1. Set up MongoDB
2. Create 2 collections.
3. CRUD:
   * Read data using: $gt/$lt, $regex, $and/$or
   * Update data using: $inc, $set, $unset
   * Update data using: $push, $pop, $pull

db.createCollection("CompanyNames")

{ "ok" : 1 }

db.createCollection("managers")

INSERT

1. db.CompanyName.insert({CompanyName:"Cactus", address:"Ceritto 333", phone:"555-7293", country:"Mexico"})
2. db.CompanyName.insert({CompanyName:"BonBon", address:"Gardens 25", phone:"586-7487", county:"Spain"})

WriteResult({ "nInserted" : 1 })

1. > db.CompanyName.insert({CompanyName:"Aqua", address:"Belgorodskaya 73", phone:"326-4855", county:"Georgia"})

WriteResult({ "nInserted" : 1 })

1. db.managers.insert({FirstName:"Ann", LastName:"Fuller", phone:"512-4985", county:"Georgia", age:"25"})

WriteResult({ "nInserted" : 1 })

1. > db.managers.insert({FirstName:"Bob", LastName:"Davolio", phone:"586-4411", county:"Spain", age:"46"})

WriteResult({ "nInserted" : 1 })

1. > db.managers.insert({FirstName:"Laura", LastName:"Callahan", phone:"555-7856", county:"Mexico", age:"34"})

WriteResult({ "nInserted" : 1 })

Операторы выборки

Меньше чем

db.managers.find({ age:{$lt: "30"}}).pretty()

{

"\_id" : ObjectId("5e0dd7e483551f4627b16e89"),

"FirstName" : "Ann",

"LastName" : "Fuller",

"phone" : "512-4985",

"county" : "Georgia",

"age" : "25"

}

2) больше чем

db.managers.find({ age:{$lt: "30"}}).pretty()

{

"\_id" : ObjectId("5e0dd7e483551f4627b16e89"),

"FirstName" : "Ann",

"LastName" : "Fuller",

"phone" : "512-4985",

"county" : "Georgia",

"age" : "25"

}

3) оператор $regex

db.CompanyName.find({"CompanyName":{$regex: "Bon"}}).pretty()

{

"\_id" : ObjectId("5e0dd76883551f4627b16e87"),

"CompanyName" : "BonBon",

"address" : "Gardens 25",

"phone" : "586-7487",

"county" : "Spain",

"country" : "Spain"

}

$And/ $or

$or

db.managers.find({ $or: [{FirstName:"Bob"},{FirstName:"Ann"}]}).pretty()

{

"\_id" : ObjectId("5e0dd7e483551f4627b16e89"),

"FirstName" : "Ann",

"LastName" : "Fuller",

"phone" : "512-4985",

"county" : "Georgia",

"age" : "25"

}

{

"\_id" : ObjectId("5e0dd80a83551f4627b16e8a"),

"FirstName" : "Bob",

"LastName" : "Davolio",

"phone" : "586-4411",

"county" : "Spain",

"age" : "46"

}

$and

db.managers.find({ $and: [{FirstName:"Laura"},{county:"Mexico"}]}).pretty()

{

"\_id" : ObjectId("5e0dd82983551f4627b16e8b"),

"FirstName" : "Laura",

"LastName" : "Callahan",

"phone" : "555-7856",

"county" : "Mexico",

"age" : "34"

}

* + Update data using: $inc, $set, $unset

Update

$set

> db.CompanyName.update({CompanyName:"Aqua", address:"Belgorodskaya 73", phone:"326-4855"}, {$set: { country:"Ukraine"}})

$unset

db.CompanyName.update({CompanyName:"Aqua", address:"Belgorodskaya 73", phone:"326-4855"}, {$unset: { country:"Ukraine"}})

WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

$inc увеличивает только цифровые значения!!! Не строковые!!!

db.managers.update({FirstName:"Ann"}, {$inc: {age:2}})

* + Update data using: $push, $pop, $pull

Создание строки с массивом

db.managers.insert({FirstName:"Andrew", LastName:"Ivanov", phone:"512-4765", county:"Georgia", age:38, languages:["English", "Russian"]})

$push

db.managers.update({FirstName:"Andrew"},{$push:{languages:"French"}})

$pop удаляет 1 элемент с конца, если значение будет отрицательным то удаление элементов будет происходить с начала

db.managers.update({FirstName:"Andrew"},{$pop:{languages:1}})

WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

$ pull удаляет конкретный элемент из массива

db.managers.update({FirstName:"Andrew"},{$pull:{languages:"English"}})