

MongoDB Basics

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Code and Resources link:

https://github.com/SumeetWajpe/DBS_Tech_Oct/blob/main/Readme

Mongo DB client

- Compass – GUI interface for the MongoDB
- Shell or cli

Mongo DB server

- Daemon – actual MongoDB server that holds tables and data.

Mongo DB cloud

- Atlas – Cloud based MongoDB server which can connected from shell or compass.

Keeping the below things simple as the examples are available in Github link above.

1. Use DB
2. Show DB
3. Storing Data
 - a. **InsertOne**
 - b. **InsertMany**
 - c. Bulk import using **mongoimport**
4. Querying Data
 - a. **FindOne**
 - b. **FindMany**
5. Update Data
 - a. **Update**
 - b. **UpdateMany**
6. Projections
7. Embeddings
 - a. Embed indexes from another collection or replicate the data.
 - i. Storage is not a problem anymore but performance is.
8. Aggregation
 - a. Aggregation pipeline: projection -> match -> group
 - b. Data operations
 - i. String concatenation and ops
 1. Use \$concat, \$toUpper, \$toLower, \$substrCP, \$strLenCP
 - ii. Field value conversion in bulk
 1. \$convert to double / string / format field values
 2. Output to a difference collection using \$out
9. Indexing
 - a. Geo-spatial indexing
 - i. 2d Sphere and location based geo-fencing
 - ii. \$near or \$geoWithin and specify the geometry as polygon / circle
 1. Provide the locations values in loop -> first and last value must match (refer to the code guide link)