Docker Komutları

docker ----> komutları gösterir

```
Microsoft Windows [Version 10.0.22631.3880]
(c) Microsoft Corporation. Tüm hakları saklıdır.

C:\Users\SefaB>docker

Usage:  docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Common Commands:
  run         Create and run a new container from an image
  exec        Execute a command in a running container
  ps          List containers
  build       Build an image from a Dockerfile
  pull        Download an image from a registry
  push        Upload an image to a registry
  images      List images
  login       Log in to a registry
  logout      Log out from a registry
  search      Search Docker Hub for images
  version     Show the Docker version information
  info        Display system-wide information

Management Commands:
  builder     Manage builds
  buildx*     Docker Buildx
  checkpoint  Manage checkpoints
  compose*    Docker Compose
  container   Manage containers
  context     Manage contexts
```

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docker search imageName ----> image aramaya yarar

```
C:\Users\SefaB>docker search alpine
NAME                                  DESCRIPTION                                    STARS    OFFICIAL
alpine                                A minimal Docker image based on Alpine Linux…  10941    [OK]
alpinelinux/docker-cli                Simple and lightweight Alpine Linux image wi…  11
alpinelinux/alpine-gitlab-ci          Build Alpine Linux packages with Gitlab CI     3
alpinelinux/gitlab-runner-helper      Helper image container gitlab-runner-helper …  7
alpinelinux/rsyncd                                                                   2
alpinelinux/unbound                                                                  13
alpinelinux/alpine-drone-ci           Build Alpine Linux packages with drone CI      0
alpinelinux/docker-alpine                                                            0
alpinelinux/ansible                   Ansible in docker                              21
alpinelinux/gitlab-runner             Alpine Linux gitlab-runner (supports more ar…  7
grafana/alpine                        Alpine Linux with ca-certificates package in…  7
alpinelinux/docker-compose            docker-compose image based on Alpine Linux     2
alpinelinux/apkbuild-lint-tools       Tools for linting APKBUILD files in a CI env…  0
bellsoft/liberica-openjdk-alpine      Liberica is a 100% open-source Java implemen…  58
alpinelinux/darkhttpd                                                                2
alpinelinux/golang                    Build container for golang based on Alpine L…  3
alpinelinux/alpine-docker-gitlab      Gitlab running on Alpine Linux                 0
alpinelinux/build-base                Base image suitable for building packages wi…  0
alpinelinux/alpine-www                The Alpine Linux public website (www.alpinel…  0
bellsoft/liberica-openjre-alpine      Liberica is a 100% open-source Java implemen…  22
alpinelinux/docker-abuild             Dockerised abuild                              0
bellsoft/liberica-openjdk-alpine-musl Liberica is a 100% open-source Java implemen…  24
balenalib/amd64-alpine-node           This image is part of the balena.io base ima…  2
alpinelinux/mqtt-exec                                                                0
alpinelinux/netbox                    dockerized netbox                              0
```

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docker pull imageName -----> son sürüm image indirir default değeri :latest dir

```
alpinelinux/netbox                    dockerized netbox

C:\Users\SefaB>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
c1ec31eb5944: Pull complete
Digest: sha256:1408fec50309afee38f3535383f5b09419e6dc0925bc69891e79d84cc4cdcec6
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest
```

İmage Komutları

docker image ls ---> imageleri gösterir

docker image rm imageID ----> ID si belirtilen imageyi siler

```
C:\Users\SefaB>docker image ls
REPOSITORY          TAG       IMAGE ID       CREATED         SIZE
alpine              latest    324bc02ae123   46 hours ago    7.8MB
nginx               latest    a72860cb95fd   4 weeks ago     188MB
diwa                latest    0db9ec866023   2 months ago    456MB
yavuzlar/vulnlab    latest    d7aa3a54b928   2 months ago    919MB
hello-world         latest    d2c94e258dcb   14 months ago   13.3kB

C:\Users\SefaB>docker image rm d2c94e258
Untagged: hello-world:latest
Untagged: hello-world@sha256:1408fec50309afee38f3535383f5b09419e6dc0925bc69891e79d84cc
Deleted: sha256:d2c94e258dcb3c5ac2798d32e1249e42ef01cba4841c2234249495f87264ac5a
Deleted: sha256:ac28800ec8bb38d5c35b49d45a6ac4777544941199075dff8c4eb63e093aa81e

C:\Users\SefaB>docker image ls
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yavuzlar/vulnlab    latest    d7aa3a54b928   2 months ago    919MB
```

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docker image inspect imageName ---> image hakkında bilgi verir

```
C:\Users\SefaB>docker image inspect alpine
[
    {
        "Id": "sha256:324bc02ae1231fd9255658c128086395d3fa0aedd5a41ab6b034fd649d1a9260",
        "RepoTags": [
            "alpine:latest"
        ],
        "RepoDigests": [
            "alpine@sha256:0a4eaa0eecf5f8c050e5bba433f58c052be7587ee8af3e8b3910ef9ab5fbe9f5"
        ],
        "Parent": "",
        "Comment": "",
        "Created": "2024-07-22T22:26:43.778747613Z",
        "ContainerConfig": {
            "Hostname": "",
            "Domainname": "",
            "User": "",
            "AttachStdin": false,
            "AttachStdout": false,
            "AttachStderr": false,
            "Tty": false,
            "OpenStdin": false,
            "StdinOnce": false,
            "Env": null,
            "Cmd": null,
            "Image": "",
            "Volumes": null,
            "WorkingDir": "",
            "Entrypoint": null,
            "OnBuild": null,
            "Labels": null
        },
        "DockerVersion": "23.0.11",
        "Author": "",
        "Config": {
```

docker run –-rm –p 80:80 –name yavuzlar1 nginx

Docker run komutu imageyi çalıştırır

--rm komutu çalışması bitikten sonra silinmesini sağlar

-p komutu ile port ataması yapılır hostport:containerport

--name komutu containere isim verir

-it komutu docker içinde interaktif shell verir

```
C:\Users\SefaB>docker run --rm -p 80:80 --name yavuzlar1 nginx
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2024/07/24 20:24:40 [notice] 1#1: using the "epoll" event method
2024/07/24 20:24:40 [notice] 1#1: nginx/1.27.0
2024/07/24 20:24:40 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14)
2024/07/24 20:24:40 [notice] 1#1: OS: Linux 5.15.146.1-microsoft-standard-WSL2
2024/07/24 20:24:40 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2024/07/24 20:24:40 [notice] 1#1: start worker processes
2024/07/24 20:24:40 [notice] 1#1: start worker process 29
2024/07/24 20:24:40 [notice] 1#1: start worker process 30
2024/07/24 20:24:40 [notice] 1#1: start worker process 31
2024/07/24 20:24:40 [notice] 1#1: start worker process 32
2024/07/24 20:24:40 [notice] 1#1: start worker process 33
2024/07/24 20:24:40 [notice] 1#1: start worker process 34
2024/07/24 20:24:40 [notice] 1#1: start worker process 35
2024/07/24 20:24:40 [notice] 1#1: start worker process 36
2024/07/24 20:24:40 [notice] 1#1: start worker process 37
2024/07/24 20:24:40 [notice] 1#1: start worker process 38
2024/07/24 20:24:40 [notice] 1#1: start worker process 39
2024/07/24 20:24:40 [notice] 1#1: start worker process 40
2024/07/24 20:24:40 [notice] 1#1: start worker process 41
2024/07/24 20:24:40 [notice] 1#1: start worker process 42
2024/07/24 20:24:40 [notice] 1#1: start worker process 43
2024/07/24 20:24:40 [notice] 1#1: start worker process 44
172.17.0.1 - - [24/Jul/2024:20:24:48 +0000] "GET / HTTP/1.1" 304 0 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleW
ebKit/537.36 (KHTML, like Gecko) Chrome/126.0.0.0 Safari/537.36" "-"
```

----

docker run –v (kendi klasörüm):(containerde kaydedilecek yer) imageName sleep 20

Host ve konteynır arasında volume oluşturur

Sleep komutu uyutma sağlar 20 saniyelik

docker volume ls -----> volumeleri gösteri

```
C:\Users\SefaB>docker run -v C:\Users\SefaB\Desktop:/app alpine sleep 20

C:\Users\SefaB>
C:\Users\SefaB>docker volume ls
DRIVER    VOLUME NAME

C:\Users\SefaB>docker volume inspect data
[]
Error response from daemon: get data: no such volume

C:\Users\SefaB>
```

 Docker Fıle

DOCKERFILE

Dockerfile olarak yazılmalı yoksa çalışmaz

Dockerfile > build > Image > run > Container

FROM

bir base imaj dosyasını referans olarak belirtiler eğer boş bir imaj oluşturmak istersek SCRATCH kullanabilriiz

RUN

Konteyner ile birlikte build zamanında yapılması gereken tüm işlemler tamamlanır

WORKDIR

Konteyner üzerinde çalıştırılacak olan komutların nerede çalışacağını belirtir

CMD

konteyner çalıştırığında işleme alınacak komutları tanımlar

ENTRYPOINT

konteyner çalıştığında ilk önce yürütülecek komutu ve parametreleri ayarlar

COPY

host sisteminden konteynere dosya veya dizin kopyalamak için

ADD

bu da copy gibidir ama ekstra olarak örneğin zip dosyası varsa önce unzip yapar sonra atar internet üzerinde bi sunucudan da indirebilir

ENV

Genel değişkenlerin ataması yapılır

EXPOSE

Sanal docker networkünde kullanılacak portlar tanımlanır