Java App

Relational Database

tcp/ip

file

① docker

Win
Linux
MACOS

docker-desktop

- Oracle SQL
- Microsoft SQL
- MySQL
▶ Postgre SQL

SQL'92

no SQL

https://hub.docker.com

Project ∨

```yaml
1    version: '3.3'
2
3    services:
4    postgres96:
5        image: postgres:9.6
6        restart: unless-stopped
7        environment:
8          POSTGRES_USER: 'postgres'
9          POSTGRES_PASSWORD: 'pg123456'
10       ports:
11         - "5432:5432"
12       container_name: pg_2
```
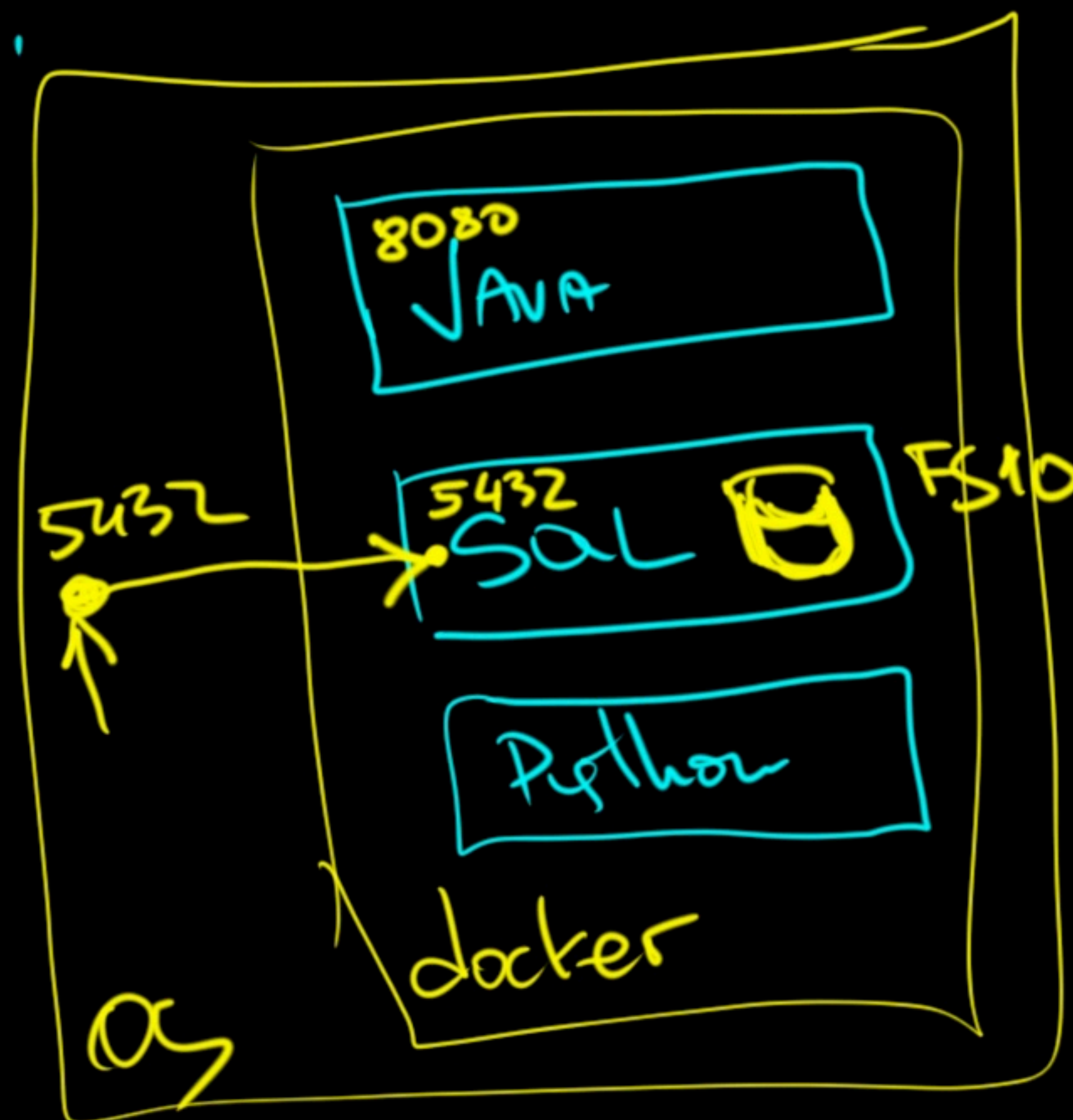
docker-compose.yaml

fs-10-online ~/dev/danit/fs-10-c
- .idea
- docker
  - docker-compose.yaml
- java-basic
- java-web
  - slides
  - src
    - main
      - java

URL: jdbc:postgresql://localhost:5432/fs10 ?......

protocol

http:// localhost : 8080 / calc ?x=5

address    port    resource_id    param

id

DAO<A>

CRUD

①create ✓
②update ✓
③Read 99%.
④delete ✓

8080
JAVA

5432
5432 SQL    FS10

Python

docker

OS

STUDENT

id

id5
id6
id7

+SORT
+PAGE

| name | dob |
|------|-----|
| Jim | 1973 |
| Alex | 1976 |
| Jim | 1973 |

| id | name | dob |
|----|------|-----|
| 1 | Jim | 1973 |
| 2 | Alex | 1976 |
| 2 | Alex | 1976 |

| id | name | dob |
|----|------|-----|
| 1 | Jim | 1973 |
| 2 | Alex | 1976 |
| 3 | Alex | 1976 |

| id | name | dob |
|----|------|-----|
| 1 | Jim | 1973 |
| 2 | Alex | 1976 |
| 3 | Alex | 1976 |
| 3 | Alex | 1976 |