

Build Better APIs with GraphQL

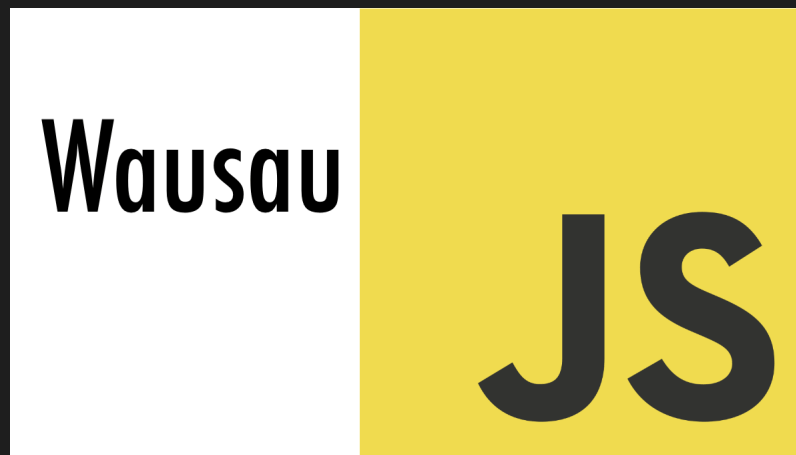
I'm Jack



Senior Programmer / Analyst



Founder - Wausau.js



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GraphQL

A query language for APIs

Journey to GraphQL



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The Plan™

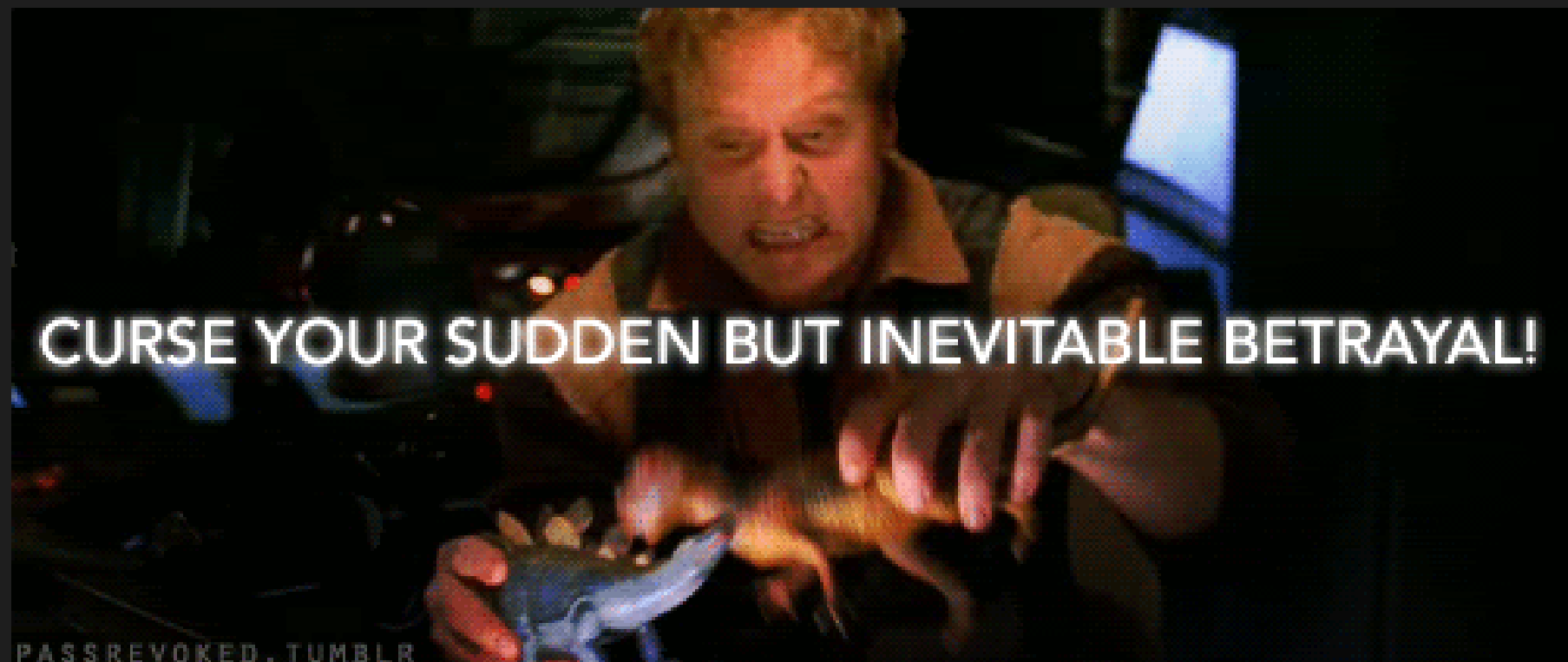
- Microservices
- Event Sourcing
- Http
- Websockets

Success!



Photo by [Andreas Klassen](#) on [Unsplash](#)

But then...



[Giphy](#)

Problems...

- Hundreds of Microservices
- Distributed Side Effects
- Many Similar
- Hard to Organize
- Slowing Progress

GraphQL



Photo by [Lori M. Sousa](#) on [Unsplash](#)

Languages

- JavaScript
- C#
- Clojure
- Elixir
- Erlang
- Go
- Groovy
- Java
- PHP
- Python
- Scala
- Ruby

Used by

- Github
- Facebook
- Airbnb
- Paypal
- Shopify
- The New York Times
- Twitter
- Yelp

Don't miss GraphQL Summit, Oct 30 - 31 in San Francisco | [See the Lineup >](#)

APOLLO

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[Platform](#)

[Pricing](#)

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THE APOLLO DATA GRAPH PLATFORM

Do GraphQL Right

A single versatile query system to replace a patchwork of legacy APIs, with all the devtools and cloud services you need to run GraphQL at scale

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```
type Query {  
  book(id: ID!): Book  
  series(name: String!): [Book]!  
}  
  
type Mutation {  
  createBook(input: CreateBookInput!): Book  
  deleteBook(id: ID!): Boolean  
}  
  
type Subscription {  
  onBookChanged: Book  
}
```

Subscriptions

Schema

```
type Book {
  author: Author!
  characters: [Character]!
}

type Query {
  book(id: ID!): Book
  series(name: String!): [Book]!
}

type Mutation {
  createBook(input: CreateBookInput!): Book
  deleteBook(id: ID!): Boolean
}
```

Resolvers

```
export default {
  Book: {
    author: (parent, args, context, info) => {},
    characters: (parent, args, context, info) => {},
  },
  Query: {
    book: (parent, args, context, info) => {},
    series: (parent, args, context, info) => {},
  },
  Mutation: {
    createBook: (parent, args, context, info) => {},
    deleteBook: (parent, args, context, info) => {},
  },
}
```


Query

```
query BOOK {  
  book(id: 1) {  
    id  
    title  
    series  
    author {  
      name  
    }  
  }  
}
```

Schema

```
type Book {  
  id: ID!  
  title: String!  
  pages: Int!  
  publishedYear: Int!  
  author: Author!  
  characters: [Character]!  
}  
  
type Author {  
  id: ID!  
  name: String!  
  born: Date  
  died: Date  
  books: [Book]!  
}  
  
type Query {  
  book(id: ID!): Book  
  series(name: String!): [Book]!  
}  
  
type Mutation {  
  createBook(input: CreateBookInput!): Book  
  deleteBook(id: ID!): Boolean  
}
```

Resolvers

```
export default {  
  Book: {  
    author: (parent, args, context, info) => ({  
      name: 'Jack',  
    }),  
    characters: (parent, args, context, info) => {},  
  },  
  
  Query: {  
    book: (parent, args, context, info) => ({  
      id: 1,  
      title: 'GraphQL For Fun and Profit',  
      series: 'Languages',  
    }),  
    series: (parent, args, context, info) => {},  
  },  
  
  Mutation: {  
    createBook: (parent, args, context, info) => {},  
    deleteBook: (parent, args, context, info) => {},  
  },  
}
```

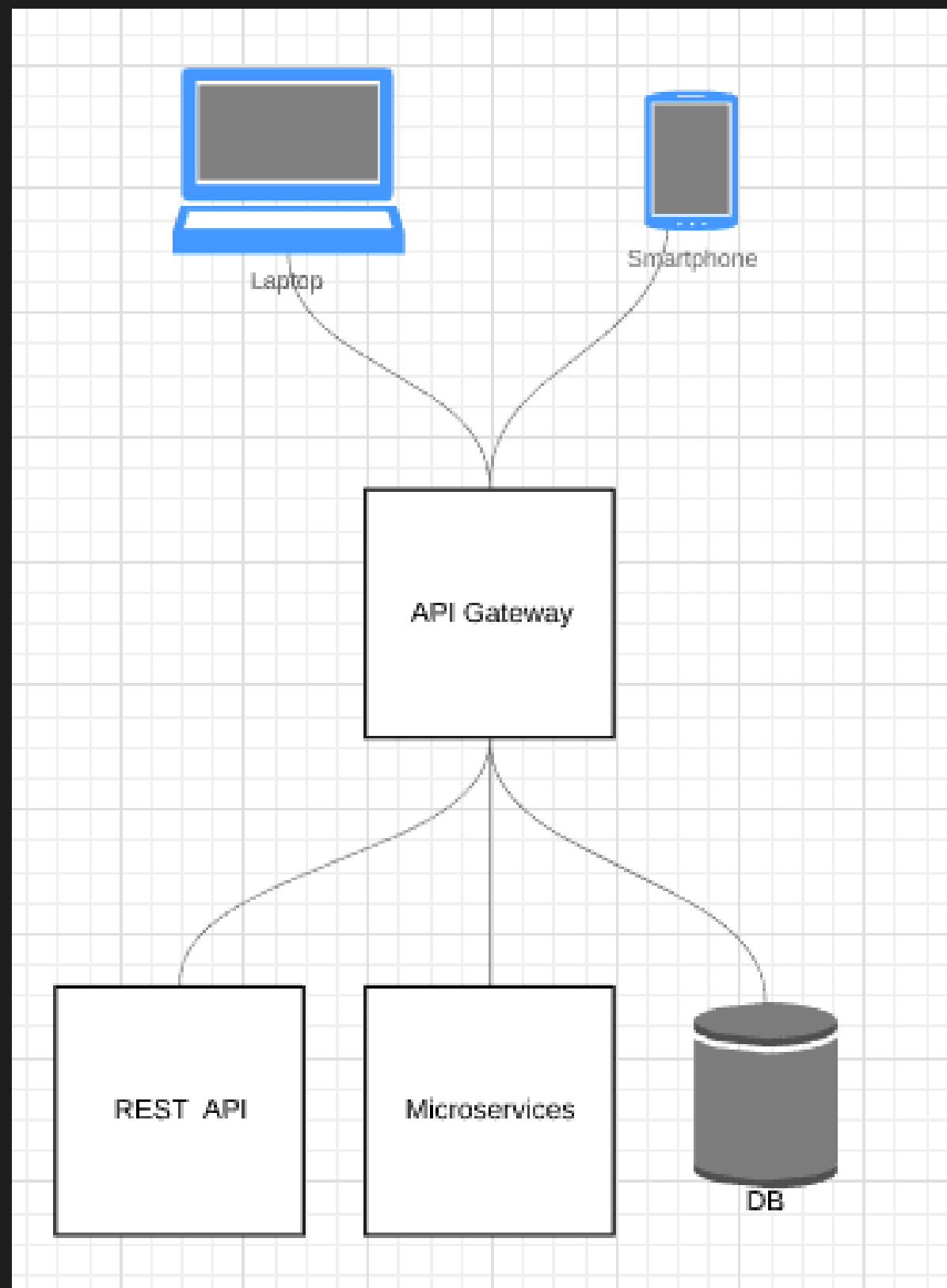
Demo

GraphQL Playground

Benefits

- Easier
- Reduced Code
- Backend Agnostic
- Client Agnostic
- **Directives**
- Dev Tools

How can I GraphQL?



Apollo Client

[apollo-link-rest](#)

Resources

- [Repository](#)
- [GraphQL Specification](#)
- [GraphQL: The Documentary](#)
- [How To GraphQL](#)
- [Apollo](#)

Questions?

Thanks!

bit.ly/cwitic-deck

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