Mongo DB interview Q&A

[https://docs.mongodb.com/manual/faq](https://docs.mongodb.com/manual/faq/concurrency/)

1. Difference between push and addtoset in update operation

Push will create duplicate entries addtoset will not

1. Difference between update and updateOne/updateMany

Update will simply replace the matched document’s data with the data provided, while updateOne/updateMany will append new data to the document.

1. What is the difference between replace and update?
2. What does find return?

It returns a cursor, so for a huge data, there is no long running display job. You can fetch more data with it command. However, to force results to be displayed on the screen, toArray can be used.

1. How do you enforce projection in MongoDB?

By using columns in the find function as second argument as shown below:

db.passengers.find({}, {name:1,\_id:0 }). pretty()

\_id=0 is compulsory if yuou don’t want to display it, not required for other columns.

1 displays, 0 hides.

1. What is the importance of NumberDecimal datatype?

Because it provides extreme precision after decimal point upto XXX bytes.

1. Diff between insert, insertone and insertmany
2. How do you enforce mongodb insertmany documents to parse through all documents and insert whichever is not present and report errors for the ones that are present?

By using ordered=false option

1. How do you import from a json file?

By using mongoimport,

Use

Mongoimport <filename> -d <db\_name> -c <collection\_name> --jsonArray –drop

If the file consists of array of documents, you need to specify the jsonArray.

It will drop the collection if it already exists with the –drop option

1. Javascript stores only 64 bit values for numbers
2. How do you save space while storing numbers?  
   If it is known that the number is integer and not float, insert using NumberInt() method saves space.
3. How can you define the log path and db path and other configuration properties for mongodb?  
   These are defined in the mongod.cfg file which is the configuration file for mongodb.
4. We can have 100 level of nesting, upto 16mb documents for embedded documents
5. How can you find nested/embedded documents for example for the below collection

{

"\_id" : ObjectId("5f48f5c3d4c34c2c72e103a6"),

"departureAirport" : "MUC",

"arrivalAirport" : "SFO",

"aircraft" : "Airbus A380",

"distance" : 12000,

"intercontinental" : true,

"status" : {

"description" : "on-time",

"lastUpdated" : "` hour ago",

"details" : {

"responsible" : "John Doe"

}

}

}

{

"\_id" : ObjectId("5f48f5c3d4c34c2c72e103a7"),

"departureAirport" : "LHR",

"arrivalAirport" : "TXL",

"aircraft" : "Airbus A320",

"distance" : 950,

"intercontinental" : false,

"status" : {

"description" : "on-time",

"lastUpdated" : "` hour ago",

"details" : {

"responsible" : "John Doe"

}

}

}

Use : db.flightData.find({"status.description":"on-time"}).pretty()

1. What are Indexes in MongoDB?

Indexes support the efficient execution of queries in MongoDB. Without indexes, MongoDB must perform a collection scan, i.e. scan every document in a collection, to select those documents that match the query statement. If an appropriate index exists for a query, MongoDB can use the index to limit the number of documents it must inspect.

1. What is sharding?

<https://www.guru99.com/mongodb-sharding-implementation.html>

1. What is locking?

4. What are transactions?

5. What is replication?

6. Schema design in mongodb?

7. <https://www.fullstack.cafe/blog/30-best-mongodb-interview-questions-and-answers>

8. Can you create an index on an array field in MongoDB? If yes, what happens in this case?

Yes. An array field can be indexed in MongoDB. In this case, MongoDB would index each value of the array so you can query for individual items

9. Explain the structure of ObjectID in MongoDB

ObjectIds are small, likely unique, fast to generate, and ordered. ObjectId values consist of 12 bytes, where the first four bytes are a timestamp that reflect the ObjectId’s creation. Specifically:

a 4-byte value representing the seconds since the Unix epoch,

a 5-byte random value, and

a 3-byte counter, starting with a random value. In MongoDB, each document stored in a collection requires a unique \_id field that acts as a primary key. If an inserted document omits the \_id field, the MongoDB driver automatically generates an ObjectId for the \_id field.

10. How can you achieve primary key - foreign key relationships in MongoDB?

By default MongoDB does not support such primary key - foreign key relationships. However, we can achieve this concept by embedding one document inside another (aka subdocuments). Foe e.g. an address document can be embedded inside customer document