Schema Design

Ramesh S

Mongo Factory

All data in one collection?

Or

Multiple collections

Mongo Factory

How do I handle "null" fields?

Mongo Factory

Are timestamps free in mongodb?

Mongo Factory

How can I enforce constraints?

Mongo Factory

Working with constraints

Supported from 3.2

```
db.createCollection("employees",
       {validator:{$and:
              [
               {name:{$type:"string"}},
               {email:{$regex:/@gmail\.com$/}},
               {gender:{$in:["Male","Female"]}}
              ]
       }

})
```

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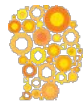
This will work

      db.employees.insert({"name":"Ramesh",

      "email":"rsannareddy@gmail.com","gender":"Male"})

This won't

      db.employees.insert({"name":"Ramesh",

      "email":"rsannareddy@yahoo.com","gender":"Male"})

Are transactions supported?

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Are joins supported?

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Embed when you can

Link when you must

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What is the max size of a doc?

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16MB

Mongo Factory

One of the biggest books ever written

Fits in

One

document

Can I limit the size of a collection?

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Capped collections

Create a collection called log whose max size is 1MB

db.createCollection("log",{capped:true,size:1000000})

Mongo Factory

Capped collections

Create a collection called log which can store max 500 docs

db.createCollection("log",{capped:true,size:1000000,max:500})

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Can I create views?

Yes from version 3.4

MongoDB supports read only views

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Create a View

Given a collection `employee` with the following documents:

```
{FirstName : 'Byomkesh', LastName:  'Bakshy', position : 'CFO', wage : 180000.00 },
{FirstName : 'Sherlock', LastName:  'Holmes', position : 'CTO', wage : 210000.00 },
{FirstName : 'Ramesh', LastName:  'Sannareddy', position : 'COO', wage : 180000.00 }
```

Create a view called `employee_names` that shows only full names:

```
db.createView(
    'employee_names',
    'employee',
    [{ $project : { _id : 0,
    "fullname" : {$concat : ["$FirstName", " ", "$LastName"]}}}]
    )
```

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Querying a View

The following read operations can support views:

- `db.collection.find()`

- `db.collection.findOne()`

- `db.collection.aggregate()`

- `db.collection.countDocuments()`

- `db.collection.estimatedDocumentCount()`

- `db.collection.count()`

- `db.collection.distinct()`

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Querying a View – Example

- `db.employee_names.find()`

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