Building Data-driven React Applications with Relay, GraphQL, and Flux

Introduction

Samer Buna

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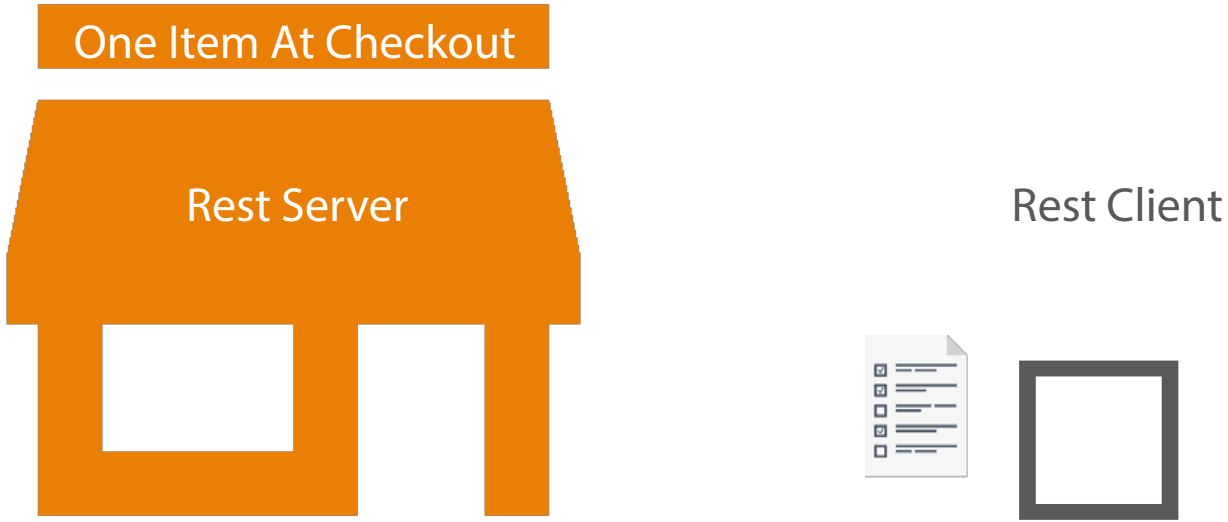
Why This Course



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/posts

/posts/1

/posts/1?includeComments=true

/posts?includeTags=true

/posts?limitTo=10&orderBy=date

/posts/random

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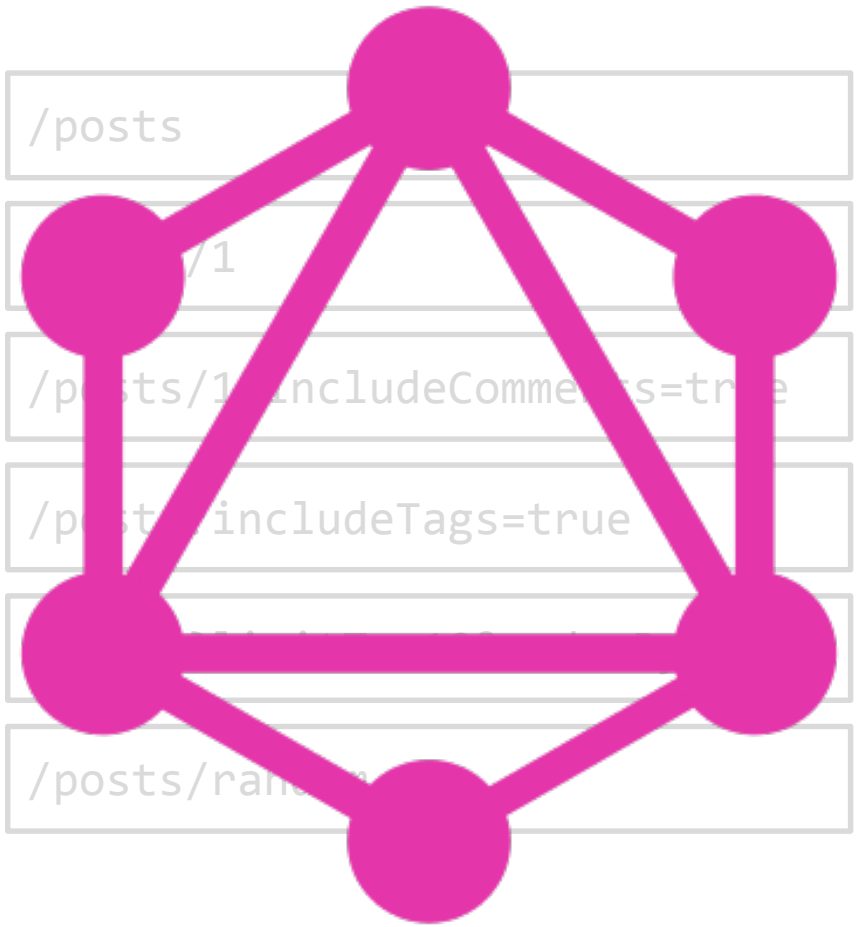

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Batching

Pagination

Caching

Error Handling

Rollbacks

Retries

Optimistic Updates

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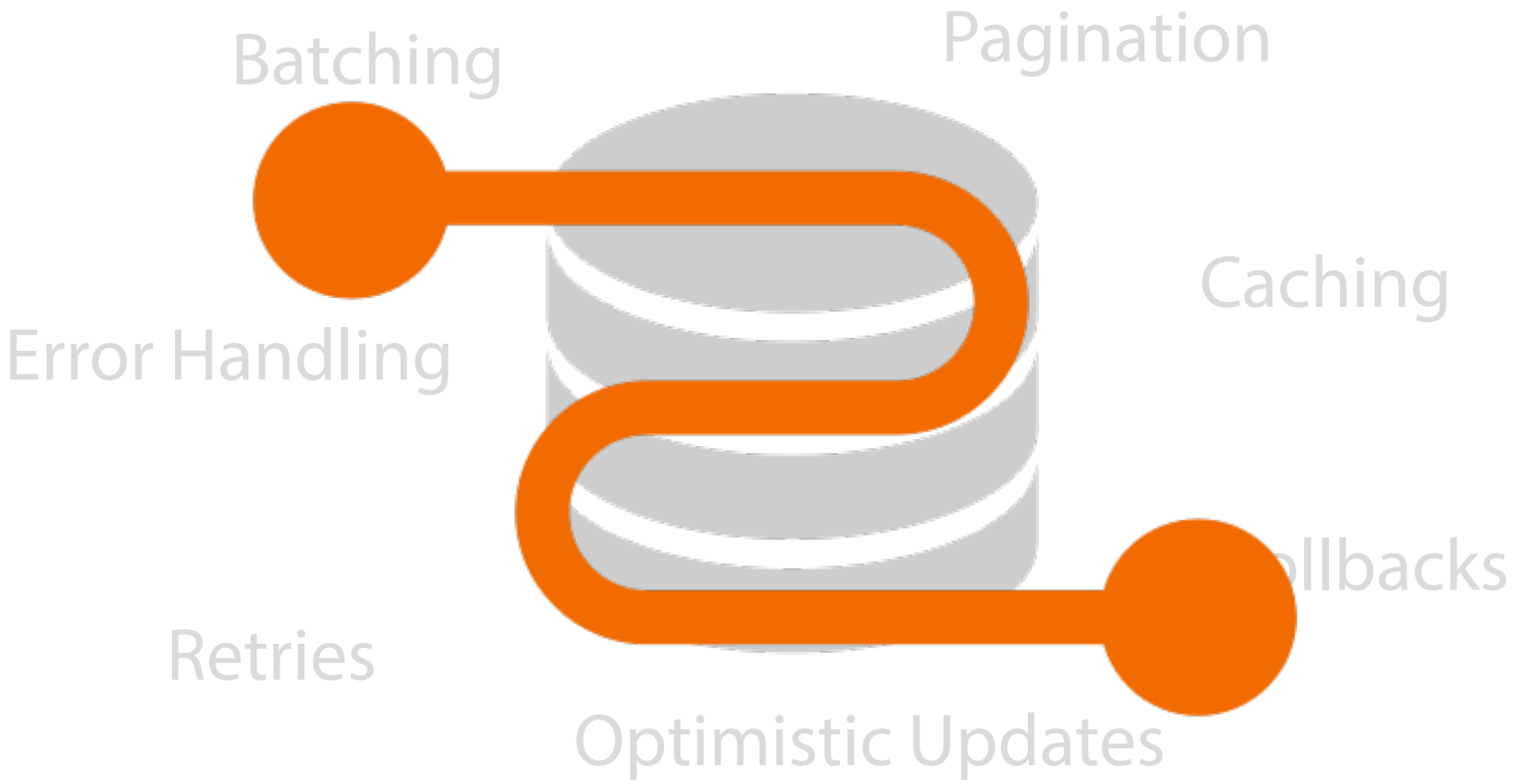

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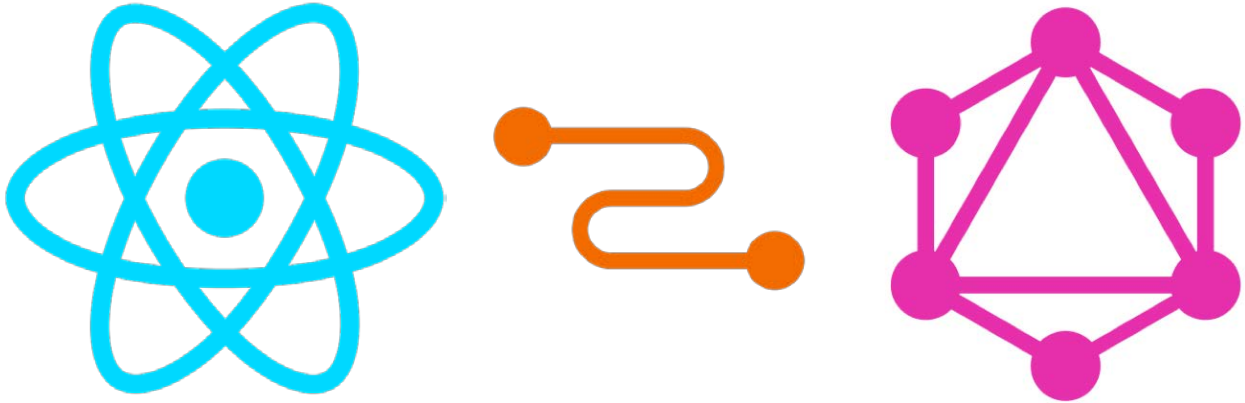

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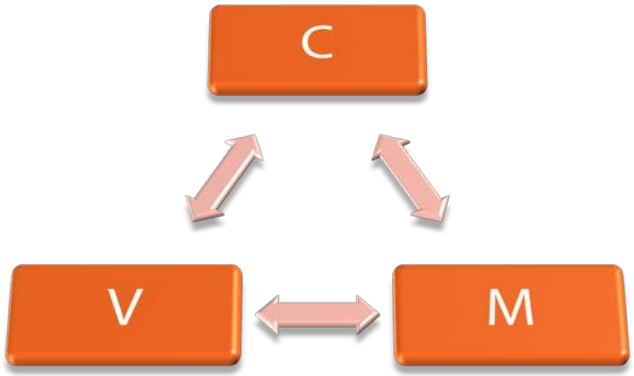
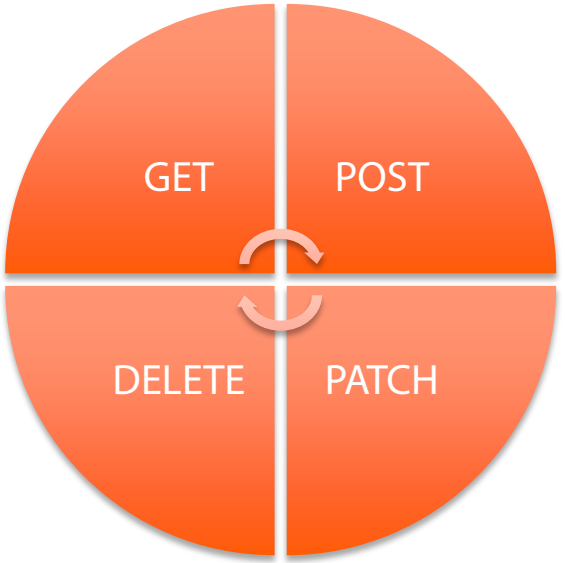
Can We Do Better?

Model View Controller



REST APIs



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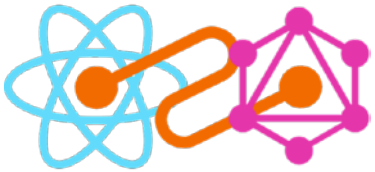

Build something from scratch

Small increments

Concepts by example

JavaScript (ES2015+)

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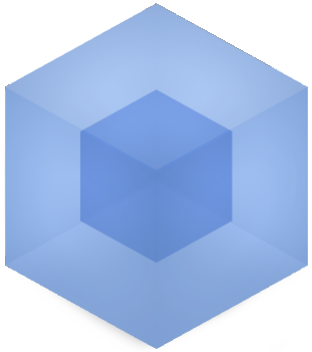
ES2015+, Node, and Express



Crash Courses Included

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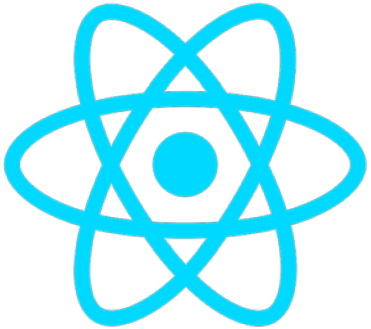
React.js



Components

Reusable

Composable

Stateful

Write HTML with JavaScript

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HTML in JS? Why??

Data => HTML

PHP/JSP server-side

Send only the Data to the client

Enhance HTML: Loops, Conditionals, …

Generate HTML with JavaScript

Virtual DOM

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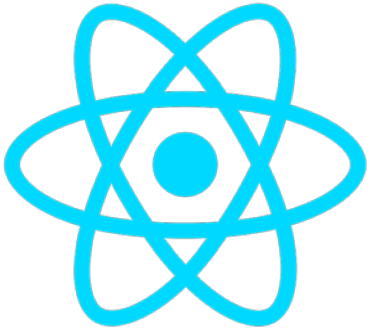
React.js: Disadvantages



Give up HTML?

Integration with other libraries

What about the M and the C

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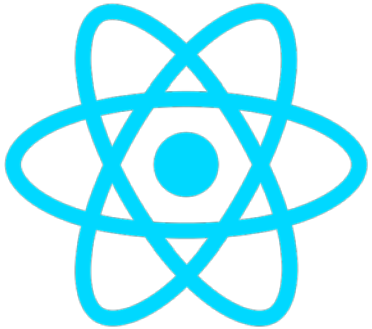
React.js: Disadvantages



~~Give up HTML?~~ **JSX**

~~Integration with other libraries~~ **Lifecycle Methods**

~~What about the M and the C~~ **- RGR**

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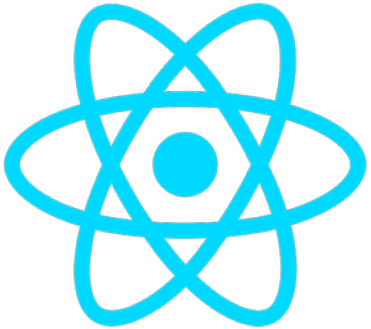
React.js: Advantages



- Powerful and Flexible JavaScript
- No learning curve
- The Virtual DOM performance
- Reactive updates
- Not only for the browser
- React Native

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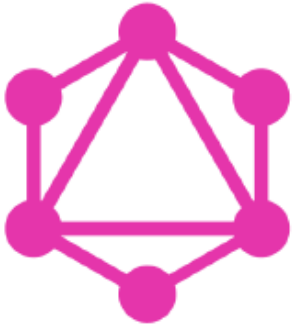
GraphQL



JSON without the values

person: { name: … , address: ... }

No custom endpoints

Clients ask exactly what they want

One endpoint to rule them all

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@samerbuna

#REST APIs are now #RestInPeace APIs | Long live #GraphQL

RETWEETS	FAVORITES
18	18

9:30 AM - 17 Sep 2015

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Flux

No data binding, one-way data flow

Views do not change the models

A single dispatcher

Views listen, React reacts

What's wrong with MVC?

Constraints are good

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Relay

Flux++

No separation of views and models

Data requirements expressed with GraphQL

Fetch and make data available as props

Updates (Mutations)

Efficiency, consistency, and error handling

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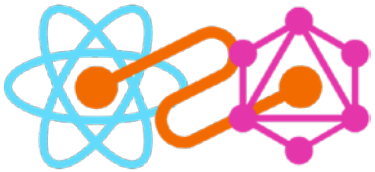
What We Are Going to Build



Educational resources for the RGR stack

Users can add new resources (links)

See the one big list

Search

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