kirillspitsvn@LAPTOP-VPGTN0GN:∼\$ sudo docker run hello-world Unable to find image 'hello-world:latest' locally

latest: Pulling from library/hello-world c1ec31eb5944: Pull complete Digest: sha256:4bd78111b6914a99dbc560e6a20eab57ff6655aea4a80c50b0c5491968cbc2e6 Status: Downloaded newer image for hello-world:latest

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

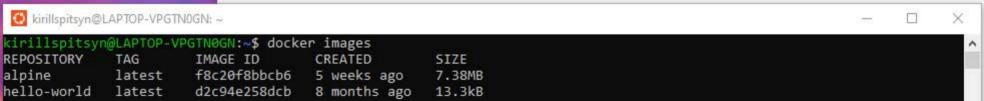
to your terminal. To try something more ambitious, you can run an Ubuntu container with:

Hello from Docker!

\$ 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/

Выбрать kirillspitsyn@LAPTOP-VPGTN0GN: ~	55	×
kirillspitsyn@LAPTOP-VPGTN0GN:~\$ docker pull alpine		^
Jsing default tag: latest		43
latest: Pulling from library/alpine		
561ff4d9561e: Pull complete		
Digest: sha256:51b67269f354137895d43f3b3d810bfacd3945438e94dc5ac55fdac340352f48		
Status: Downloaded newer image for alpine:latest		
docker.io/library/alpine:latest		



1 root

2 root

7 root

5 root

2 root

2 root

2 root

2 root

2 root

12 root

root

11 root

root

root

2

root

drwxr-xr-x

drwxr-xr-x

drwxr-xr-x

drwxr-xr-x

drwxr-xr-x

drwxr-xr-x

drwx-----

drwxr-xr-x

drwxr-xr-x

dr-xr-xr-x

drwxrwxrwt

drwxr-xr-x

drwxr-xr-x

drwxr-xr-x

dr-xr-xr-x 349 root

4096 Dec

7 09:43 bin

09:43 home

09:43 media

09:43 root

09:43 sbin

09:43 srv

09:43 usr

mnt

09:43 lib

340 Jan 15 00:34 dev

4096 Jan 15 00:34 etc

7

7

7 09:43

0 Jan 15 00:34 proc

0 Jan 15 00:34 svs

7

7 09:43 opt

7 09:43 run

7 09:43 tmp

7 09:43 var





```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN@GN:~$ docker run -it alpine /bin/sh
/ # ls -1
total 56
                                       4096 Dec 7 09:43 bin
drwxr-xr-x
             2 root
                         root
                                        360 Jan 15 00:45 dev
drwxr-xr-x
             5 root
                        root
drwxr-xr-x
             1 root
                        root
                                       4096 Jan 15 00:45 etc
                                       4096 Dec 7 09:43 home
drwxr-xr-x
             2 root
                        root
                                       4096 Dec 7 09:43 lib
drwxr-xr-x
             7 root
                        root
                                       4096 Dec 7 09:43 media
drwxr-xr-x
             5 root
                        root
                                       4096 Dec 7 09:43 mnt
drwxr-xr-x
             2 root
                         root
drwxr-xr-x
             2 root
                        root
                                       4096 Dec 7 09:43 opt
                                          0 Jan 15 00:45 proc
dr-xr-xr-x 356 root
                        root
                                       4096 Jan 15 00:46 root
drwx----
             1 root
                        root
                                       4096 Dec 7 09:43 run
drwxr-xr-x
             2 root
                        root
drwxr-xr-x
             2 root
                        root
                                       4096 Dec 7 09:43 sbin
             2 root
                        root
                                       4096 Dec 7 09:43 srv
drwxr-xr-x
dr-xr-xr-x
            11 root
                                          0 Jan 15 00:45 svs
                        root
drwxrwxrwt
             2 root
                                       4096 Dec 7 09:43 tmp
                        root
             7 root
                                       4096 Dec 7 09:43 usr
drwxr-xr-x
                         root
drwxr-xr-x
            12 root
                         root
                                       4096 Dec 7 09:43 var
/ # uname -a
Linux e19cce015d2f 5.15.133.1-microsoft-standard-WSL2 #1 SMP Thu Oct 5 21:02:42 UTC 2023 x86 64 Linux
/ # exit
kirillspitsyn@LAPTOP-VPGTN0GN:~$
```



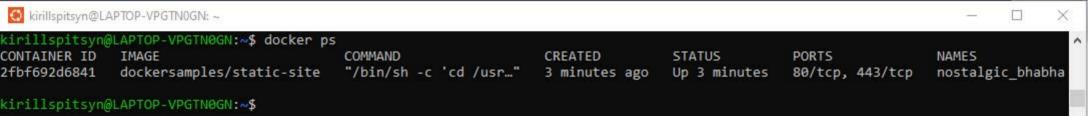
```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN@GN:~$ docker ps -a
CONTAINER ID
                            COMMAND
                                                     CREATED
                                                                      STATUS
                                                                                                       PORTS
                                                                                                                 NAMES
              IMAGE
                                                                      Exited (0) About a minute ago
e19cce015d2f
              alpine
                            "/bin/sh"
                                                     3 minutes ago
                                                                                                                nifty wilson
                                                                      Exited (0) 4 minutes ago
ee3fd1205166
              alpine
                            "/bin/sh"
                                                     4 minutes ago
                                                                                                                stoic hertz
b088fa647912
              alpine
                            "echo 'hello from al..."
                                                     6 minutes ago
                                                                      Exited (0) 6 minutes ago
                                                                                                                blissful dirac
32358773b4cd
                            "15 -1"
                                                     13 minutes ago
                                                                      Exited (0) 13 minutes ago
                                                                                                                serene leavitt
              alpine
ce8d7a55601a
              hello-world
                            "/hello"
                                                     43 minutes ago
                                                                      Exited (0) 43 minutes ago
                                                                                                                hungry ishizaka
kirillspitsyn@LAPTOP-VPGTN0GN:~$
```

```
The second second
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN0GN:~$ docker run -it alpine /bin/sh
/ # 15
bin dev etc home lib media mnt opt proc root run sbin srv sys tmp usr var
/ # uname -a
Linux a09bb33966b6 5.15.133.1-microsoft-standard-WSL2 #1 SMP Thu Oct 5 21:02:42 UTC 2023 x86 64 Linux
/ # ^C
/ # exit
kirillspitsyn@LAPTOP-VPGTN0GN:~$
```

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN0GN:~$ docker run --help
Usage: docker run [OPTIONS] IMAGE [COMMAND] [ARG...]
Create and run a new container from an image
Aliases:
 docker container run, docker run
Options:
     --add-host list
                                       Add a custom host-to-IP mapping (host:ip)
                                       Add an annotation to the container (passed through to the OCI runtime) (default map[])
      --annotation map
  -a. --attach list
                                       Attach to STDIN, STDOUT or STDERR
      --blkio-weight uint16
                                       Block IO (relative weight), between 10 and 1000, or 0 to disable (default 0)
      --blkio-weight-device list
                                       Block IO weight (relative device weight) (default [])
      --cap-add list
                                       Add Linux capabilities
      --cap-drop list
                                       Drop Linux capabilities
      --cgroup-parent string
                                       Optional parent cgroup for the container
      --cgroupns string
                                       Cgroup namespace to use (host|private)
                                       'host': Run the container in the Docker host's cgroup namespace
                                        'private': Run the container in its own private cgroup namespace
                                                  Use the cgroup namespace as configured by the
                                                  default-cgroupns-mode option on the daemon (default)
```

```
X
kirillspitsyn@LAPTOP-VPGTN0GN: ~
                                                                                                                                                                        --workdir string
                                                    Working directory inside the container
kirillspitsyn@LAPTOP-VPGTN0GN:~$ docker inspect alpine
           "Id": "sha256:f8c20f8bbcb684055b4fea470fdd169c86e87786940b3262335b12ec3adef418",
           "RepoTags":
                "alpine:latest"
          ],
"RepoDigests": [
" leine@sha2
                "alpine@sha256:51b67269f354137895d43f3b3d810bfacd3945438e94dc5ac55fdac340352f48"
          ],
"Parent": ""
          "Comment": ""
          "Created": "2023-12-08T01:20:49.650406179Z",
"Container": "f2f93a8109b6034cb27137e7cb0a77417b4d7529cde89524d455964455c0d23a",
          "ContainerConfig": {
    "Hostname": "f2f93a8109b6",
    "Domainname": "",
    "User": "",
                "AttachStdin": false,
                "AttachStdout": false,
                "AttachStderr": false,
                "Tty": false,
                "OpenStdin": false,
                "StdinOnce": false,
                "Env": [
                      "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
               ],
"Cmd": [
                     "/bin/sh",
                     "-c",
                     "#(nop) '
                     "#(nop) ",
"CMD [\"/bin/sh\"]"
                ],
"Image": "sha256:c068232ea3eea78e6800063b9b599c95911729d5c8dd2a2b737684998eefb10a",
"Volumes": null,
"WorkingDir": "",
                "Entrypoint": null,
                "OnBuild": null,
                "Labels": {}
          },
"DockerVersion": "20.10.23",
          "Author": "",
          "Config": {
                "Hostname": "",
"Domainname": "",
                "User": "",
                "AttachStdin": false,
"AttachStdout": false,
                "AttachStderr": false,
                "Tty": false,
                "OpenStdin": false,
                "StdinOnce": false,
                "Env": [
                     "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin"
               ],
"Cmd": [
"/bj
                      "/bin/sh"
                ],
"Image": "sha256:c068232ea3eea78e6800063b9b599c95911729d5c8dd2a2b737684998eefb10a",
"Volumes": null,
"WorkingDir": "",
                "Entrypoint": null,
"OnBuild": null,
                "Labels": null
          },
"Architecture": "amd64",
          "Os": "linux",
          "Size": 7377066,
          "VirtualSize": 7377066,
           "GraphDriver": {
                "Data": {
                     "MergedDir": "/var/lib/docker/overlay2/fa852d6660fd5b7c62bec135aa1c0485e2e35d3ad56fe8e452f6eeb881b3ddc9/merged",
"UpperDir": "/var/lib/docker/overlay2/fa852d6660fd5b7c62bec135aa1c0485e2e35d3ad56fe8e452f6eeb881b3ddc9/diff",
"WorkDir": "/var/lib/docker/overlay2/fa852d6660fd5b7c62bec135aa1c0485e2e35d3ad56fe8e452f6eeb881b3ddc9/work"
               },
"Name": "overlay2"
          },
"RootFS": {
    "Type": "layers",
    "ers": [
                      "sha256:5af4f8f59b764c64c6def53f52ada809fe38d528441d08d01c206dfb3fc3b691"
           "Metadata": {
                 "LastTagTime": "0001-01-01T00:00:00Z"
]
kirillspitsyn@LAPTOP-VPGTN0GN:~$
```

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN@GN:~$ docker run -d dockersamples/static-site
Unable to find image 'dockersamples/static-site:latest' locally
latest: Pulling from dockersamples/static-site
fdd5d7827f33: Pull complete
a3ed95caeb02: Pull complete
716f7a5f3082: Pull complete
7b10f03a0309: Pull complete
aff3ab7e9c39: Pull complete
Digest: sha256:daa686c61d7d239b7977e72157997489db49f316b9b9af3909d9f10fd28b2dec
Status: Downloaded newer image for dockersamples/static-site:latest
2fbf692d68414efbafb101392e0cd2f286cd3ae81a6b5d81319ed720d8d4a4e8
kirillspitsyn@LAPTOP-VPGTN0GN:~$
```



kirillspitsyn@LAPTOP-VPGTN0GN: ~ kirillspitsvn@LAPTOP-VPGTN@GN:~\$ docker stop 2fbf692d6841 2fbf692d6841 kirillspitsvn@LAPTOP-VPGTN0GN:~\$ docker rm 2fbf692d6841 2fbf692d6841 kirillspitsyn@LAPTOP-VPGTN0GN:~\$

kirillspitsyn@LAPTOP-VPGTN0GN: ~ kirillspitsyn@LAPTOP-VPGTN@GN:∼\$ docker run --name static-site -e AUTHOR="Kirill Spitsyn" -d -P dockersamples/static-site 39aae2598114c3b37f72c5004581fdb27e4091d3175da22c173760d59e139487

kirillspitsyn@LAPTOP-VPGTN0GN:~\$

kirillspitsvn@LAPTOP-VPGTN@GN:~\$ docker port static-site 80/tcp -> 0.0.0.0:32769 443/tcp -> 0.0.0.0:32768 kirillspitsyn@LAPTOP-VPGTN@GN:~\$

kirillspitsvn@LAPTOP-VPGTN0GN: ~

cacf126d481d8a63abb5ca963f651410dc8ccee66839a3e0f067f2e55f65e156

kirillspitsyn@LAPTOP-VPGTN0GN:~\$



#### Hello Kirill Spitsyn!

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



#### Hello Kirill Spitsyn2!

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

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN@GN:~$ docker stop static-site
static-site
kirillspitsyn@LAPTOP-VPGTN@GN:~$ docker rm static-site
static-site
kirillspitsvn@LAPTOP-VPGTN@GN:~$ docker rm -f static-site-2
static-site-2
```

CREATED

STATUS

PORTS

NAMES

kirillspitsyn@LAPTOP-VPGTN0GN:~\$ docker ps

COMMAND

CONTAINER ID IMAGE

kirillspitsyn@LAPTOP-VPGTN0GN:~\$

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~
kirillspitsvn@LAPTOP-VPGTN@GN:~$ docker images
REPOSITORY
                                     IMAGE ID
                                                    CREATED
                           TAG
                                                                   SIZE
alpine
                           latest
                                    f8c20f8bbcb6
                                                   5 weeks ago
                                                                  7.38MB
hello-world
                           latest
                                     d2c94e258dcb
                                                   8 months ago
                                                                  13.3kB
dockersamples/static-site latest
                                     f589ccde7957
                                                   7 years ago
                                                                  191MB
kirillspitsyn@LAPTOP-VPGTN0GN:~$
```

```
kirillspitsvn@LAPTOP-VPGTN0GN: ~
kirillspitsyn@LAPTOP-VPGTN0GN:~$ 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
kirillspitsyn@LAPTOP-VPGTN@GN:~$ 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

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~/flask-app
kirillspitsvn@LAPTOP-VPGTN@GN:~/flask-app$ docker build -t kirillspitsvn220701/myfirstapp .
[+] Building 0.8s (11/11) FINISHED
                                                                                                              docker:default
kirillspitsyn@LAPTOP-VPGTN@GN:~/flask-app$
```

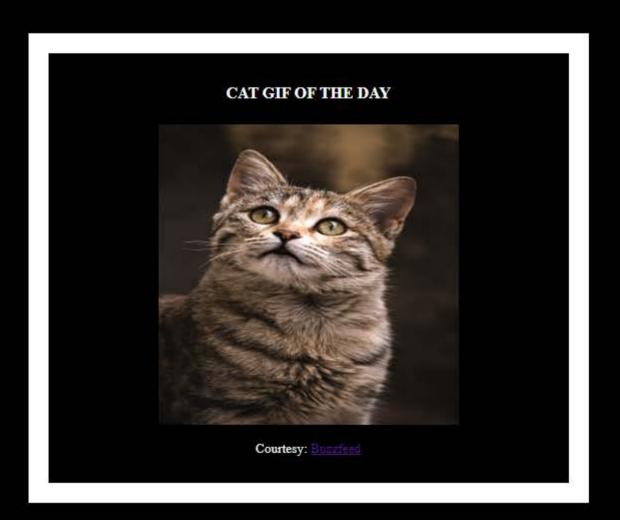
```
kirillspitsyn@LAPTOP-VPGTN0GN: ~/flask-app
=> => naming to docker.io/kirillspitsyn220701/myfirstapp
kirillspitsyn@LAPTOP-VPGTN@GN:~/flask-app$ docker images
REPOSITORY
                                            IMAGE ID
                                                           CREATED
                                                                            SIZE
                                  TAG
kirillspitsyn/myfirstapp
                                                           2 minutes ago
                                  latest
                                            0c180476f746
                                                                            56.8MB
kirillspitsyn220701/myfirstapp
                                  latest
                                            0c180476f746
                                                           2 minutes ago
                                                                            56.8MB
ubuntu
                                  latest
                                            174c8c134b2a
                                                           4 weeks ago
                                                                            77.9MB
                                  latest
                                            f8c20f8bbcb6
                                                           5 weeks ago
                                                                            7.38MB
```

alpine hello-world d2c94e258dcb 8 months ago 13.3kB latest 5b117edd0b76 ubuntu 12.04 6 years ago 104MB

dockersamples/static-site f589ccde7957 latest 7 years ago 191MB

kirillspitsyn@LAPTOP-VPGTN0GN:~/flask-app\$\_\_

```
kirillspitsyn@LAPTOP-VPGTN0GN:∼/flask-app$ docker run -p 8888:5000 --name myfirstapp kirillspitsyn220701/myfirstapp
* Running on http://0.0.0.0:5000/ (Press CTRL+C to quit)
```



```
kirillspitsyn@LAPTOP-VPGTN0GN: ~/flask-app
kirillspitsyn@LAPTOP-VPGTN0GN:~/flask-app$ docker login
Log in with your Docker ID or email address to push and pull images from Docker Hub. If you do
n't have a Docker ID, head over to https://hub.docker.com/ to create one.
You can log in with your password or a Personal Access Token (PAT). Using a limited-scope PAT
grants better security and is required for organizations using SSO. Learn more at https://docs
.docker.com/go/access-tokens/
Username: kirillspitsyn220701
Password:
WARNING! Your password will be stored unencrypted in /home/kirillspitsyn/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store
Login Succeeded
kirillspitsyn@LAPTOP-VPGTN0GN:~/flask-app$ docker push kirillspitsyn220701/myfirstapp
Using default tag: latest
The push refers to repository [docker.io/kirillspitsyn220701/myfirstapp]
55ef679ce7fc: Pushed
226533cafe87: Pushed
30b8a0eea834: Pushed
bfbae16e04c9: Pushed
9ec5d3860b25: Pushed
f566c57e6f2d: Mounted from library/alpine
latest: digest: sha256:3583c3b362b855fbfc28c6abc86b07cf588c95962d5e45c90ac9930bd187f02b size:
1571
kirillspitsyn@LAPTOP-VPGTN0GN:~/flask-app$ docker stop myfirstapp
myfirstapp
kirillspitsyn@LAPTOP-VPGTN@GN:~/flask-app$ docker rm myfirstapp
myfirstapp
kirillspitsyn@LAPTOP-VPGTN@GN:~/flask-app$
```

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~/example-voting-app
kirillspitsyn@LAPTOP-VPGTN@GN:~$ git clone https://github.com/docker/example-voting-app.git
Cloning into 'example-voting-app'...
remote: Enumerating objects: 1132, done.
remote: Total 1132 (delta 0), reused 0 (delta 0), pack-reused 1132
Receiving objects: 100% (1132/1132), 1.17 MiB | 1.76 MiB/s, done.
Resolving deltas: 100% (432/432), done.
kirillspitsyn@LAPTOP-VPGTN0GN:∾$ cd example-voting-app
```

```
kirillspitsyn@LAPTOP-VPGTN0GN: ~/example-voting-app
cirillspitsvn@LAPTOP-VPGTN@GN:~/example-voting-app$ docker swarm init
Swarm initialized: current node (r8axplz6qnv1kgrqanwxbfgsk) is now a manager.
To add a worker to this swarm, run the following command:
   docker swarm join --token SWMTKN-1-3hb74v65bwbw6zd198tdi1asvff8bmudbb5diwdhpevkis0am2-0gg1
vpo2w3wv5ai5micer2okn 192.168.65.3:2377
To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructi
ons.
```

cirillspitsyn@LAPTOP-VPGTN0GN:~/example-voting-app\$

```
kirillspitsvn@LAPTOP-VPGTN0GN: ~/example-voting-app
kirillspitsyn@LAPTOP-VPGTN@GN:~/example-voting-app$ docker stack deploy --compose-file docker-stack.vml /
vote
Updating service vote worker (id: zu01tzwhvwywpo92s4hmadqk4)
Updating service vote visualizer (id: o5vnfff9ev2qiphb47vkggfwn)
Updating service vote redis (id: c14h89accr1v5brebirom8wsg)
Updating service vote db (id: kjux07ddblpbxybbmkhgdv3zv)
Updating service vote vote (id: tbrepcnw4nbpujst7nytz9cqa)
Updating service vote result (id: sf5a4gp83n1uiv0stagx39rk2)
kirillspitsvn@LAPTOP-VPGTN0GN:~/example-voting-app$ docker stack services vote
ID
              NAME
                                              REPLICAS
                                 MODE
                                                         IMAGE
PORTS
kjux07ddblpb
              vote db
                                 replicated
                                              0/1
                                                         postgres:9.4
c14h89accr1v
                                 replicated
                                                         redis:alpine
              vote redis
                                              0/2
*:30000->6379/tcp
              vote result
                                 replicated
                                              0/1
                                                         dockersamples/examplevotingapp result:before
sf5a4gp83n1u
*:5001->80/tcp
o5vnfff9ev2a
              vote visualizer
                                 replicated
                                              0/1
                                                         dockersamples/visualizer:latest
*:8080->8080/tcp
tbrepcnw4nbp
                                 replicated
                                                         dockersamples/examplevotingapp vote:before
              vote vote
                                              2/2
*:5000->80/tcp
zu01tzwhvwyw
              vote worker
                                 replicated
                                              1/1
                                                         dockersamples/examplevotingapp worker:latest
```

kinillanitawa ANTON VOCTNOCN - Voyamala veting anny

## Cats vs Dogs!

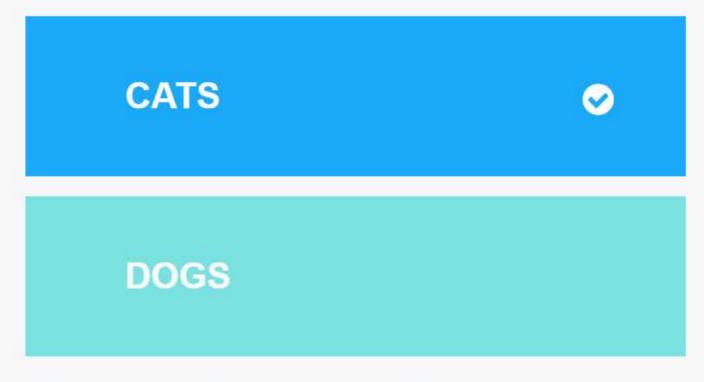
**CATS** 

**DOGS** 

(Tip: you can change your vote)

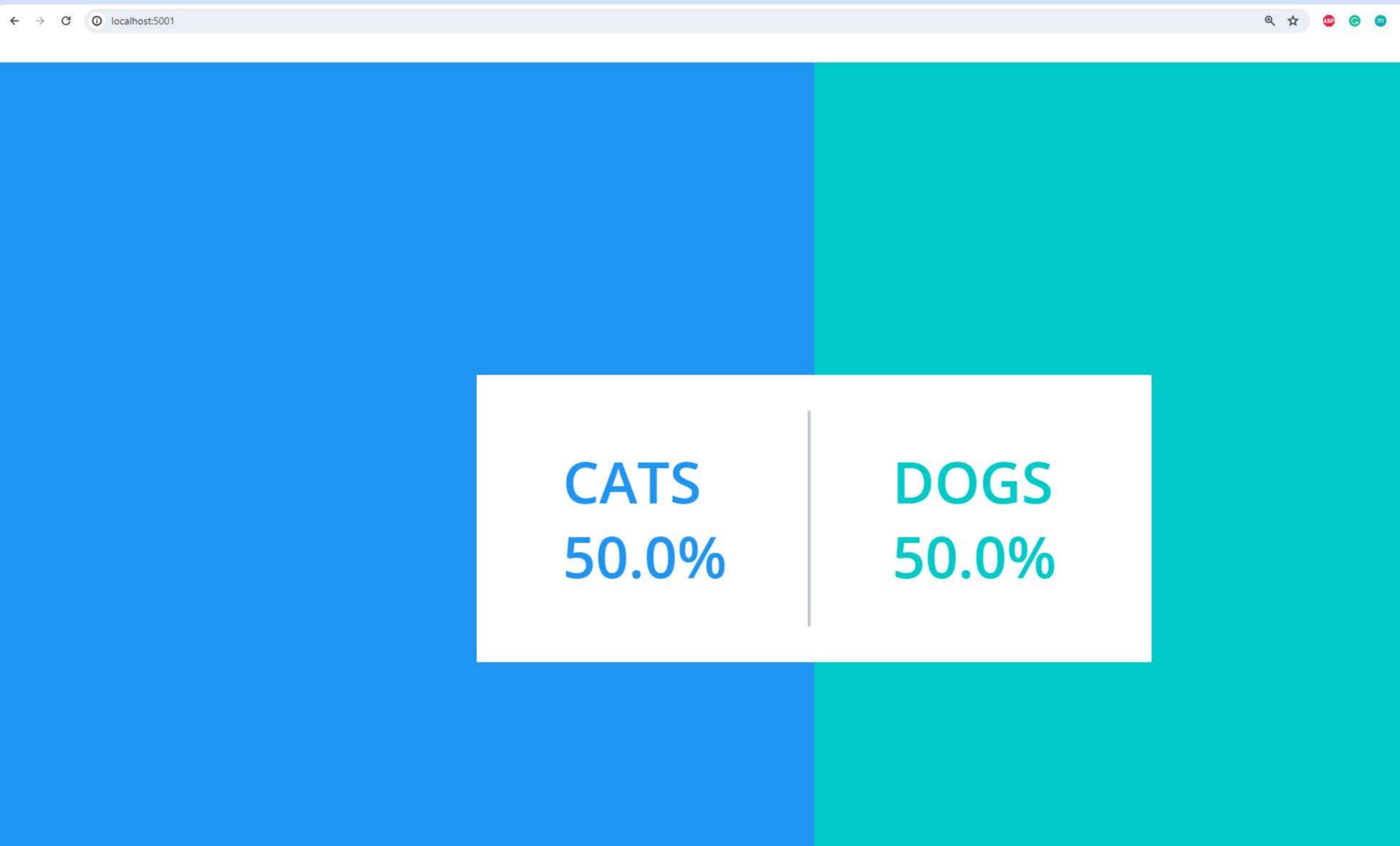
Processed by container ID dca238c7690a

### Cats vs Dogs!

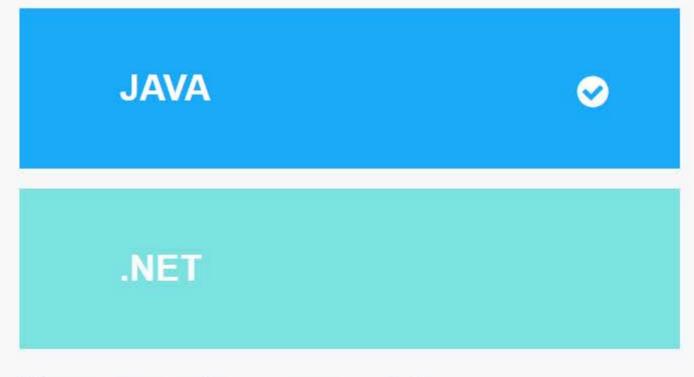


(Tip: you can change your vote)

# Processed by container ID 4571af0f7391



## Java vs .NET!



(Tip: you can change your vote)



JAVA 50.0% .NET 50.0%

```
db-data:kirillspitsyn@LAPTOP-VPGTN@GN:~/example-voting-app$ docker stack rm vote
Removing service vote db
Removing service vote redis
Removing service vote result
Removing service vote visualizer
Removing service vote vote
Removing service vote worker
Removing network vote backend
Removing network vote frontend
```

kirillspitsyn@LAPTOP-VPGTN0GN: ~/example-voting-app

cirillspitsyn@LAPTOP-VPGTN0GN:~/example-voting-app\$

Removing network vote default