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The Neo4j GraphQL OGM

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Lesson Overview

In this lesson we take a brief look at using the Neo4j GraphQL OGM for programmatically querying Neo4j. Then in the Exercise, you will use the OGM.

The Neo4j GraphQL OGM

The Neo4j GraphQL OGM is an object graph mapper that uses GraphQL type definitions to define models and exposes a programmatic way to query Neo4j without using Cypher.

Using The Neo4j GraphQL OGM

Install the Neo4j GraphQL OGM package:

Bash

npm install @neo4j/graphql-ogm

Once installed, import the OGM into your project:

JavaScript

```
const { OGM } = require("@neo4j/graphql-ogm");
```

The OGM is instantiated by passing the GraphQL type definitions and a Neo4j Grammynity ance:

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JavaScript

```
const ogm = new OGM({ typeDefs, driver });
```

Model objects correspond to types declared in the GraphQL type definitions and expose **find**, **create**, **update**, and **delete** methods for working with the models.

Here we use the **Book.find** method to query for all books in the database and log to the console.

JavaScript

```
const Book = ogm.model("Book")

const fetchBooks = async () => {
  const books = await Book.find()
  console.log(JSON.stringify(books, null, 2));
}

fetchBooks()
```

JavaScript

```
[
  {
    "isbn": "1492047686",
    "title": "Graph Algorithms",
    "price": 37.48,
    "description": "Practical Examples in Apache Spark and Neo4j"
  },
    "isbn": "1119387507",
    "title": "Inspired",
    "price": 21.38,
    "description": "How to Create Tech Products Customers Love"
  },
    "isbn": "190962151X",
    "title": "Ross Poldark",
    "price": 15.52,
    "description": "Ross Poldark is the first novel in Winston Graham's sweeping saga of
Cornish life in the eighteenth century."
  }
1
```

We can use the familiar filter arguments when querying weing the Nen 4i Graph Olm OGM. To filter for a

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specific book by isbn value:

JavaScript

```
const Book = ogm.model("Book")

const fetchBooks = async () => {
  const books = await Book.find({where: {isbn: "1492047686"}})
  console.log(JSON.stringify(books, null, 2));
}

fetchBooks()
```

JSON

We can pass a selection set to traverse relationships defined in the GraphQL type definitions. Here we traverse to the book's subjects using a selection set:

JavaScript

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```
const fetchBooks = async () => {
  const selectionSet = `
  {
    title
    description
    isbn
    price
    subjects {
        name
    }
}

const books = await Book.find({where: {isbn: "1492047686"}, selectionSet })
    console.log(JSON.stringify(books, null, 2));
}

fetchBooks()
```

JSON

Create, update, and delete operations are also available using the Neo4j GraphQL OGM. Refer to the Neo4j GraphQL OGM documentation \nearrow for more details.

Exercise: Neo4j GraphQL OGM

Let's consider a hands-on example of using the Neo4j Gwanth@p? <u>OGIMnoutesvide4pCamGraphp</u>QL API.

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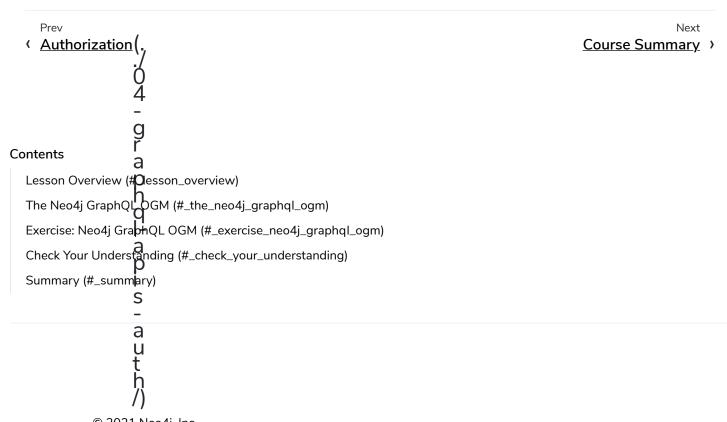
Launch this Codesandbox / which is a simple node script that runs a report to log all orders.
• Update the .env file with the connection credentials for your Neo4j Sandbox instance.
 Modify the script to include book titles and the price of each book in each order.
See this Codesandbox / for the solution.
Check Your Understanding
Overtion 1
Question 1
The Neo4j GraphQL OGM uses GraphQL type definitions to define models.
Is this statement true or false?
☐ True
☐ False
Question 2
When querying using the Neo4j GraphQL OGM a selection set can be provided to indicate specific fields to be returned.
Is this statement true or false?
☐ True
☐ False
Ougstion 2
Question 3
The Neo4j GraphQL OGM can be used outside of GraphQL APIs, such as in a REST API implementation.
Is this statement true or false?
☐ True
☐ False Need help? <u>Ask in the Neo4j Community</u>

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Summary

In this lesson, we introduced the Neo4j GraphQL OGM for querying Neo4j programmatically.

✓ Check Answers



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