Data Management Systems

1 Intro

1.1 Physical and logical independence

User does not care about how the data is stored, and what format it's stored in memory - is it on RAM, is it NTFS, whatever.

Logical independence means the data is the data, and You can have different views of it.

I guess physical independence is nuts and bolts of actual storage, logical is how the data is presented to the user.

1.2 Query Optimization

Equivalent results may be achieved by different operators, and some are more efficient than others e.g. join and select v.s. select and join.

1.3 Data Integrity

Enforcement of legal values, so the database is intact/coherent.

1.4 Access Control

1.5 Concurrency Control

1.6 Recovery

1.7 Data vs Query shipping

1.8 Cons/Pros of Shared-Nothing

1.9 Shared Memory

1.10 Shared Disk

2 Storage Systems

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