



Innovation Talk 6 oktober

GraphQL

GraphQL

- Query language voor API
- Ontwikkeld door Facebook
- Zowel client-side als server-side
- Staat los van database engine

GraphQL schema (types and fields)

```
type Query {  
  me: User  
}
```

```
type User {  
  id: ID  
  name: String  
}
```

GraphQL query

```
{  
  me {  
    name  
  }  
}
```

result:

```
{  
  "me": {  
    "name": "Bas Schoenmakers"  
  }  
}
```

Voordelen

- Je krijgt terug wat je verwacht
- Query is interactief aan te passen in client
- Resultaat kan tevens array of object zijn

```
{
  hero {
    name
    # Queries can have comments!
    friends {
      name
    }
  }
}
```

```
{
  "data": {
    "hero": {
      "name": "R2-D2",
      "friends": [
        {
          "name": "Luke Skywalker"
        },
        {
          "name": "Han Solo"
        }
      ]
    }
  }
}
```

Arguments

```
{  
  human(id: "1000") {  
    name  
    height  
  }  
}
```

```
{  
  "data": {  
    "human": {  
      | "name": "Luke Skywalker",  
      "height": 1.72  
    }  
  }  
}
```

```
{  
  human(id: "1000") {  
    name  
    height(unit: FOOT)  
  }  
}
```

```
{  
  "data": {  
    "human": {  
      "name": "Luke Skywalker",  
      "height": 5.6430448  
    }  
  }  
}
```

Aliases

```
{
  empireHero: hero(episode: EMPIRE) {
    name
  }
  jediHero: hero(episode: JEDI) {
    name
  }
}
```

```
{
  "data": {
    "empireHero": {
      "name": "Luke Skywalker"
    },
    "jediHero": {
      "name": "R2-D2"
    }
  }
}
```

Fragments

```
{
  leftComparison: hero(episode: EMPIRE) {
    ...comparisonFields
  }
  rightComparison: hero(episode: JEDI) {
    ...comparisonFields
  }
}

fragment comparisonFields on Character {
  name
  appearsIn
  friends {
    name
  }
}
```

```
{
  "data": {
    "leftComparison": {
      "name": "Luke Skywalker",
      "appearsIn": [
        "NEWHOPE",
        "EMPIRE",
        "JEDI"
      ],
      "friends": [
        {
          "name": "Han Solo"
        },
        {
          "name": "Leia Organa"
        },
        {
          "name": "C-3PO"
        }
      ]
    }
  }
}
```


In de praktijk

Wat is nu de stand van zaken?