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Docker || 20th July 2025

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1. Docker
2. Microservices
3. Docker basic
4. Dockerfile
5. Container
6. Image

Docker —>

1. Container
2. Containerise the application
3. Swarm
4. Dockerfile
5. Combination
6. Small virtual env.
- 7.

Docker —> Just company —> Container

Container.d —> Runtime

Podman

Image —>

OCR standard —> Best container —>

Runtime —> Docker engine —> Desktop

Docker —> Virtual machine —>

Bare-metal Server —> Ubuntu —> Nginx/ Python/ Database —> XXXXX  
16GB

2GB

Virtual machine → 16GB 1GB 2GB 4GB

4GB → Server → nginx webserver →

Nginx → 1.18 → 21.

unInstall complete

Python → Lib → 2.7 → 3.12

2.7 → 3.01 → 3.12

Sysadmin / DevOps →

Docker / container →

Blue Print → Dockerfile → all dependency →

Server or laptop

E.g.

Dev → Python Django →

20th July → KT → Sn dev →

1. Laptop Windows
2. Basic
  1. Visual studio
  2. Python 3.14
  3. Database
  4. Chrome
3. Application server run
4. Database run
5. FE
6. API
7. Local env setup

1st line of code

Server → Dev

1. Server
  2. Basic
    1. Python 3.11
    2. Database
    3. Vim
    4. git
    5. zod
  3. Application server run
  4. Database run
- 1st line of code

Server —> QA

1. Server
  2. Basic
    1. Python 3.11
    2. Database
    3. Vim
    4. git
    5. zod
  3. Application server run
  4. Database run
- 1st line of code

Server —> Prod

1. Server
  2. Basic
    1. Python 3.11
    2. Database
    3. Vim
    4. git
    5. zod
  3. Application server run
  4. Database run
- 1st line of code

Docker —>

1. Laptop
2. Visual

3. Docker desktop
4. Docker compose
5. Docker compose up

10th Day —> Github

1. Docker image —> Github —> Docker hub —> clone /pull

Docker image —> combination —> all decency and code

Docker image —>

Blue print —>

Dockerfile —> Classes

Laptop  
water  
laptop  
mobile

Karjet —>

Take

1. Resources
2. Depends installation
3. Isolation

1st lab docker

1. Get the ready made docker images
2. Run as a Contianer
  - docker pull nginx
  - docker pull nginx:latest

2nd start the docker image as container

`docker run nginx`

Image → Windows + docker desktop → Python or for → Windows

Windows .dot application → windows → Linux XXXXXXXX

1. Docker pull → to get the image from docker hub
2. Docker images
3. Docker run nginx
4. Docker run -d nginx
5. Docker run -d -p 80:80 nginx
6. Docker stop <container-id>
7. Docker rm <Container-id>
8. Docker rmi nginx
9. Docker logs
10. Docker inspect
11. Docker rm \$(docker rm -a -q)
12. Docker start
13. Docker run -d (interactive mode)
14. Docker run -ltd -p 80:80 nginx
15. docker exec -it 44eaed06d3b4 /bin/bash
- 16.