

# **MongoDB - collection**

Topics : <u>MongoDB</u> Written on <u>December 30, 2023</u>

A MongoDB collection is a grouping of MongoDB documents. It is the equivalent of an RDBMS table. A collection exists within a single database and does not enforce a schema. In MongoDB, documents within a collection can have different fields and data types.

#### 1. Dynamic Schema:

• MongoDB is schema-less, meaning documents within a collection do not need to have the same structure. Each document can have different fields.

#### 2. Creation:

• Collections are created implicitly when the first document is inserted. MongoDB creates a collection dynamically as soon as data is inserted into it.

#### 3. Accessing Collections:

• In the MongoDB shell, you can access a collection using the db.collection\_name notation. For example, db.users refers to the "users" collection.

## 4. Inserting Documents:

• You can insert documents into a collection using the insertOne or insertMany methods.

db.collection\_name.insertOne({ field1: value1, field2: value2 });

## 5. Querying Documents:

 $\circ~$  The find method is used to query documents in a collection. It returns a cursor to the documents that match the query criteria.

db.collection\_name.find({ field: value });

## 6. Updating Documents:

 $\circ\,$  You can update documents in a collection using the updateOne or updateMany methods.

db.collection\_name.updateOne({ field: value }, { \$set: { updated\_field: new\_value } });

#### 7. **Deleting Documents:**

• Documents can be deleted using the deleteOne or deleteMany methods.

db.collection\_name.deleteOne({ field: value });

## 8. Indexing:

Indexes can be created on fields to improve query performance.
 db.collection\_name.createIndex({ field: 1 });

# 9. Aggregation:

• MongoDB supports aggregation pipelines for complex data transformations.

```
db.collection_name.aggregate([
    { $group: { _id: "$field", count: { $sum: 1 } }
]);
```

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