

MongoDB

Вводный курс



NoSQL Database



SQL

NoSQL (MongoDB)

Масштабирование

Вертикальное

Горизонтальное

Модель данных

Таблица

Документ (JSON)

Схема

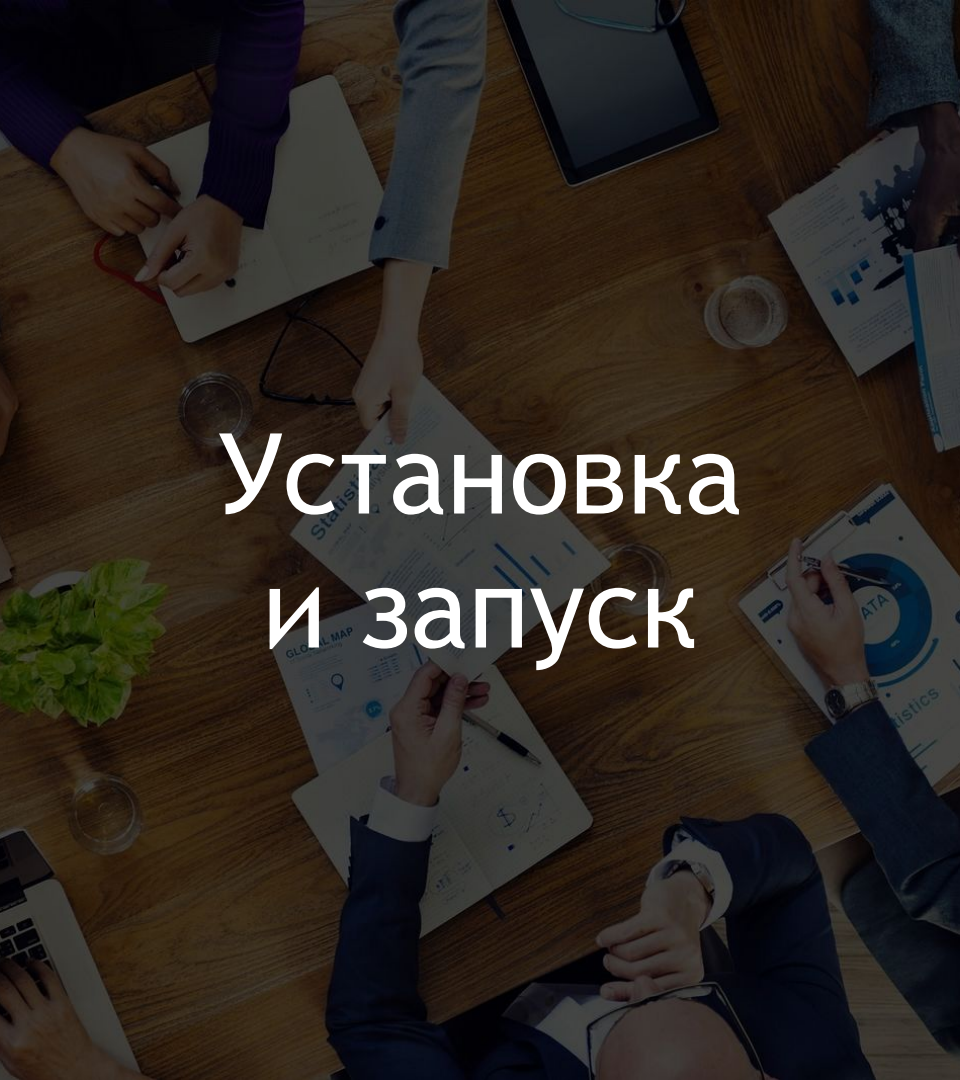
Строгая

Динамическая

API

SELECT, UPDATE,
INSERT, ...

Объектно-ориентированный
API



Установка и запуск

<https://docs.mongodb.com/v2.6/tutorial/install-mongodb-on-ubuntu/>

```
$ sudo service mongod start
```

```
$ mongo -u maxim -p 12345678 --  
host=localhost --port=27017 --  
authenticationDatabase=summercamp
```

Mongo shell



```
{  
  _id: ObjectId("5099803df3f4948bd2f98391"),  
  name: { first: "Alan", last: "Turing" },  
  birth: new Date('Jun 23, 1912'),  
  death: new Date('Jun 07, 1954'),  
  contribs: [  
    "Turing machine",  
    "Turing test",  
    "Turingery"  
  ],  
  views : NumberLong(1250000)  
}
```

Документ

.insert()

```
db.users.insert (  ← collection
{
  name: "sue",      ← field: value
  age: 26,           ← field: value
  status: "A"        ← field: value
}
)                  } document
```

.find()

```
db.users.find(  
  { age: { $gt: 18 } },  
  { name: 1, address: 1 }  
) .limit(5)
```

- ← collection
- ← query criteria
- ← projection
- ← cursor modifier


```
db.users.update(  
  { age: { $gt: 18 } },  
  { $set: { status: "A" } },  
  { multi: true }  
)
```

← collection
← update criteria
← update action
← update option

.update()

MongoDB with Koa.js

```
const userService = require('./services/user')

co(function *() {
  // create index
  yield userService.index('name last')
  // create document
  yield userService.create({ name: 'Tobi', bigdata: {} })
  // query
  yield userService.find({ name: 'Loki' }, '-bigdata')
  // remove
  yield userService.remove({ name: 'Loki' })
})
```