

# mongoose

object modeling for node.js

# Install

```
npm install --save mongoose
```

```
Var mongoose = require('mongoose');  
mongoose.connect('mongodb://localhost:27017/{db_name}');  
mongoose.connection.once('open',()=>{  
  console.log('connected to mongoo')  
})  
mongoose.connection.on('error',(err)=>{  
  console.log('connected to mongoo error ',err)  
})
```

# Models

```
var mongoose = require('mongoose');
var Schema = mongoose.Schema;
var userSchema = new Schema({
  name: {type: String, required: true},
  email: {type: String, required: true, unique: true, index: true},
  password: {type: String, required: true},
  age: {type: Number, required: true},
})
module.exports = User = mongoose.model('User', userSchema);
module.exports.getUserById = function (id, callback) {
  User.findById(id, callback)
}
//, { versionKey: false } // to remove __v
```

# DataTypes

- String
- Number { type: Number, min: 18, max: 65 }
- Date { type: Date, default: Date.now }
- Boolean
- Array {type: [String] }

# Insert Data

```
var User = require('../model/user');  
var newUser = new User();  
  newUser.name = 'mina';  
  newUser.email = 'email5';  
  newUser.password = 'password';  
  newUser.age = 22;  
  console.log(newUser)  
  newUser.save(function (err, doc) {  
    if (err) {  
      throw error  
    }  
  });
```

# Find Data

```
User.find(function(err,docs){  
  if (err) {  
    res.send(err);  
  }else {  
    console.log(docs);  
  }  
})
```

```
User.find({age:{$gte:1}},function(err,docs){  
  if (err) {  
    res.send(err);  
  }else {  
    res.send(docs);  
  }  
})  
//User.find().exec(function(err,docs)
```

# Delete Data

```
User.findByIdAndRemove({'_id':'5ace6c8b9db9a6469e4d2bcd'},function(err,doc){
    res.send(doc)
})
doc.remove(function(err,doc){
})
```

# Relations

```
var postSchema = Schema({
  user: { type: Schema.Types.ObjectId, ref: 'User' },
  title: String,
  content: String
});
module.exports = Post = mongoose.model('Post', postSchema);
var userSchema = new Schema({
  name: {type: String },
  posts: [{ type: Schema.Types.ObjectId, ref: 'Post' }],
})
module.exports = User = mongoose.model('User', userSchema);
```



# Relations

For insert

```
user.posts.push(PostId)
```

```
Post.user = userId
```

# Relations

For retrieve use **populate**

```
User.find().populate('posts').exec(function(err,docs){  
    res.send(docs)  
})
```

```
Post.find().populate('author').exec(function(err,docs){  
    res.send(docs)  
})
```