Clarusway

Backend
Workshop
-5-

Workshop

Subject:

- Mongoose / MongoDb

Learning Goals

- Ability to work with NoSQL databases with Mongoose.

Introduction

- One of the things a backend developer needs to know is to work with SQL and NoSQL databases. For this purpose, studies will be carried out with Mongoose for NoSQL databases.

Prerequisites

- We will use the VSCode.
- At the same time, we need to install Nodejs, MongoDb on our computer.

Lets start

1. What is ODM ?

Answer:

Object Document Mapping, is a programming technique for converting data between incompatible type systems in MongoDB and Mongoose.ODM is a tool that allows you to interact with your MongoDB database using JavaScript objects.

ODM provides a way to interact with the documents in the database using JavaScript objects. With Mongoose, you can define a schema (a blueprint) for your objects and then use it to create instances of those objects. These instances can be saved, retrieved, updated and deleted in the database using mongoose methods.

It's like an ORM, but instead of SQL databases and tables, it uses MongoDB collections and documents.

2. How to connect to MongoDB using Mongoose ?

Answer:

```js
const mongoose = require('mongoose')
mongoose.connect('mongodb://127.0.0.1:27017/dbname')
    .then(() =>
    .catch((err) =>
```

3. What is a Mongoose model, give a simple example ?

Answer:

A Mongoose model is a wrapper of the Mongoose schema. A Mongoose schema defines the document's properties, default values, types of data, validators, etc. In contrast, a Mongoose model provides an interface for the database to CRUD, and so on.

```js
const UserSchema = new mongoose.Schema({
  name: String,
  email: String,
});
//Then, create a model from this schema:
const User = mongoose.model("User", UserSchema);
// create user
```

```
let newUser = new User({ name: "Alex", email: "alex@example.com" });
// newUser.save();
```

4- What is the difference between findOne() and find() methods in Mongoose?

Answer:

The findOne() method retrieves a single document from the MongoDB collection based on the provided query criteria. It returns the first matching document or null if no document is found. The find() method, on the other hand, returns an array of documents that match the specified query criteria.

5- What is middleware in Mongoose and how is it used?

Answer:

Middleware in Mongoose are functions that are executed before or after certain operations occur, such as saving a document to the database or removing a document from the database. They are commonly used for tasks like data validation, manipulation, or logging.

6- What is the purpose of the 'populate' method in Mongoose?

Answer:

The 'populate' method in Mongoose is used to replace specified paths in a document with document(s) from other collection(s). It allows you to reference documents in other collections and automatically retrieve and populate them when querying the original collection.

7- Mongoose performs ..... operations on MongoDB.? Answer: CRUD

8- The 'required' option in Mongoose schemas specifies whether a field is ...... ? Answer: mandatory

9- To update the properties of a document, we can use the ...... or ..... methods ? updateOne() , updateMany()

10- To find and delete a document based on a specific condition, we can use the ...... or ..... methods ? Answer: findOneAndDelete() , deleteOne()

☺ Thanks for Attending ✍

Clarusway   »