

GRAPHQL

DANA HART

NORTHWESTERN MUTUAL

@DMHART13

@REACTJSWI

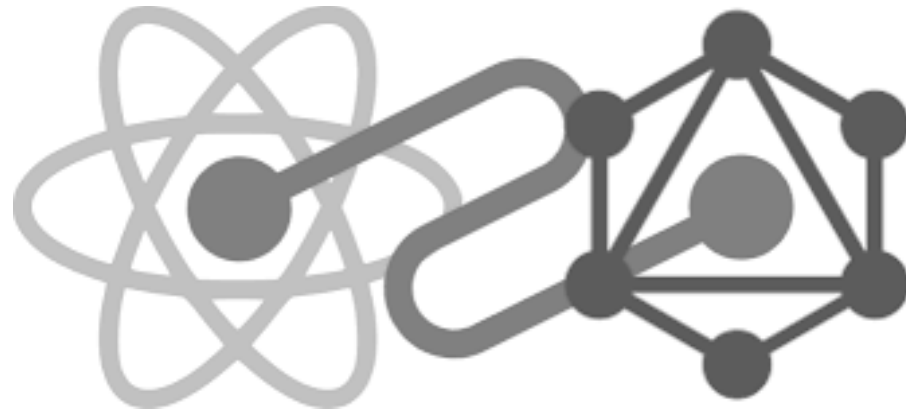
THANK YOU FACEBOOK

- Leading tech company
- Trailblazing
- Tested via billions of users
- F8 announced the future



MEET THE REACT FAMILY

- React
- React Native
- Redux
- Relay
- GraphQL



WHAT IS GRAPHQL

- Query language for graph data
- Interface between client and server for data fetching and manipulations
- Query string sent to a server to be interpreted and fulfilled, returns JSON
- Sits in the application layer



DESIGN PRINCIPLES

Hierarchical

Product-centric

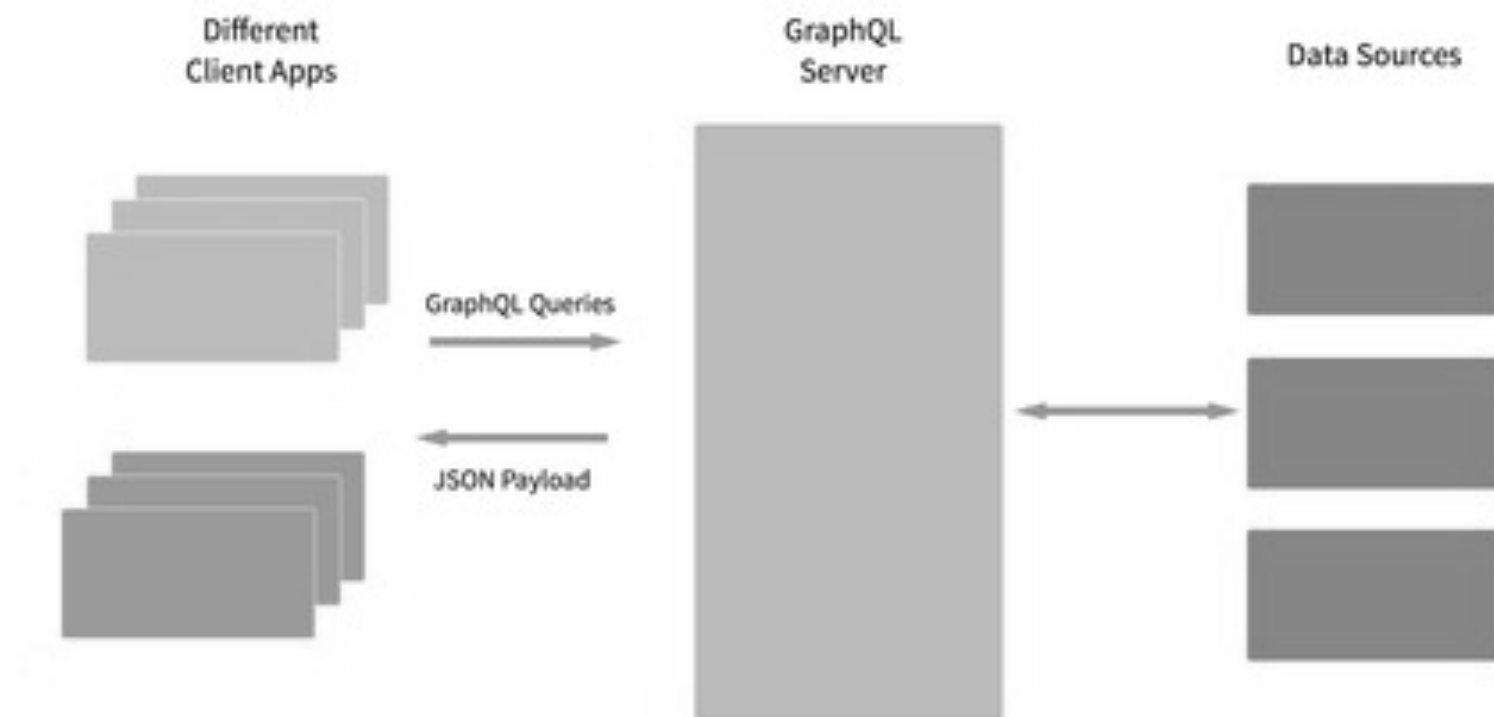
Strongly typed

Structured

Client-specific

Backwards compatible





SAMPLE JSON

```
{  
  "1": {  
    "id": "1",  
    "name": "Dan"  
  },  
  "2": {  
    "id": "2",  
    "name": "Marie"  
  },  
  "3": {  
    "id": "3",  
    "name": "Jessie"  
  }  
}
```



QUERY & RESULT

```
{  
  user(id: "1") {  
    name  
  }  
}
```

```
{  
  "data": {  
    "user": {  
      "name": "Dan"  
    }  
  }  
}
```


STRONGLY TYPED

```
var userType = new graphql.GraphQLObjectType({  
  name: 'User',  
  fields: {  
    id: { type: graphql.GraphQLString },  
    name: { type: graphql.GraphQLString },  
  }  
});
```

SCHEMA

```
var schema = new graphql.GraphQLSchema({
  query: new graphql.GraphQLObjectType({
    name: 'Query',
    fields: {
      user: {
        type: userType,
        args: {
          id: { type: graphql.GraphQLString }
        },
        resolve: function (_, args) {
          return data[args.id];
        }
      }
    }
  })
});
```



DEMO

