Queries - Retrieve data from GraphQL

ADHITHI RAVICHANDRAN

SOFTWARE CONSULTANT, AUTHOR, SPEAKER

@AdhithiRavi www.adhithiravichandran.com

Module Overview

Learn about GraphQL Queries using Apollo client

- useQuery Hook
- Query with arguments
- Query with variables
- Error handling
- Reuse fields with fragments
- Aliases in GraphQL
- Dynamic queries with directives
- Demo all concepts using Globomantics conference site

Queries

Queries

Provides clients the power to ask for exactly what they need and nothing more

You can combine all the data you need in a single request

Queries are tailor made per client

useQuery Hook

The *useQuery* is a React hook, which is the API for executing queries in an Apollo application.

Demo

Before writing your first query:

- Create a sessions page for the conference
- Hard-code with dummy data and make sure it is running

Query to Retrieve Sessions

Demo

Write your first simple query in Apollo client

- Query for sessions data from the Globomantics API
- Query using the *useQuery* hook
- Display retrieved sessions data on the Globomantics website.

Query with Variables

Variables in Queries

Arguments to fields can be dynamic

GraphQL uses variables to query for dynamic values

Demo

Extend your query to include variables

- Demonstrate including variables for day of the conference

Default Variables

Error Handling

Handling Errors

Errors are common

- Query could be incorrect
- Server isn't responding
- Network issues

Apollo *useQuery* returns result object with *error* and *loading* as properties

Query to Retrieve Speakers

Fragments

Fragments

Fragments are reusable units in GraphQL

Can build sets of fields, and reuse them across multiple queries

Demo

Demonstrate use of fragments within the queries

- Use fragments in the speakers and speakerById queries

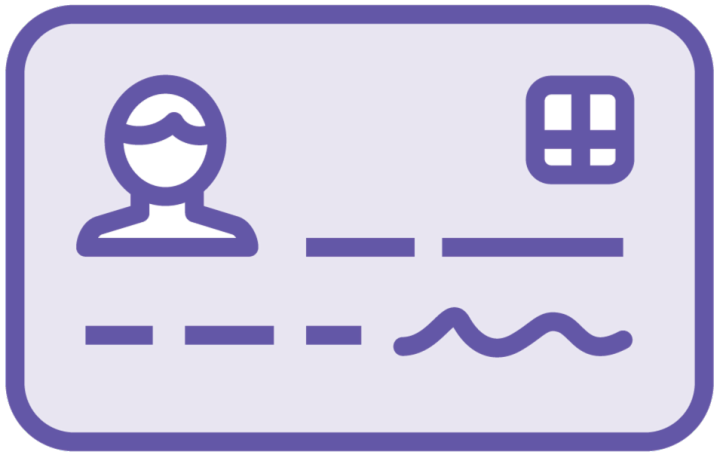
Aliases

Arguments

Can pass arguments to fields to filter resulting data

Every field and nested object can get its own set of arguments

Aliases



Can’t directly query for same field with different arguments

Aliases let you rename result of a field to anything you want

Gets rid of conflict in query

Demo

Demonstrate use of aliases in GraphQL queries

- Sort sessions based on level of the session, and use aliases within the query

Query Directives

Review

Review Time - Queries

useQuery Hook

Fragments

Arguments and Variables

Aliases

Error handling

Directives

Up Next:
Mutations