

MongoDB

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Mongodb v8.0
Mongosh v2.3.8

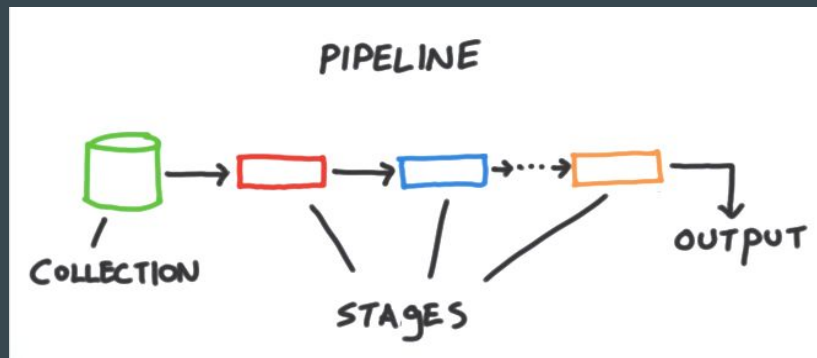
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Full-Stack developer @fixed solutions

Agenda (Day 3)

- Aggregation
- Indexes
- Transaction
- Import–Export vs Dump–Restore

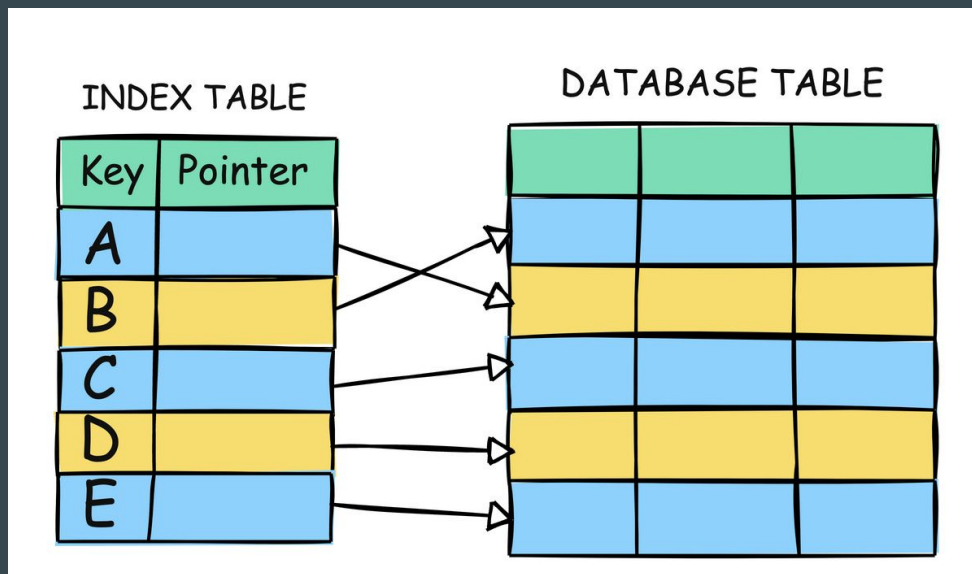
Aggregation

- powerful framework for performing data transformations and computations
- Building a pipeline of steps —→ To get the output in the form you need
- Every stage receive the output of the previous stage
- Aggregation operators —→ \$match, \$sort, \$group, \$project, \$lookup, \$out



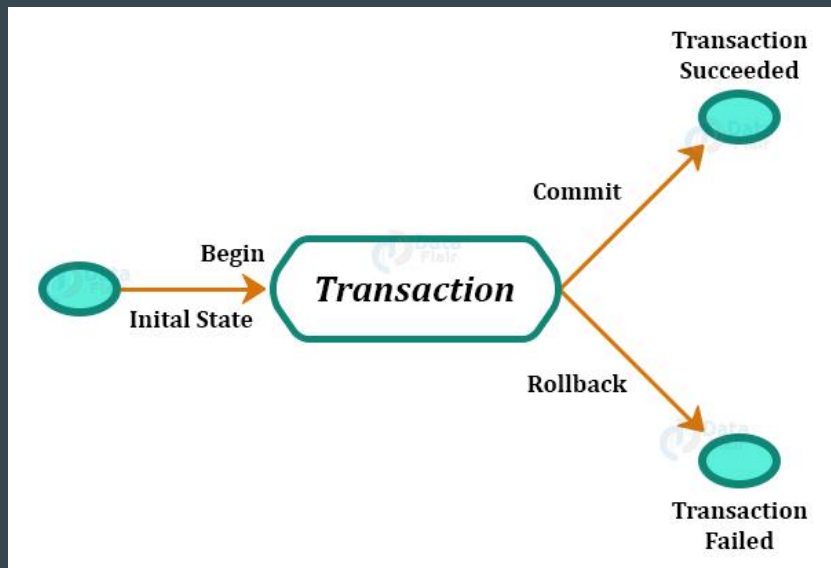
Indexes

- COLLSCAN vs IXSCAN
- Field Index



Transactions

- All success or not (All or None)
- With transactions → Atomicity not only on the Document level



Import–Export vs Dump–Restore

Mongoexport & mongoimport

- Exporting data in JSON or CSV format for use in other applications
- Migrating data between different database systems
- Extracting specific collections or documents
- Does not preserve indexes, roles, or other database metadata
- Slower compared to binary dumps

mongodump & mongorestore

- Taking full database backups and restoring them exactly
- Preserving indexes, roles, and metadata
- Efficiently backing up large databases in binary format
- Dumps are stored in a binary BSON format, which is MongoDB-specific
- Cannot easily inspect or edit the exported data



Thank you!