

GraphQL Workshop

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Agenda

- Introduction to GraphQL
- GraphQL Query Language
- GraphQL Server
- GraphQL Client



What is GraphQL ?

- A query language for your API
- Enables clients to ask exactly what they want



What is GraphQL ?

GraphQL Query

```
{
  me {
    id
    firstName
  }
}
```

Response

```
{
  "data": {
    "me": {
      "id": 1,
      "firstName": "Kiran"
    }
  }
}
```

What is GraphQL ?

GraphQL Query

```
{  
  me {  
    id  
    firstName  
    lastName  
  }  
}
```

Response

```
{  
  "data": {  
    "me": {  
      "id": 1,  
      "firstName": "Kiran",  
      "lastName": "Abburi"  
    }  
  }  
}
```

GraphQL vs REST: Single endpoint

- GraphQL has only single endpoint
- We send different queries to get different data

GraphQL

/graphql

REST

- /me
- /posts



GraphQL VS REST: HTTP Verbs

REST

- We use GET, POST, PUT, etc. based on action

GraphQL

- We can use any HTTP Verb for GraphQL queries: GET or POST
- POST is preferred over GET because of URL length restriction



GraphQL vs REST: Overfetching

- Common endpoints for multiple platforms results in overfetching
 - /posts
- Different endpoints for different platforms causes maintenance burden
 - /desktop/posts
 - /mobile/posts
- GraphQL solves these problems by enabling clients to query exactly what they need



GraphQL vs REST: Multiple round trips

- We need to make round trips to get data with REST
 - /me
 - /posts/1
 - /posts/1/comments
- We can fetch different sets of data in a single query



<https://github.com/akiran/react-india-2019-graphql-workshop>

<https://bit.ly/2l9zsAW>

