

GraphQL and Relay

Lightning Talk at JSConf 2015

About me

- Dafeng Guo, CTO of strikingly.com
- Strikingly
 - simplest website builder
 - probably the largest React.js user in China

GraphQL

What the hell is it?

@ruanyf 🧠📖

Facebook的前端工程师，创新能力太惊人，完全是thinking out of box，解决问题的思路是推倒重来，而不是优化现实：写DOM不方便，那就发明新的写法JSX，配上专门的编译器；SQL查询语言太啰嗦，那就发明新的查询语言GraghQL，让数据库必须装专有的解析引擎。

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正解 //@尤小右:GraphQL 要解决的不是 SQL 的问题而是 REST 的问题，而且也不是加装
在数据库上的...

@ruanyf 🏆

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“REST is perfect!”

- A random backend engineer

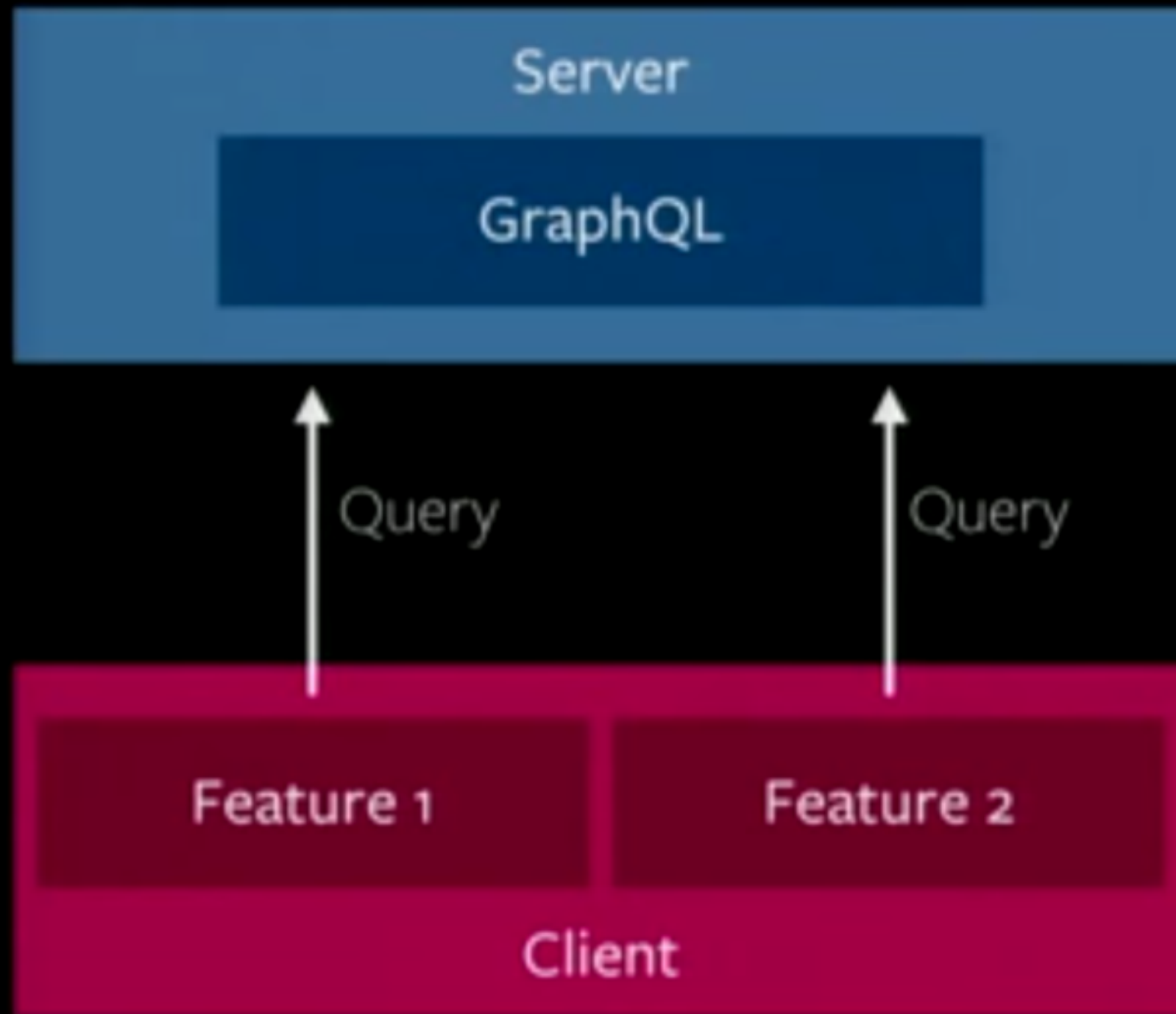
REST-ful API Sometimes Sucks

- Round trip for complicated objects
- Variable fields
- Custom endpoint - not REST-ful design
- Backend engineer dependency - slow down iterations

GraphQL

- Server-side engineers published a type system
- Client-side engineers use GraphQL as a unified query interface
- No more adhoc endpoints
- Product changes are faster

GraphQL



Are we writing SQL in
the client?!

NO!

GraphQL Query

Code

```
{
  user(id: 3500401) {
    id,
    name,
    isViewerFriend,
    profilePicture(size: 50) {
      uri,
      width,
      height
    }
  }
}
```

JSON Response

Code

```
{
  "user" : {
    "id": 3500401,
    "name": "Jing Chen",
    "isViewerFriend": true,
    "profilePicture": {
      "uri": "http://someurl.cdn/pic.jpg",
      "width": 50,
      "height": 50
    }
  }
}
```

GraphQL

- REST-ful sometimes sucks
- GraphQL is declarative
- GraphQL allows product engineers to iterate faster
- Draft spec was released

Relay

GraphQL on React

Component

- Component is at the core of React
- Reusing any component, we are reusing
 - HTML - React
 - Javascript - React
 - CSS - Maybe React?
 - Data fetching - Relay

Relay

- Allows you to define the data format the component needs using GraphQL
- Relay automatically fetch the data
 - Supports nested/composite components

Relay

- Solving the data fetching problem
 - Supports composite components
 - Makes component reuse possible
- Will be open sourced in August

Thanks!