



Mongodb



Installation

Windows

<https://docs.mongodb.com/manual/tutorial/install-mongodb-on-windows/>

Ubuntu

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

Mac OS

<https://docs.mongodb.com/manual/tutorial/install-mongodb-on-os-x/>

Create DB

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/mydb";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  console.log("Database created!");
  db.close();
});
```

Create Collection

Create a collection called "customers":

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.createCollection("customers", function(err, res) {
    if (err) throw err;
    console.log("Collection created!");
    db.close();
  });
});
```

Insertion

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myobj = { name: "Company Inc", address: "Highway 37" };
  dbo.collection("customers").insertOne(myobj, function(err, res) {
    if (err) throw err;
    console.log("1 document inserted");
    db.close();
  });
});
```

Insert multiple documents in the "customers" collection:

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myobj = [
    { name: 'John', address: 'Highway 71'},
    { name: 'Peter', address: 'Lowstreet 4'},
    { name: 'Amy', address: 'Apple st 652'},
    { name: 'Hannah', address: 'Mountain 21'},
    { name: 'Michael', address: 'Valley 345'},
    { name: 'Sandy', address: 'Ocean blvd 2'},
    { name: 'Betty', address: 'Green Grass 1'},
    { name: 'Richard', address: 'Sky st 331'},
    { name: 'Susan', address: 'One way 98'},
    { name: 'Vicky', address: 'Yellow Garden 2'},
    { name: 'Ben', address: 'Park Lane 38'},
    { name: 'William', address: 'Central st 954'},
    { name: 'Chuck', address: 'Main Road 989'},
    { name: 'Viola', address: 'Sideway 1633'}
  ];

  dbo.collection("customers").insertMany(myobj, function(err, res) {
    if (err) throw err;
    console.log("Number of documents inserted: " + res.insertedCount);
    db.close();
  });
});
```

Find

Example

Find all documents in the customers collection:

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.collection("customers").find({}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

[Run example »](#)

The second parameter of the `find()` method is the `projection` object that describes which fields to include in the result.

This parameter is optional, and if omitted, all fields will be included in the result.

Example

Return the fields "name" and "address" of all documents in the customers collection:

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.collection("customers").find({}, { projection: { _id: 0, name: 1, address: 1 } }).toArray(function(err,
result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```


When finding documents in a collection, you can filter the result by using a query object.

The first argument of the `find()` method is a query object, and is used to limit the search.

Example

Find documents with the address "Park Lane 38":

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var query = { address: "Park Lane 38" };
  dbo.collection("customers").find(query).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

Sort the result alphabetically by name:

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var mysort = { name: 1 };
  dbo.collection("customers").find().sort(mysort).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

Delete

Delete the document with the address "Mountain 21":

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myquery = { address: 'Mountain 21' };
  dbo.collection("customers").deleteOne(myquery, function(err, obj) {
    if (err) throw err;
    console.log("1 document deleted");
    db.close();
  });
});
```

Update

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://127.0.0.1:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myquery = { address: "Valley 345" };
  var newvalues = { $set: {name: "Mickey", address: "Canyon 123" } };
  dbo.collection("customers").updateOne(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log("1 document updated");
    db.close();
  });
});
```

Limit

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.collection("customers").find().limit(5).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

orders

```
[  
  { _id: 1, product_id: 154, status: 1 }  
]
```

products

```
[  
  { _id: 154, name: 'Chocolate Heaven' },  
  { _id: 155, name: 'Tasty Lemons' },  
  { _id: 156, name: 'Vanilla Dreams' }  
]
```

Join

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://127.0.0.1:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.collection('orders').aggregate([
    { $lookup:
      {
        from: 'products',
        localField: 'product_id',
        foreignField: '_id',
        as: 'orderdetails'
      }
    }
  ]).toArray(function(err, res) {
    if (err) throw err;
    console.log(JSON.stringify(res));
    db.close();
  });
});
```