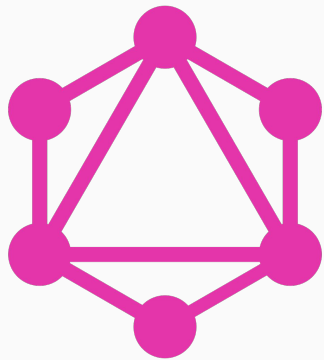# GraphQL API

Phonbopit

Growth Session #7 - September 21-22 2017

What is GraphQL?

GraphQL is a query language for APIs, and a server-side runtime for executing queries by using type system you define for your data.

Benefits

- Ask for what you need, get exactly that.
- Get many resources in a single request
- Describe what's possible with a type system.

Schema & Types

We'll use the "GraphQL schema language" - it's similar to the query language, and allows us to talk about GraphQL schemas in a language-agnostic way.

```
// Query
{
  user {
    name,
    email
  }
}
```

```
// Type
type User {
  id: String!
  name: String
  email: String
  books: [Book]
}
```

Relations

```
type Book {
  id: ID!
  title: String!
  isbn: String
  price: Int
  author: Author
}

type Author {
  id: ID!
  name: String
}
```
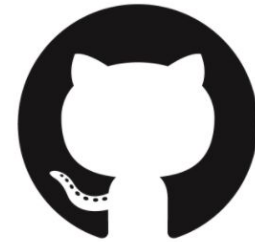
```
Book.findAll({ include: [Author] })
```

```
SELECT book.*, author.*
FROM book JOIN author
ON book.author_id = author.id;
```
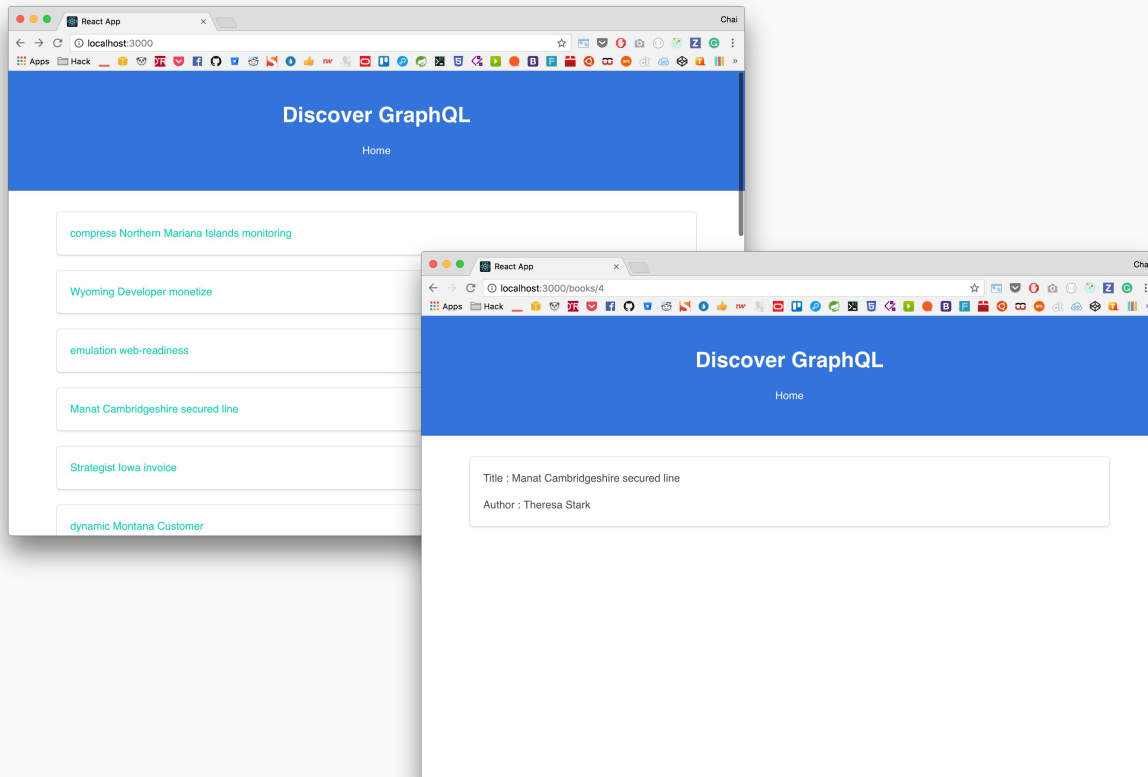
Who's using GraphQL?

And more : http://graphql.org/users/

GraphQL Server

- Express.js
- GraphQL Express
- Postgres (Sequelize)
- graphql-tools

How's it works?

1
```
import { makeExecutableSchema } from 'graphql-tools'
import { resolvers } from './resolvers'
```

2
```
const typeDefs = `
  type Book {
    id: ID!
  }

  type Query {
    books: [Book]
  }
`

const resolvers = {
  Query: {
    books: () => {
      Book.findAll()
    }
  }
}
```

3
```
const schema = makeExecutableSchema({ typeDefs, resolvers })
```

4
```
app.use('/graphql', bodyParser.json(), graphqlExpress({
  schema
}))
```
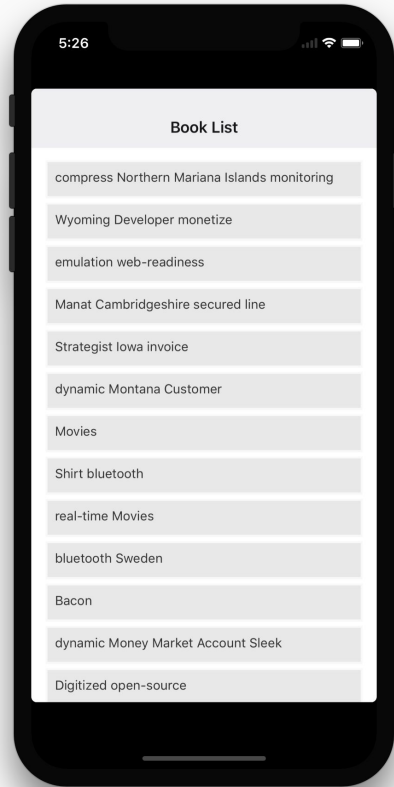
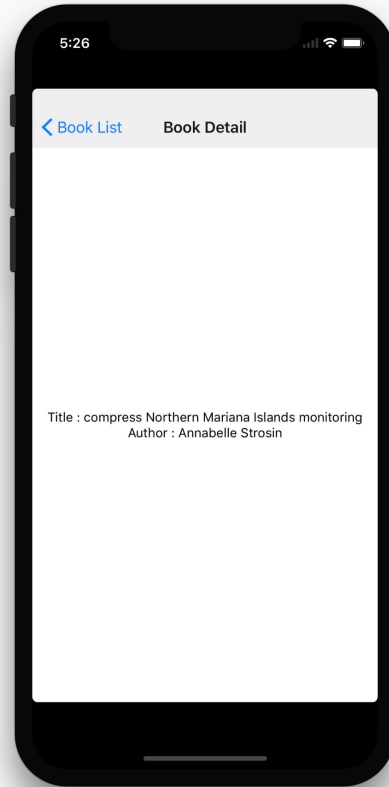# Achievements and progress

GraphQL Client with React Native

- create-react-native-app
- react-native-cli
- react-apollo
- apollo-client
- graphql-tag
- react-native-router-flux
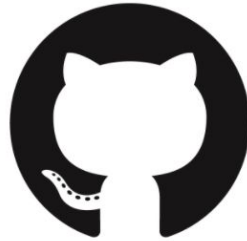
Achievements and progress

Let's try

git clone https://github.com/nimbl3/discover-graphql.git

Thanks!

Contact Nimbl3

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