

## Wk 3 Lecture note

### Relational Database & Intro to SQL

#### File-based approach

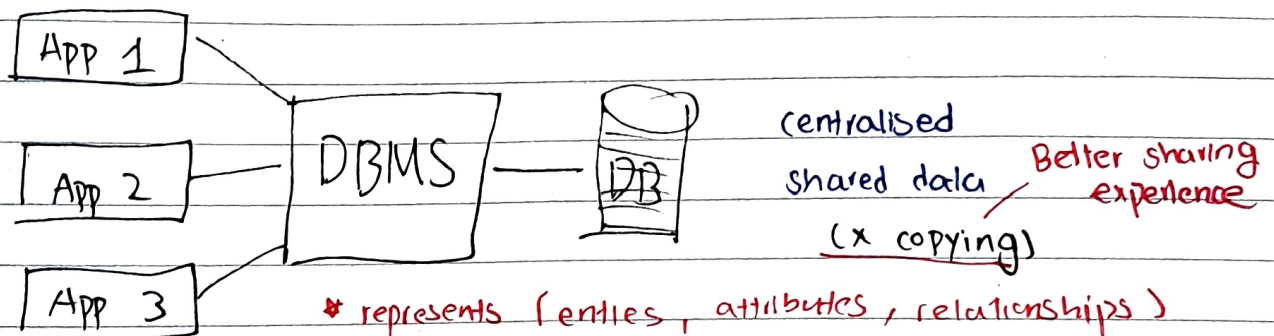
- ↳ spreadsheet, csv, json
- ↳ get a copy of the file & analyse programmatically.

Has quality issues

↳ Too many issues users have to handle themselves such as

- keeping backups
- storing meta-data
- prevent changes that violate integrity properties

#### Better Alternative: Databases



- ↳ Enforcement of standards (no worries about all the different ways data can be retrieved from AC)  
↳ (SQL)

- ↳ integrity constraints, data validation

- ↳ security, backup, concurrency

- ↳ Program - Data Independence
    - meta-data in DBMS
    - uniform method to gain data
- (↑ maintenance, ↓ development cost)

Refer to ISYS2120 notes (wk 1 ~ wk 4) for this part