



SNS COLLEGE OF TECHNOLOGY



Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade Approved
by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER APPLICATIONS

19CAE730 – Fundamentals of NOSQL database System
II YEAR III SEM

UNIT III - Indexing, Adaptive Indexing



MongoDB Query Operators

Comparison

- \$eq:** Values are equal
- \$ne:** Values are not equal
- \$gt:** Value is greater than another value
- \$gte:** Value is greater than or equal to another value
- \$lt:** Value is less than another value
- \$lte:** Value is less than or equal to another value
- \$in:** Value is matched within an array

Logical

- \$and:** Returns documents where both queries match
- \$or:** Returns documents where either query matches
- \$nor:** Returns documents where both queries fail to match
- \$not:** Returns documents where the query does not match

Evaluation

- \$regex:** Allows the use of regular expressions when evaluating field values
- \$text:** Performs a text search
- \$where:** Uses a JavaScript expression to match documents



Create an Index

```
db.collection.createIndex( <key and index type specification>, <options> )
```

Example

```
db.collection.createIndex( {  
  name: -1 } )
```

Results

```
db.collection.getIndices()
```

Output:

```
[  
  { v: 2, key: { _id: 1 }, name: '_id_' },  
  { v: 2, key: { name: -1 }, name: 'name_-1' }  
]
```



Drop an Index

Method

Description

[db.collection.dropIndex\(\)](#)

Drops a specific index from the collection.

[db.collection.dropIndexes\(\)](#)

Drops all removable indexes from the collection or an array of indexes, if specified.

Before You Begin

`db.<collection>.getIndexes()`



Procedures

Drop a Single Index

```
db.<collection>.dropIndex("<indexName>")
```

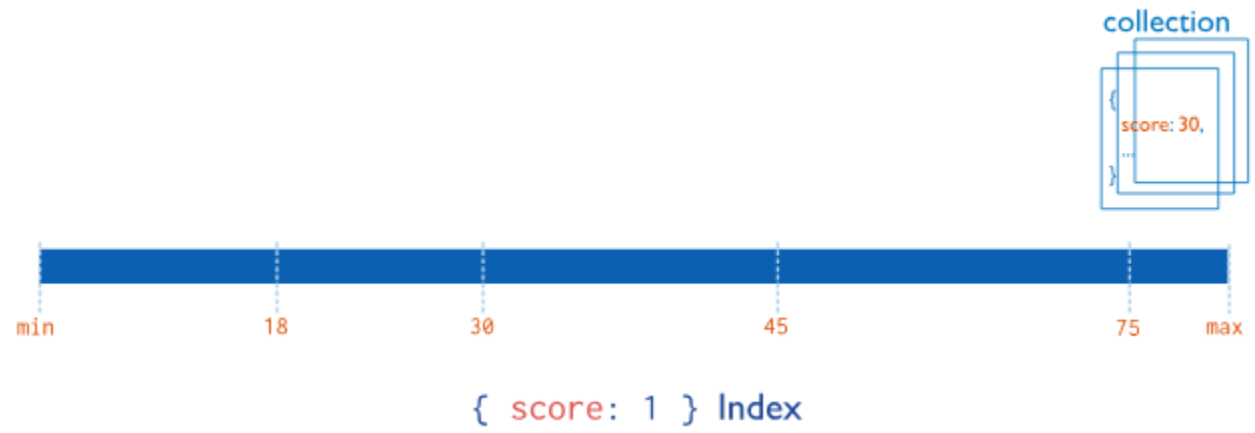
Drop Multiple Indexes

```
db.<collection>.dropIndexes("<index1>", "<index2>",  
"<index3>")
```

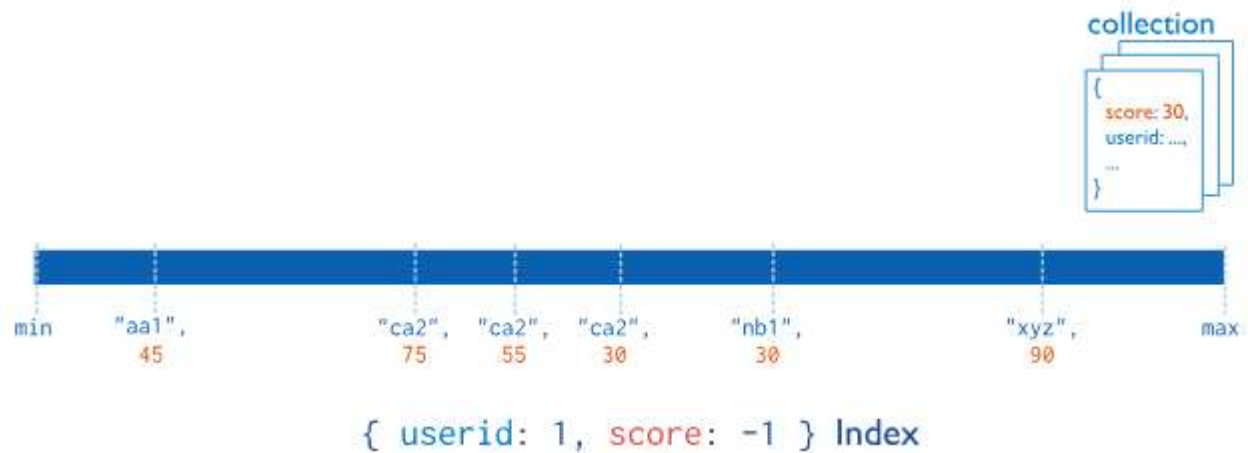


Index Types

Single Field Index

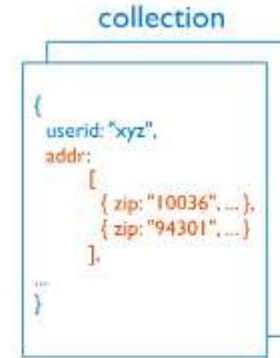


Compound Index





Multikey Index



{ "addr.zip": 1 } Index