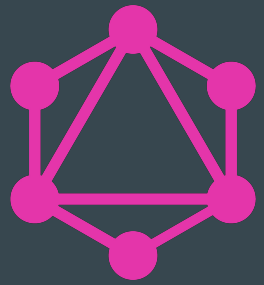
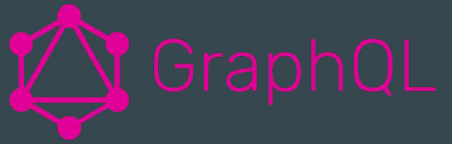


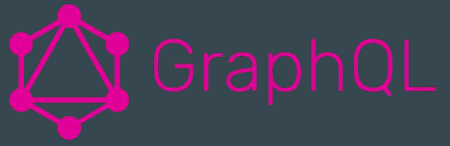
GraphQL Introduction

What is GraphQL : Why Use GraphQL : GraphQL vs Rest :
Who Uses GraphQL : GraphQL Development Tools : Working Demo

What is GraphQL?



What is GraphQL?



- Created by a Facebook internal development team in 2012

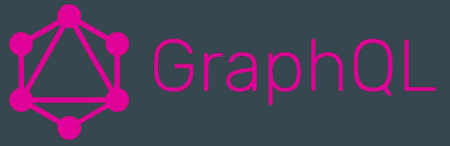
Created by:

- Nick Schrock
- Dan Schafer
- Lee Byron

Open-Sourced in 2015

In November 2018 the GraphQL Project was moved to the newly-established GraphQL foundation hosted by the non-profit Linux Foundation

What is GraphQL?



- Created by a Facebook internal development team in 2012
- GraphQL is a query language for APIs

Instead of multiple endpoints to retrieve data, a query is sent to one endpoint and the response only includes what was asked for

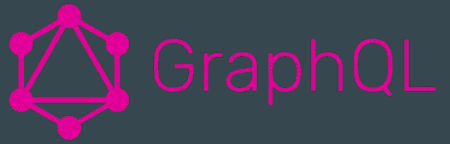
Query:

```
query {
    player(id: 1) {
        playerName
    }
}
```

Response:

```
{
    "data": {
        "player": {
            "playerName": "Phil Mickelson"
        }
    }
}
```

What is GraphQL?



- Created by a Facebook internal development team in 2012
- GraphQL is a query language for APIs
- Based on the idea of Schemas

The center of any GraphQL implementation

Defines the way the data is structured with object types and fields

Describes the functionality available to the clients that connect

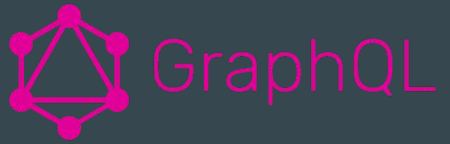
Creates the relationships between types

Handles the data input validation for querying and mutating data

Very powerful and fully customizable

Large schemas can be broken down into smaller more manageable and scoped schemas

What is GraphQL?



- Created by a Facebook internal development team in 2012
- GraphQL is a query language for APIs
- Based on the idea of Schemas
- Gives clients the power to ask for exactly what they need and nothing more

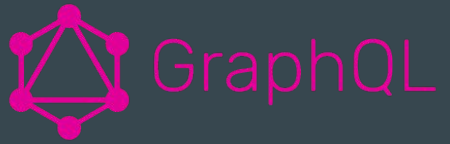
Clients have the power to only ask for what they need

Only the fields and related data objects with it's fields is returned.

Allows to get multiple related data objects with one request saving on the amount of api calls required

Server only has to process the data asked for, so if a more costly calculation is part of the data object the server only needs to make that calculation if requested.

What is GraphQL?



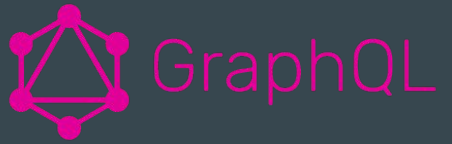
- Created by a Facebook internal development team in 2012
- GraphQL is a query language for APIs
- Based on the idea of Schemas
- Gives clients the power to ask for exactly what they need and nothing more
- Makes it easier to evolve APIs over time

Continuous Evolution

API evolution is the concept of striving to maintain the "I" in API, the request/response body, query parameters, general functionality, etc., only breaking them when you absolutely, absolutely, have to.

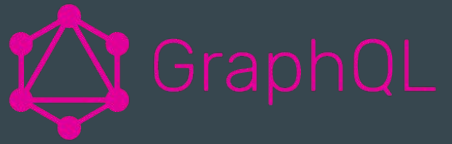
Phil Sturgeon

Why Use GraphQL?



GraphQL vs. REST

What is a Graph?



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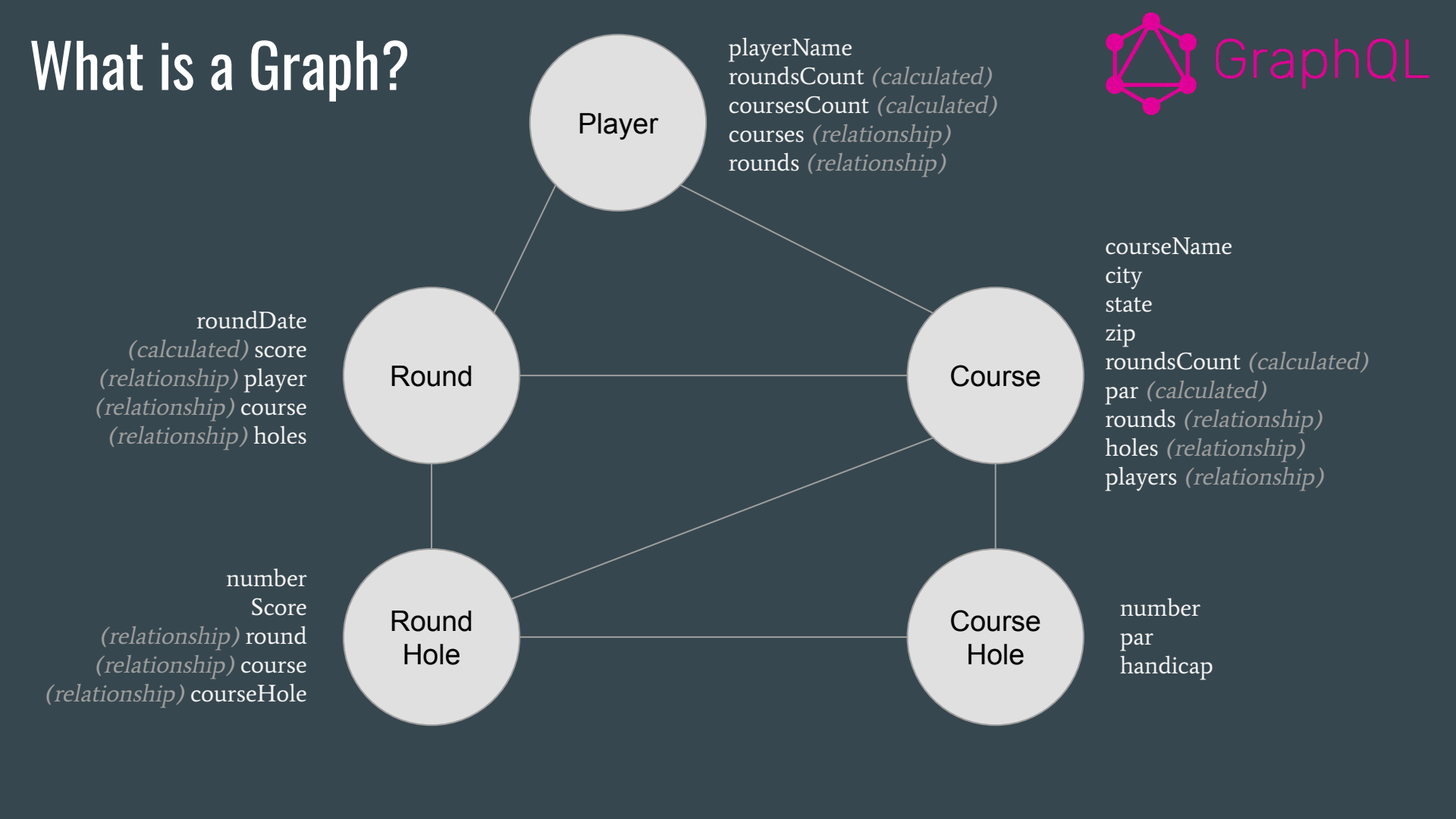
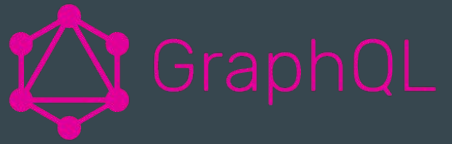
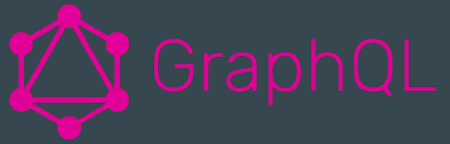


GraphQL

Who is Using GraphQL?



GraphQL Development Tools



Working Demo