```
dhiuhu@DESKTOP-ATLGL31:~$ mkdir flask-app
dhiuhu@DESKTOP-ATLGL31:~$ ls
best_mount  example-voting-app  flash-app  flask-app  minikube-linux-amd64
dhiuhu@DESKTOP-ATLGL31:~$ cd flask-app
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py  requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ mkdir templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py  requirements.txt  templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$
```

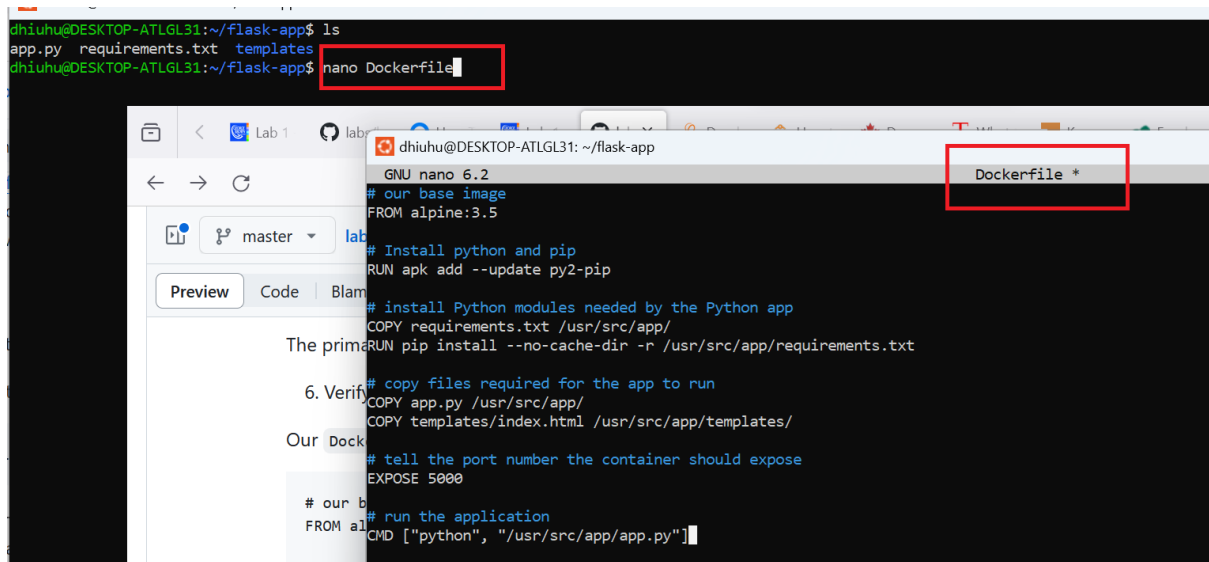
```
dhiuhu@DESKTOP-ATLGL31:~$ mkdir flask-app
dhiuhu@DESKTOP-ATLGL31:~$ ls
best_mount  example-voting-app  flash-app  flask-app  minikube-linux-amd64
dhiuhu@DESKTOP-ATLGL31:~$ cd flask-app
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py  requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ mkdir templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py  requirements.txt  templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ cd templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app/templates$ nano index.html
```

```
dhiuhu@DESKTOP-ATLGL31: ~/flask-app/templates
GNU nano 6.2 index.html
<html>
<head>
  <style type="text/css">
    body {
      background: black;
      color: white;
    }
    div.container {
      max-width: 500px;
      margin: 100px auto;
      border: 20px solid white;
      padding: 10px;
      text-align: center;
    }
    h4 {
      text-transform: uppercase;
    }
  </style>
</head>
<body>
  <div class="container">
    <h4>Cat Gif of the day</h4>
    
    <p><small>Courtesy: <a href="http://www.buzzfeed.com/copyranter/the-best-cat-gif-post-in-the-history-of-cat-gifs">Buzzfeed</a></p>
  </div>
</body>
</html>
```

```
dhiuhu@DESKTOP-ATLGL31: ~/flask-app
dhiuhu@DESKTOP-ATLGL31:~$ cd flask-app
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py requirements.txt
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ mkdir templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py requirements.txt templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ cd templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app/templates$ nano index.html
dhiuhu@DESKTOP-ATLGL31:~/flask-app/templates$ ls
index.html
dhiuhu@DESKTOP-ATLGL31:~/flask-app/templates$
```

2.3.2 Write a Dockerfile

```
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py requirements.txt templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano Dockerfile
```



```
GNU nano 6.2 Dockerfile *
# our base image
FROM alpine:3.5

# Install python and pip
RUN apk add --update py2-pip

# install Python modules needed by the Python app
COPY requirements.txt /usr/src/app/
RUN pip install --no-cache-dir -r /usr/src/app/requirements.txt

# copy files required for the app to run
COPY app.py /usr/src/app/
COPY templates/index.html /usr/src/app/templates/

# tell the port number the container should expose
EXPOSE 5000

# run the application
CMD ["python", "/usr/src/app/app.py"]
```

```
dhiuhu@DESKTOP-ATLGL31: ~/flask-app
```

```
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py requirements.txt templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano Dockerfile
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
Dockerfile app.py requirements.txt templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$
```

2.3.3 Build the image

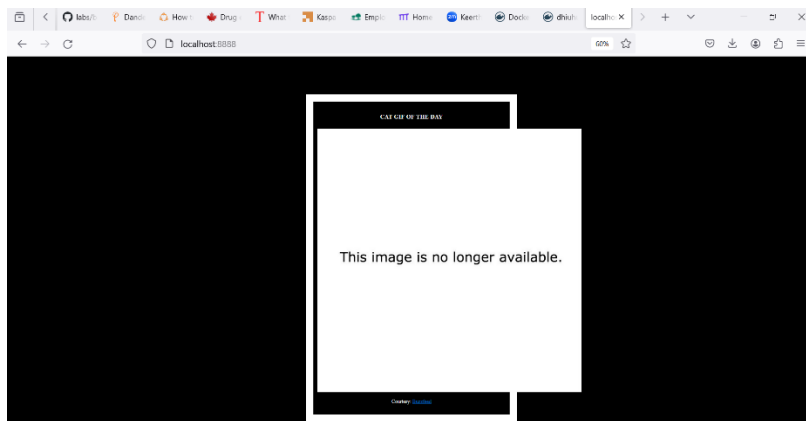
```
dhiuhu@DESKTOP-ATLGL31: ~/flask-app
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py  requirements.txt  templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano Dockerfile
Dockerfile app.py requirements.txt templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker build -t dhiuhu/my1stapp .

dhiuhu@DESKTOP-ATLGL31: ~/flask-app
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ ls
app.py  requirements.txt  templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ nano Dockerfile
Dockerfile app.py requirements.txt templates
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker build -t dhiuhu/my1stapp .
[+] Building 1.5s (12/11) FINISHED
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 521B
=> [internal] load metadata for docker.io/library/alpine:3.5
=> [auth] library/alpine:pull token for registry-1.docker.io
=> [internal] load build context
=> => transferring context: 2.63kB
=> [1/6] FROM docker.io/library/alpine:3.5@sha256:66952b313e51c3bd1987d7c4ddf5dba9bc8fb6e524eed2448fa660246b3e76e
=> CACHED [2/6] RUN apk add --update py2-pip
=> CACHED [3/6] COPY requirements.txt /usr/src/app/
=> CACHED [4/6] RUN pip install --no-cache-dir -r /usr/src/app/requirements.txt
=> CACHED [5/6] COPY app.py /usr/src/app/
=> CACHED [6/6] COPY templates/index.html /usr/src/app/templates/
=> exporting to image
=> => writing image sha256:15d270e71899c6d9352933c6c0fa4909ce79f4815c3d122f72fc9535ad39261f
=> => naming to docker.io/dhiuhu/my1stapp
dhiuhu@DESKTOP-ATLGL31:~/flask-app$
```

2.3.4 Run your image

```
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker build -t dhiuhu/my1stapp .
[+] Building 1.5s (12/12) FINISHED
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 521B
=> [internal] load metadata for docker.io/library/alpine:3.5
=> [auth] library/alpine:pull token for registry-1.docker.io
=> [internal] load build context
=> => transferring context: 2.63kB
=> [1/6] FROM docker.io/library/alpine:3.5@sha256:66952b313e51c3bd1987d7c4ddf5dba9bc0fb6e524eed2448fa660246b3e76ec
=> CACHED [2/6] RUN apk add --update py2-pip
=> CACHED [3/6] COPY requirements.txt /usr/src/app/
=> CACHED [4/6] RUN pip install --no-cache-dir -r /usr/src/app/requirements.txt
=> CACHED [5/6] COPY app.py /usr/src/app/
=> CACHED [6/6] COPY templates/index.html /usr/src/app/templates/
=> exporting to image
=> => exporting layers
=> => writing image sha256:15d270e71899c6d9352933c6c0fa4909ce79f4815c3d122f72fc9535ad39261f
=> => naming to docker.io/dhiuhu/my1stapp
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker run -p 8888:5000 --name my1stapp dhiuhu/my1stapp
* Running on http://0.0.0.0:5000/ (Press CTRL+C to quit)
```

Head over to <http://localhost:8888>




```
=> CACHED [6/6] COPY templates/index.html /usr/src/app/templates/
=> exporting to image
=> => exporting layers
=> => writing image sha256:15d270e71899c6d9352933c6c0fa4909ce79f4815c3d122f72fc9535ad39261f
=> => naming to docker.io/dhiuhu/my1stapp
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker run -p 8888:5000 --name my1stapp dhiuhu/my1stapp
* Running on http://0.0.0.0:5000/ (Press CTRL+C to quit)
172.17.0.1 - - [15/Jan/2024 03:26:07] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [15/Jan/2024 03:28:06] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [15/Jan/2024 03:28:07] "GET /favicon.ico HTTP/1.1" 404 -
172.17.0.1 - - [15/Jan/2024 03:31:13] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [15/Jan/2024 03:31:20] "GET / HTTP/1.1" 200 -
```

RUNNING ON THE BROWSER

DOCKER LOGIN

```
=> => naming to docker.io/dhiuhu/my1stapp
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker run -p 8888:5000 --name my1stapp dhiuhu/my1stapp
* Running on http://0.0.0.0:5000/ (Press CTRL+C to quit)
172.17.0.1 - - [15/Jan/2024 03:26:07] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [15/Jan/2024 03:28:06] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [15/Jan/2024 03:28:07] "GET /favicon.ico HTTP/1.1" 404 -
172.17.0.1 - - [15/Jan/2024 03:31:13] "GET / HTTP/1.1" 200 -
172.17.0.1 - - [15/Jan/2024 03:31:20] "GET / HTTP/1.1" 200 -
^Cdhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker login
Authenticating with existing credentials...
WARNING! Your password will be stored unencrypted in /home/dhiuhu/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
dhiuhu@DESKTOP-ATLGL31:~/flask-app$
```




CTRL+C

docker login

docker push

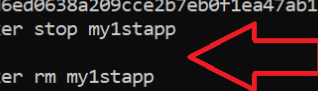
```
172.17.0.1 - - [15/Jan/2024 03:31:20] "GET / HTTP/1.1" 200 -
^Cdhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker login
Authenticating with existing credentials...
WARNING! Your password will be stored unencrypted in /home/dhiuhu/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker push dhiuhu/my1stapp
Using default tag: latest
The push refers to repository [docker.io/dhiuhu/my1stapp]
084636cc7af9: Mounted from dhiuhu/myfirstapp
f669315e169f: Mounted from dhiuhu/myfirstapp
a05360ccd4b3: Mounted from dhiuhu/myfirstapp
c3891e16937a: Mounted from dhiuhu/myfirstapp
5243c7724646: Mounted from dhiuhu/myfirstapp
f566c57e6f2d: Mounted from dhiuhu/myfirstapp
latest: digest: sha256:962e4d9ae9f6ac5ad6ed0638a209cce2b7eb0f1ea47ab16d036cbbbee19bf4a5e size: 1571
dhiuhu@DESKTOP-ATLGL31:~/flask-app$
```



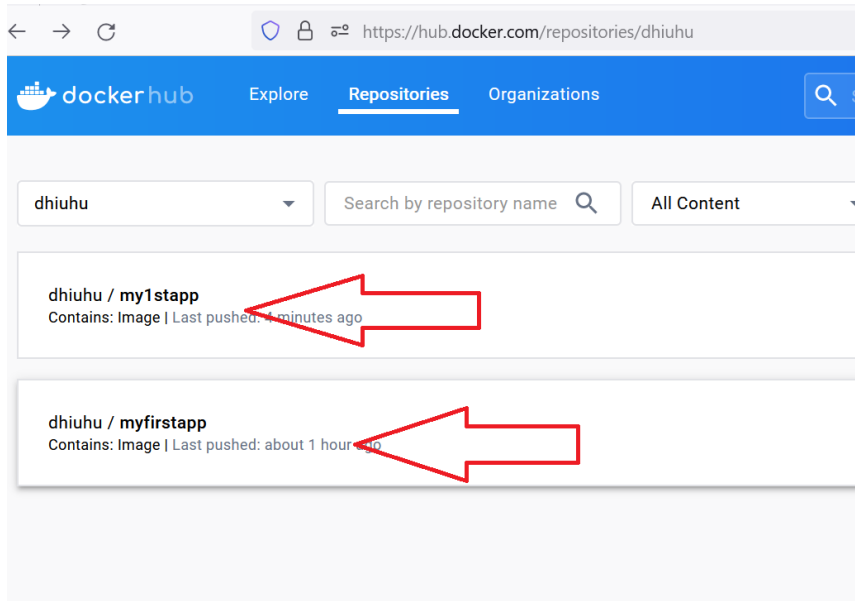
PUSH

```
a05360ccd4b3: Mounted from dhiuhu/myfirstapp
c3891e16937a: Mounted from dhiuhu/myfirstapp
5243c7724646: Mounted from dhiuhu/myfirstapp
f566c57e6f2d: Mounted from dhiuhu/myfirstapp
latest: digest: sha256:962e4d9ae9f6ac5ad6ed0638a209cce2b7eb0f1ea47ab16d036cbbbee19bf4a5e size: 1571
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker stop my1stapp
my1stapp
dhiuhu@DESKTOP-ATLGL31:~/flask-app$ docker rm my1stapp
my1stapp
dhiuhu@DESKTOP-ATLGL31:~/flask-app$
```



STOP & REMOVE

MY REPOSITORY



3.0 Deploying an app to a Swarm

git clone https://github.com/docker/example-voting-app.git

cd example-voting-app

```
dhiuhu@DESKTOP-ATLGL31: ~/example-voting-app
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$ ls
LICENSE      README.md      docker-compose.images.yml  docker-stack.yml  k8s-specifications  seed-data  worker
MAINTAINERS  architecture.excalidraw.png  docker-compose.yml        healthchecks      result              vote
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$ nano docker-stack.yml
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$
```

```
dhiuhu@DESKTOP-ATLGL31: ~/example-voting-app
GNU nano 6.2
# this file is meant for Docker Swarm stacks only
# trying it in compose will fail because of multiple replicas trying to bind to the same port
# Swarm currently does not support Compose Spec, so we'll pin to the older version 3.9

version: "3.9"

services:

  redis:
    image: redis:alpine
    networks:
      - frontend

  db:
    image: postgres:15-alpine
    environment:
      POSTGRES_USER: "postgres"
      POSTGRES_PASSWORD: "postgres"
    volumes:
      - db-data:/var/lib/postgresql/data
    networks:
      - backend

  vote:
    image: dockersamples/examplevotingapp_vote
    ports:
      - 5000:80
    networks:
      - frontend
    deploy:
      replicas: 2

  result:
    image: dockersamples/examplevotingapp_result
    ports:
      - 5001:80
```

Deploy the App

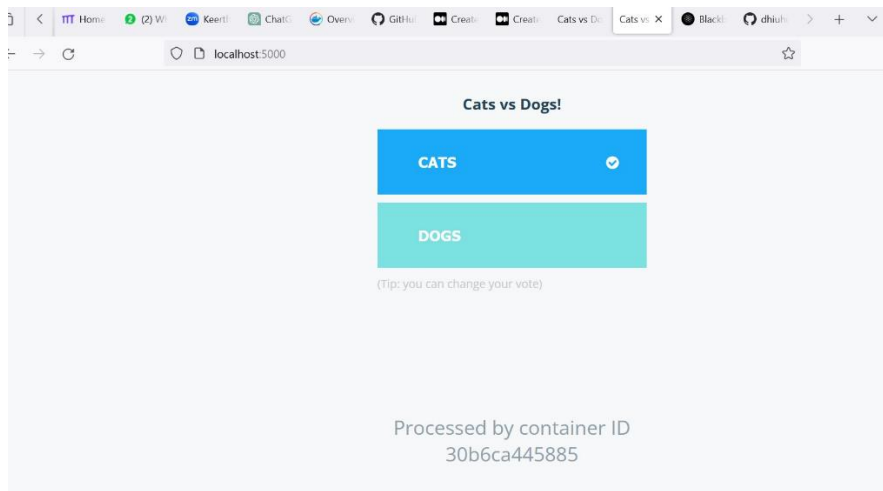
```
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$ nano docker-stack.yml
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$ docker stack deploy --compose-file docker-stack.yml vote
Updating service vote_redis (id: ql372mur78nz4jeauu49qvjpk)
Updating service vote_db (id: ear3lu39zq7cg81obh4gggtce8)
Updating service vote_vote (id: jua25wzxpshfxxwnqp4yp8go0)
Updating service vote_result (id: 73bj1bcv4hknlp70g8q502pz)
Updating service vote_worker (id: ifp82d4h1hqxj7gfbjri356qz)
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$
```

docker stack services vote

```
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$ nano docker-stack.yml
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$ docker stack deploy --compose-file docker-stack.yml vote
Updating service vote_redis (id: ql372mur78nz4jeauu49qvjpk)
Updating service vote_db (id: ear3lu39zq7cg81obh4gggtce8)
Updating service vote_vote (id: jua25wzxpshfxxwnqp4yp8go0)
Updating service vote_result (id: 73bj1bcv4hknlp70g8q502pz)
Updating service vote_worker (id: ifp82d4h1hqxj7gfbjri356qz)
dhiuhu@DESKTOP-ATLGL31:~/example-voting-app$ docker stack services vote
```

ID	NAME	MODE	REPLICAS	IMAGE	PORTS
ear3lu39zq7c	vote_db	replicated	1/1	postgres:15-alpine	
ql372mur78nz	vote_redis	replicated	1/1	redis:alpine	
73bj1bcv4hkn	vote_result	replicated	1/1	dockersamples/examplevotingapp_result:latest	*:5001->80/tcp
jua25wzxpshf	vote_vote	replicated	2/2	dockersamples/examplevotingapp_vote:latest	*:5000->80/tcp
ifp82d4h1hqx	vote_worker	replicated	2/2	dockersamples/examplevotingapp_worker:latest	

PORT 5000



PORT 5001

