Exploring the GraphQL Schema with Introspection

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Module Overview

What is Introspection in GraphQL?

Learn introspection in GraphQL to:

- Retrieve a GraphQL schema's types
- Learn what queries and mutations an API supports
- Query property types
- Retrieve deprecated fields
- Query directives
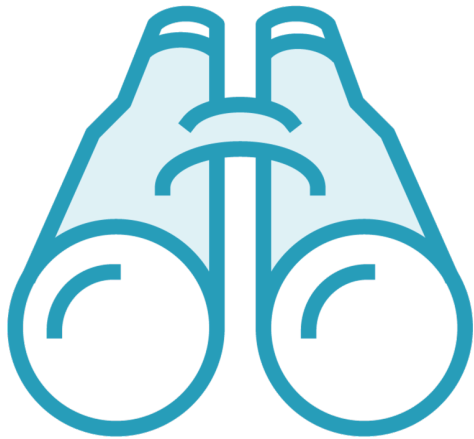- Introspection with Apollo client

Introspection

Introspection

GraphQL provides a way for clients to discover the resources that are available in the GraphQL API schema via introspection.
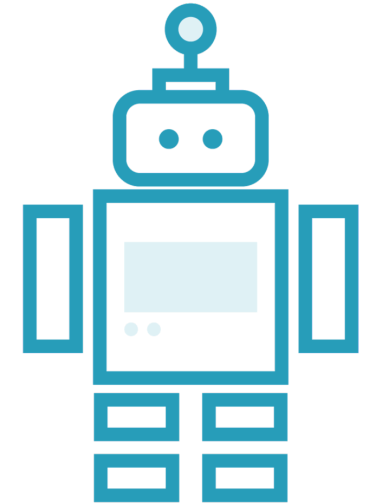
Why Introspection is Useful?

Provides clients a view of the available resources in the schema

Ability to build awesome tools (GraphiQL, GraphQL Playground)

Self documentation, autocomplete, code generation, etc..

Introspect
Globomantics schema

Retrieve a Schema's Types

```
query getSchemaTypes {

 __schema {

  types{

   name

   kind

   description

  }

 }

}
```

What Queries does the API support?

```
query retrieveQueryTypes {

  __schema {

    queryType {

      fields {

        name

        description

      }

    }

  }

}
```

Query Property Types

```
query sessionType {

__type(name: "Session") {

  fields {

    name

    description

    }

  }

}
```

◄ **Placeholder slide. This will be shown as a demo**

Retrieve deprecated fields

Query Deprecated Fields

```
query sessionType {

  __type(name: "Session") {

    fields(includeDeprecated : true) {

      name

      description

      isDeprecated

      deprecationReason

    }

  }

}
```

◄ **Placeholder slide. This will be shown as a demo**

Query Directives

Apollo Codegen to Introspect Schema

```
npm install apollo-codegen


apollo-codegen introspect-schema http://localhost:4000/graphql --output schema.json
```

Apollo codegen to introspect schema

Create a JSON introspection dump file for a given graphql schema

Input schema can be fetched from a remote graphql server or from a local file.

We are now ready to start consuming the GraphQL API from our client!