

Docker Part 2

1. Build Docker Image

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker build -t my-application:latest .
[+] Building 5.3s (10/10) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile              0.1s
=> => transferring dockerfile: 296B                             0.0s
=> [internal] load metadata for docker.io/library/python:3.11.4-slim-bookworm 3.1s
=> [auth] library/python:pull token for registry-1.docker.io    0.0s
=> [internal] load .dockerignore                                0.1s
=> => transferring context: 58B                                   0.0s
=> [1/4] FROM docker.io/library/python:3.11.4-slim-bookworm@sha256:17d62d681d9ecef20aae6c6605e9cf83b0ba3dc247013e2f43 0.0s
=> [internal] load build context                                0.5s
=> => transferring context: 629.79kB                             0.5s
=> CACHED [2/4] COPY requirements.txt requirements.txt          0.0s
=> CACHED [3/4] RUN pip install -r requirements.txt             0.0s
=> [4/4] COPY . .                                               0.2s
=> exporting to image                                           0.2s
=> => exporting layers                                           0.1s
=> => writing image sha256:dc5a9a78ffc837b89d8ec07af1e06d0264229fae68192f00197406c9c70d7f61 0.0s
=> => naming to docker.io/library/my-application:latest         0.0s

What's Next?
View a summary of image vulnerabilities and recommendations → docker scout quickview
```

2. Buat + Jalankan Docker Container

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker run --name my-application-container -p 3000:8000 -e USER_NAME=budi -d my-application:latest
578153b26b21b1ab393d0ffcdc490dbd214eb24413d5d60cd62ec06fc6ee651d
```

3. Stop container

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker stop my-application-container
my-application-container
```

4. Start container

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker start my-application-container
my-application-container
```

5. Hapus container

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker rm my-application-container
my-application-container
```

6. List image

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
my-application	latest	dc5a9a78ffc8	6 minutes ago	179MB
imange-belajar-docker	latest	76c14f2ca7fa	2 days ago	179MB
<none>	<none>	e7ad176f0410	2 days ago	179MB
<none>	<none>	d1205f845361	2 days ago	179MB
postgres	12.3-alpine	17150f4321a3	3 years ago	157MB

7. List container

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS          NAMES
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS          NAMES
77eea0598cf6   76c14f2ca7fa   "/bin/sh -c 'uvicorn..." 2 days ago    Exited (137) 2 days ago          my-container1
fe6b0a663560   e7ad176f0410   "/bin/sh -c 'uvicorn..." 2 days ago    Exited (137) 2 days ago          my-container
f19b7c2b797c   d1205f845361   "/bin/sh -c 'uvicorn..." 2 days ago    Exited (137) 2 days ago          container-test
6715caeb1bfc   17150f4321a3   "docker-entrypoint.s..." 2 days ago    Exited (0) 2 days ago          postgres-lite
9b2b525dfe80   17150f4321a3   "docker-entrypoint.s..." 2 days ago    Exited (1) 2 days ago          sleepy_golick
16d13bb28954   17150f4321a3   "docker-entrypoint.s..." 2 days ago    Exited (1) 2 days ago          thirsty_davinci
70026acd4ba4   17150f4321a3   "docker-entrypoint.s..." 2 days ago    Exited (1) 2 days ago          keen_ritchie
25e50c4ed96d   17150f4321a3   "docker-entrypoint.s..." 2 days ago    Exited (1) 2 days ago          tender_pike
```

8. Remote container

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker exec -it my-application-container bash
root@050961ad0c41:/#
```

9. Munculin log

```
User@DESKTOP-19NICRJ MINGW64 ~/Documents/DE_altera/tugas_altera/bahan_tugas_docker/belajar-dockerfile (main)
$ docker logs 050961ad0c41
INFO:      Started server process [8]
INFO:      Waiting for application startup.
INFO:      Application startup complete.
INFO:      Uvicorn running on http://0.0.0.0:8000 (Press CTRL+C to quit)
```

10. Result

```
← → 🔍 localhost:3000 ☆
{"Hello": "budi"}
```