

Reminder!

IMAGE (instance of filesystem)
CONTAINER (equivalent to VM)

IMAGE → CONTAINER

Useful Docker Commands

Remember.

You can get all commands by typing :

```
docker
```

Then for each command you can get help by typing:

```
docker <cmd> --help
```

Example: `docker start --help`

List of commands:

#pulls an image, creates a container and runs it

```
docker run <image name>
```

```
docker run <image name> <command>
```

list containers

```
docker ps
```

```
docker ps --all // all the containers ever run
```

```
docker ps -q //only ids
```

#create containers from existing image

```
docker create <image name> <command> // creates a container
```

#manage created containers

docker start <container id> // starts a container

docker start -a <container id> //starts a container but shows the output

docker stop <container id> ... //stops containers (polite) after 10s it will kill it

docker kill <container id> .. //kills containers

#clean docker

docker system prune // deletes unusefull things containers ect

docker rm <container1> ... <containerN> //delete one or more containers use either ids or names

docker rm \$(docker ps -a -q) //deletes all containers

#interact with container

docker logs <container id> //lists all logs from one container

docker exec -it <container id> <command> // executes a command inside a docker container with interactive terminal

docker run -it <image name> <command or sh> // **creates a new container** and runs a command ininteractive

Docker Compose

Tool to manage docker architectures

You need a file named by default: docker-compose.yml

docker-compose up //Create and start containers. Override file name by using -f <filename>. Check --help

docker-compose up -d //detached, no output from containers

docker-compose down //Stop and remove containers, networks, images, and volumes

docker-compose start //start the services (containers)

`docker-compose stop` //stops the services (containers)

Requirements for both projects

Install Docker and Docker-compose.

<https://docs.docker.com/get-docker/>

<https://docs.docker.com/compose/install/>

Preferably use a Virtual box with linux installed for your projects. For example VirtualBox. Then install Docker inside VirtualBox
