Why Relay matters

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Si **Small Improvements**

Overview

Intro into Relay

The power of abstraction
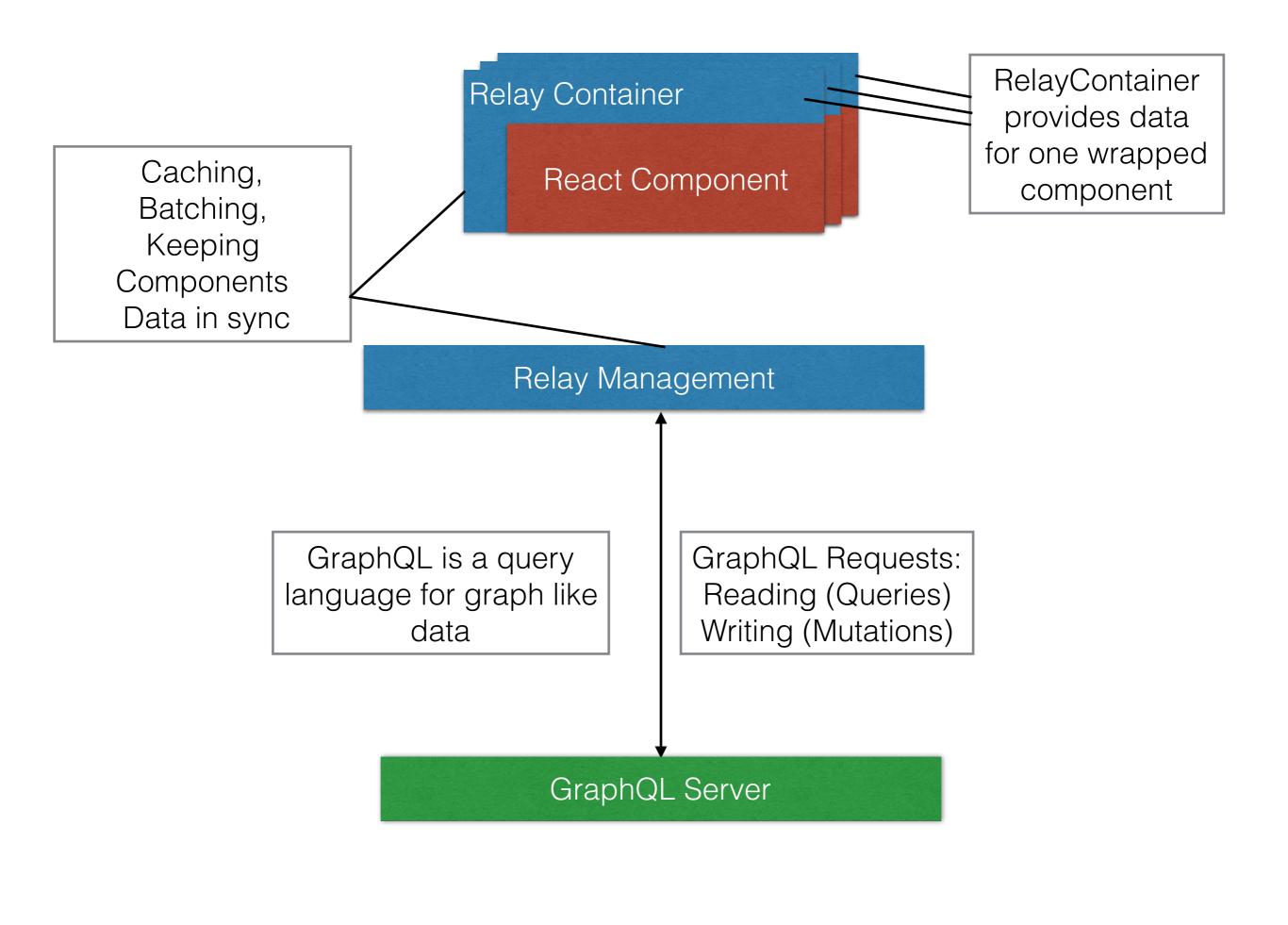
Now and the Future

When to use it

Practical Experience

Library for Client-Server data fetching

Declarative

Caching and request optimization

Released by Facebook several months ago

Based on a internal version used for several years

Relay Example

```
class User extends React.Component {
  render() {
    var {firstName, lastName, dob} = this.props.user;
    return (
      <span>User: {firstName} {lastName} born on {dob}</span>
    );
  }
}

export default Relay.createContainer(User, {
  fragments: {
    user: () => Relay.QL`
      fragment on User {
        firstName,
        lastName,
        dob
      }
    `,
  },
});
```

The power of abstraction

Fundamental idea: Solve data fetching on a abstract level

GraphQL (+ Relay Extensions) is a uniform API to retrieve data from the server in a controlled way.

Consequences

Features:
Declarative data requirements
Caching
Query-Optimising
Optimistic Updates

It frees developer of dealing with non-business tasks

It scales

Now and the Future

A mature project

More features planned:
Partial Loading of Data (Deferred Fragments),
Events from the server (Subscriptions),
Client-Only Data

Currently only available on React (Browser)

Soon on React Native

Server side rendering enabled by a third-party lib

Relay will get a Relay-Core independent of React
(generic-relay already available as an experiment)

When to use it

It's not a silver bullet: Mind the trade-off

Biggest Implication: GraphQL-Server

Do you really have a complicated domain model?

Do you really need client-side caching/full SPA?

Alternatives: E.g. Falcor

Use it, before you start reimplementing it (Caching etc)

Redux

Relay

Practical Experience

It takes time to setup and learn

It works

It's magic (good and bad)

Trying to debug errors is sometimes frustrating

GraphiQL is wonderful

Mutations are the hardest part currently

Still early: Not a lot blog posts/background infos

Relay does matter, because it provides a glimpse into the future

Thanks

Slides and links to everything:

https://andimarek.com/why-relay-matters-talk

twitter.com/andimarek