

DOCKER 24.07.2024 MUSTAFA BATUHAN ALUN

COMMAND:docker search hello_world

Açıklama: Berlirtilen imajı arar

```
C:\Users\batuh>docker search hello_world
```

NAME	DESCRIPTION	STARS	OFFICIAL
hangran/hello_world	hello_world flask app running on port 5000	1	
mlcommons/hello_world	https://github.com/mlcommons/mlcube_examples...	0	
flyingsmurf/hello_world		0	
dockerinaction/hello_world	A quick 'hello world' image for the first ex...	9	
michaaliev/hello_world	image for hello_world application	0	
quangntitman/hello_world	hello_world	0	
buoyantio/jenkins-plus	A jenkins image that also includes kubectl a...	0	
panshan/hello_world	hello_world test	0	
ncjiayong/hello_world	hello_world test	0	
everydayhero/hello_world		0	
ibillett/hello_world		0	
arb204/hello_world	CS1660 Assignment 1	0	
hydrogen18/hello_world		0	
lucaster/misc-ecs	:3200/api/hello_world	0	
dockertrainings2020/hello_world		0	
hexletboy/hello_world		0	
actraiser/hello_world		0	
gasconya/rubyapp	Simple hello_world that connects to a redis ...	0	
gfish/hello_world	Homework task ci cd k8s hello_world	0	
michaelgao007/test_image	test image for hello_world	0	
scotymagee/hello_world		0	
xabiere15/emr-barbershop	Hello_world	0	
purwar/hello_world_app	hello_world_app	0	
aasoares/hello_world		0	
phibru91/hello_world		0	

Command : docker pull alpine

Açıklama: Seçilen imajı indirir

```
C:\Users\batuh>docker pull alpine
Using default tag: latest
latest: Pulling from library/alpine
c6a83fedfae6: Already exists
Digest: sha256:0a4eaa0eecf5f8c050e5bba433f58c052be7587ee8af3e8b3910ef9ab5fbe9f5
Status: Downloaded newer image for alpine:latest
docker.io/library/alpine:latest
```

Command : docker image rm alpine -force

Açıklama: seçilen imajı siler (--force ile zorla siler)

```
C:\Users\batuh>docker image rm alpine --force
Untagged: alpine:latest
Untagged: alpine@sha256:0a4eaa0eecf5f8c050e5bba433f58c052be7587ee8af3e8b3910ef9ab5fbe9f5
Deleted: sha256:324bc02ae1231fd9255658c128086395d3fa0aedd5a41ab6b034fd649d1a9260
```

Command : docker network create DNET

Açıklama: Kendi ağımızı oluştururuz.

```
C:\Users\batuh>docker network create DNET
491eb85c7d6be273d074b4d4e2c6589e17ee959a54ba2ccfc5f7db4460d4c746
```

Command : docker network ls

Açıklama: Ağları listeler

```
C:\Users\batuh>docker network ls
NETWORK ID          NAME                DRIVER              SCOPE
491eb85c7d6b        DNET                bridge              local
c78c79743a1a        bridge              bridge              local
eb5dd6616eab        dockerize_me_net    bridge              local
8f59d1fee5a4        host                host                local
66029dff18ca        none                null                local
```

Command : docker network rm <Container ID>

Açıklama: Id'si verilen ağı siler

```
C:\Users\batuh>docker network rm 491eb85
491eb85
```

Commands : docker image ls | docker imag

Açıklama: Yüklü olan imajları listeler

```
C:\Users\batuh>docker image ls
REPOSITORY          TAG                IMAGE ID            CREATED             SIZE
dockerize_me-app    latest            0611dc0a183f       3 minutes ago      453MB
mysql                latest            7ce93a845a8a       44 hours ago       586MB
alpine              latest            324bc02ae123       44 hours ago       7.8MB
nginx                latest            a72860cb95fd       4 weeks ago        188MB

C:\Users\batuh>docker images
REPOSITORY          TAG                IMAGE ID            CREATED             SIZE
dockerize_me-app    latest            0611dc0a183f       3 minutes ago      453MB
mysql                latest            7ce93a845a8a       44 hours ago       586MB
alpine              latest            324bc02ae123       44 hours ago       7.8MB
nginx                latest            a72860cb95fd       4 weeks ago        188MB
```

Command : docker run --rm alpine

Açıklama: İmajı çalıştırıp konteynırı oluşturduktan sonra kapanacak şekilde açar.

```
nd in format: unknown.

C:\Users\batuh>docker run --rm alpine
```

Command : docker run -it alpine

Açıklama: İmajı çalıştırıp konteynırı oluşturduktan sonra shell ile birlikte açar.

```
C:\Users\batuh>docker run -it alpine
/ # ls
bin      etc      lib      mnt      proc     run      srv      tmp      var
dev      home     media    opt       root     sbin     sys      usr
/ # exit
```

Command : docker image inspect alpine

Açıklama: Verilen imaj hakkında detaylı bilgi verir

```
C:\Users\batuh>docker image inspect alpine
[
  {
    "Id": "sha256:324bc02ae1231fd9255658c128086395d3fa0aedd5a41ab6b034fd649d1a9260",
    "RepoTags": [
      "alpine:latest"
    ],
    "RepoDigests": [
      "alpine@sha256:0a4eaa0eecf5f8c050e5bba433f58c052be7587ee8af3e8b3910ef9ab5f5be9f5"
    ],
    "Parent": "",
    "Comment": "",
    "Created": "2024-07-22T22:26:43.778747613Z",
    "Container": "fc33bc50844a0d6cdfc682fcf85647ec60783decabd3850e58ab7e013ef892cfb",
    "ContainerConfig": {
      "Hostname": "fc33bc50844a",
      "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) ",
        "CMD [\"/bin/sh\"]"
      ],
      "Image": "sha256:3e25db883ea289c8b0d3006e7a6a03c56be09c50f03f6b228ba2fe74fd8194d2",
      "Volumes": null,
      "WorkingDir": "",
      "Entrypoint": null,
      "OnBuild": null,
      "Labels": {}
    },
    "DockerVersion": "23.0.11",
    "Author": "",
    "Config": {
      "Hostname": "",
      "Domainname": "",
      "User": "",
      "AttachStdin": false,
      "AttachStdout": false,
```

Command : docker run --name yavuzlar alpine

Açıklama: Konteynırın adını belirtilen isim yapar.

```
C:\Users\batuh>docker run --name yavuzlar alpine
```

Command : docker ps | docker ps -a

Açıklama: Açık olan konteynırları gösterir | Açık kapalı fark etmeksizin konteynırları listeler

```
C:\Users\batuh>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
C:\Users\batuh>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
fe4f3c8bd33a   alpine     "/bin/sh"               About a minute ago   Exited (0) About a minute ago   yavuzlar
5bf290ce9260   alpine     "/bin/sh"               2 minutes ago      Exited (0) 2 minutes ago        distracted_lamport
d9f29aa90297   alpine     "--rm"                  3 minutes ago      Created                                dazzling_tu
f71b1994d18d   dockerize_me-app   "docker-php-entrypoi..." 9 minutes ago      Exited (0) 47 seconds ago        dockerize_me-app-1
97f3c5147507   mysql:latest   "docker-entrypoint.s..." 9 minutes ago      Exited (0) 45 seconds ago        dockerize_me-db-1
d016b943db3a   alpine     "echo Selamlar"         8 hours ago        Exited (0) 8 hours ago        hopeful_hugle
```

Command : docker rm <Container ID>

Açıklama: Belirtilen konteynırı siler

```
C:\Users\batuh>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
fe4f3c8bd33a   alpine     "/bin/sh"               About a minute ago   Exited (0) About a minute ago   yavuzlar
5bf290ce9260   alpine     "/bin/sh"               2 minutes ago      Exited (0) 2 minutes ago        distracted_lamport
d9f29aa90297   alpine     "--rm"                  3 minutes ago      Created                                dazzling_tu
f71b1994d18d   dockerize_me-app   "docker-php-entrypoi..." 9 minutes ago      Exited (0) 47 seconds ago        dockerize_me-app-1
97f3c5147507   mysql:latest   "docker-entrypoint.s..." 9 minutes ago      Exited (0) 45 seconds ago        dockerize_me-db-1
d016b943db3a   alpine     "echo Selamlar"         8 hours ago        Exited (0) 8 hours ago        hopeful_hugle

C:\Users\batuh>docker rm fe4f3c
fe4f3c SİLİNDİ

C:\Users\batuh>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS        NAMES
5bf290ce9260   alpine     "/bin/sh"               2 minutes ago      Exited (0) 2 minutes ago        distracted_lamport
d9f29aa90297   alpine     "--rm"                  3 minutes ago      Created                                dazzling_tu
f71b1994d18d   dockerize_me-app   "docker-php-entrypoi..." 10 minutes ago     Exited (0) About a minute ago        dockerize_me-app-1
97f3c5147507   mysql:latest   "docker-entrypoint.s..." 10 minutes ago     Exited (0) About a minute ago        dockerize_me-db-1
d016b943db3a   alpine     "echo Selamlar"         8 hours ago        Exited (0) 8 hours ago        hopeful_hugle
```

Command: docker exec <Container ID> ls

Açıklama: Id si verilen açık konteynırda komut çalıştırmayı sağlar.

```
C:\Users\batuh>docker exec 5bf290 ls
bin
dev
etc
home
lib
media
mnt
opt
proc
root
run
sbin
srv
sys
tmp
usr
var
```

Commands : docker stop <Container ID >

Açıklama: Idsi verilen konteynırı durdurur.

```
C:\Users\batuh>docker stop d016b943db3a
d016b943db3a
```

Command : docker compose up --build

Açıklama: docker dosyalarını kullanarak tüm imajları oluşturur.

```
PS C:\Users\batuh\Downloads\dockerize_me> docker compose up --build
2024/07/24 21:10:03 http2: server: error reading preface from client //./pipe/docker_engine: file has already been closed
[+] Building 8.3s (10/10) FINISHED
=> [app internal] load build definition from Dockerfile
=> => transferring dockerfile: 213B
=> [app internal] load metadata for docker.io/library/php:7.4-apache
=> [app internal] load .dockerignore
=> => transferring context: 2B
=> [app 1/5] FROM docker.io/library/php:7.4-apache@sha256:c9d7e608f73832673479770d66aacc8100011ec751d1905ff63fae3fe2e0ca6d
=> [app internal] load build context
=> => transferring context: 123B
=> CACHED [app 2/5] WORKDIR /var/www/html
=> CACHED [app 3/5] COPY ./app .
=> CACHED [app 4/5] RUN echo "ServerName localhost" >> /etc/apache2/apache2.conf
=> [app 5/5] RUN docker-php-ext-install pdo pdo_mysql
=> [app] exporting to image
=> => exporting layers
=> => writing image sha256:0611dc0a183fedd53e69776ca633540ccd4b301db06bcb75338fc748d7d8ec5c
```

Command : docker build -t image_tag <dockerfilePath>

Açıklama: Dockerfile ı imaj yapmak için kullanırız

```
PS C:\Users\batuh\Downloads\dockerize_me> docker build -t proje .
[+] Building 2.0s (10/10) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile                0.0s
=> => transferring dockerfile: 213B                                0.0s
=> [internal] load metadata for docker.io/library/php:7.4-apache  1.8s
=> [internal] load .dockerignore                                  0.0s
=> => transferring context: 2B                                       0.0s
=> [1/5] FROM docker.io/library/php:7.4-apache@sha256:c9d7e608f73832673479770d66aacc8100011ec751d1905ff63fae3fe2e0ca6d 0.0s
=> [internal] load build context                                  0.0s
=> => transferring context: 123B                                       0.0s
=> CACHED [2/5] WORKDIR /var/www/html                             0.0s
=> CACHED [3/5] COPY ./app .                                       0.0s
=> CACHED [4/5] RUN echo "ServerName localhost" >> /etc/apache2/apache2.conf 0.0s
=> CACHED [5/5] RUN docker-php-ext-install pdo pdo_mysql          0.0s
=> exporting to image                                             0.0s
=> => exporting layers                                              0.0s
=> => writing image sha256:95094a0d9a024c497e2f39506ef8b32d5ab89d379db53b43f7ba9b2e46fd5817 0.0s
=> => naming to docker.io/library/proje                             0.0s
```

Dockerfile • yavuzlar_messages.sql • compose.yml •

Dockerfile

```
1 FROM php:7.4-apache PHP 7.4 ve Apache içeren bir Docker imajı olucağını belirtiriz.
2
3 WORKDIR /var/www/html Çalışma dizinini gösteririz.
4 COPY ./app . Host'taki app dizinini konteynerdeki çalışma dizinine kopyalarız.
5 RUN echo "ServerName localhost" >> /etc/apache2/apache2.conf
6 RUN docker-php-ext-install pdo pdo_mysql PDO ve PDO_MySQL PHP 'yi ekleriz.
7 EXPOSE 80 Konteynerin 80 numaralı portunu hostla paylaşır.
```

Apache yapılandırma dosyasına
ServerName ekleriz.

↑

compose.yml

```
1  version: '3' # Dosyasının sürümünü belirtiriz.
2
3  services: # Servisleri tanımlamak için kullanırız.
4
5      app:
6          build:
7              context: . # Dockerfile ve bağlamının bulunduğu dizini yazarız.
8              dockerfile: Dockerfile # Kullanılacak Dockerfile'ın adını yazarız.
9          depends_on: # Hizmetin bağımlı olduğu hizmetleri belirtilen alan.
10             - db # 'db' hizmetinin önce başlaması gerektiği,ni gösterir.
11          ports: # Hizmetin haber alacağı port numaralarını veririz.
12             - "80:80" # Konteynerin 80 portu ile hostun 80 portunu birbirine bağlarız.
13          networks: # Ağları tanımlama alanı.
14             - net # 'net' ağını ekleriz.
15
16      db:
17          image: mysql:latest # Kullanılacak Docker imajını ve sürümünü belirtiriz.
18          environment:
19             - MYSQL_DATABASE=yavuzlar # Oluşturulacak veritabanı adını gösterir.
20             - MYSQL_ROOT_PASSWORD=1 # Root kullanıcısı için şifre belirleriz.
21          volumes: # Konteynerdeki dosya sisteminin çalışma prensiplerini ayalarız.
22             - db_data:/var/lib/mysql # Veritabanı verilerini saklamak için alan ayırırız.
23             - ./yavuzlar_messages.sql:/docker-entrypoint-initdb.d/yavuzlar_messages.sql #SQL dosyasını bağlarız.
24          ports: # Konteynerin dış dünya ile iletişim kurması için gerekli port eşlemelerini belirtir.
25             - "8080:3306" # Konteynerin 3306 numaralı portunu hostun 8080 numaralı portuna bağlarız.
26          networks: # Ağları tanımlama alanı.
27             - net # 'net' ağına ekleriz.
28
29  networks:
30      net:
31          driver: bridge # Ağı oluşturmak için kullanılacak tipi belirtiriz.
32
33  volumes: # Diskte ayrılacak alanı tanımlarız.
34      db_data: # 'db_data' adında kalıcı bir alan tanımlarız.
```

```

PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git clone https://github.com/BatuhanAlun/DockerPDF.git
Cloning into 'DockerPDF'...
PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git commit -m "pdf yollama"
fatal: not a git repository (or any of the parent directories): .git
PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git init
Initialized empty Git repository in C:/Users/batuh/OneDrive/Desktop/DockerPDF/.git/
On branch master

Untracked files:
  (use "git add <file>..." to include in what will be committed)
      DockerPDF/

nothing added to commit but untracked files present (use "git add" to track)
PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git add
Nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .'?
hint: Turn this message off by running
hint: "git config advice.addEmptyPathsSpec false"
PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git add .
error: 'DockerPDF/' does not have a commit checked out
PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git add .\docker.pdf
PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git commit -m "pdf yollama"
[master (root-commit) 63c191d] pdf yollama
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 docker.pdf
PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git push
fatal: No configured push destination.
Either specify the URL from the command-line or configure a remote repository using
    git remote add <name> <url>

and then push using the remote name

    git push <name>

PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git push https://github.com/BatuhanAlun/DockerPDF.git
fatal: The current branch master has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream https://github.com/BatuhanAlun/DockerPDF.git master

```

```

PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git push https://github.com/BatuhanAlun/DockerPDF.git
fatal: The current branch master has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream https://github.com/BatuhanAlun/DockerPDF.git master

To have this happen automatically for branches without a tracking
upstream, see 'push.autoSetUpRemote' in 'git help config'.

PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> git push --set-upstream https://github.com/BatuhanAlun/DockerPDF.git master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 303.29 KiB | 27.57 MiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/BatuhanAlun/DockerPDF.git
 * [new branch]      master -> master
branch 'master' set up to track 'https://github.com/BatuhanAlun/DockerPDF.git/master'.
PS C:\Users\batuh\OneDrive\Desktop\DockerPDF> 

```


