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Discussion 4.1

Web 335

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What is MongoDB

MongoDB is a powerful, flexible, and scalable general purpose database...able to scale out with features such as secondary indexes, range queries, sorting, aggregations and geospatial indexes (Bradshaw, Brazil & Chodorow, 1).

What are the key features of MongoDB

The creators of mongo describe MongoDB as having all the general-purpose features expected from a database management system (DBM) plus many others. Indexing are an efficient solution to queries. If there is a large collection, it is easier to parse data with indexing. The file storage feature allows the storing of large files and their metadata. Special collection and index types hold logs of the data, expirations and sessions. This is important to reduce the amount of storage space required. Another feature is aggregation. This feature allows us to find out information that exists inside of a document. There is a “count” function that can count the instances of an item in the document as well as “distinct” which returns entries in the specified table that are distinct. Aggregation can process data to build analytics that are not stored in the database. Aggregates can match or query fields depending on a specified relation or value.

Select two MongoDB data types and explain what they are, how they are used, and why they are important.

1. **Embedded Documents**

This data type reminded me of the CSS preprocessor SCSS nesting. This is because within embedded documents, we are placing information nested within each item in the document. In the text, there is the example of a user and their address. Within a relational database the name and address would be two separate fields. However with MongoDB, the address can be nested under the users name and accessed accordingly.

{

"user":"John",

"address":{

"street": "123 Fake Street",

"zip": "34500"

}

}

1. **Number**

In cases where the number of integers expected to receive from a user varies in size or when it is necessary to use longer integers, numbers have NumberInt or NumberLong classes.

{"x": NumberInt("3")}

{"x": NumberLong("3")}

Reference List

Bradshaw Shannon, Braxil Eoin & Kristina Chodorow. “MongoDB The Definitive Guide Third Edition.” O’Reilly Media, Inc. December 2019.