# Introducción al desarrollo web entorno servidor

Gabriel Rodríguez Flores

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- Instalación del módulo mongoose en NodeJS
- Creación de schemas y documentos con NodeJS
- Añadir a la estructura del proyecto

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Gabriel Rodríguez Flores

## 1 Teoría

- Ejemplo integracion sencillo
- · Recomendaciones de rendimiento

## 1.1 Instalación

```
npm i mongoose
```

## 1.2 Conexión

```
const mongoose = require('mongoose');

mongoose.connect('mongodb://localhost:27017/mydb', {
    useNewUrlParser: true,
    useUnifiedTopology: true,
});

const db = mongoose.connection;

db.on('error', console.error.bind(console, 'connection error:'));
db.once('open', () => {
    console.log('Connected to MongoDB');
});
```

#### 1.3 Schemas

```
const mongoose = require('mongoose');

const { Schema } = mongoose;

const userSchema = new Schema({
   name: String,
   email: String,
   age: Number,
});

const User = mongoose.model('User', userSchema);

module.exports = User;
```

#### 1.3.1 Nested Schemas

```
const mongoose = require('mongoose');
const { Schema } = mongoose;
const addressSchema = new Schema({
 street: String,
 city: String,
 state: String,
 country: String,
 postalCode: String,
});
const userSchema = new Schema({
 name: String,
 email: String,
 age: Number,
 address: addressSchema,
});
const User = mongoose.model('User', userSchema);
module.exports = User;
```

#### **1.4 CRUD**

#### 1.5 Find

```
const user = await User.find({ name: 'John Doe' });
```

#### 1.6 Insert

```
const User = require('./models/user');

const user = new User({
   name: 'John Doe',
   email: '',
   age: 30,
});

user.save();
```

## 1.7 Update

```
User.updateOne({ name: 'John Doe' }, { age: 31 });
User.updateMany({ name: 'John Doe' }, { age: 31 });

const user = await User.find({ name: 'John Doe' });
user.age = 31;
user.save();
```

#### **1.7.1** Remove

```
User.deleteOne({ name: 'John Doe' });
User.deleteMany({ name: 'John Doe' });

const user = await User.find({ name: 'John Doe' });
user.delete();
```

### 1.8 Avanzados

- · Optimización y eficiencia
- 2 Ejemplos
- 3 Ejercicios
- 4 Entregables
- 4.1 En clase
- 4.2 Tarea