

GraphQL Ecosystem and Tools



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GraphQL is a specification that is
language agnostic



GraphQL Client



What Can a GraphQL Client Do ?



Handles sending requests(queries) to the server and receiving the response(JSON) from the server



Integrates with your view components and updates the UI



Caching Query Results



What Can a GraphQL Client Do?



Error Handling and schema validation



Local State Management and Caching



Pagination



Popular GraphQL Clients



Apollo Client



Relay

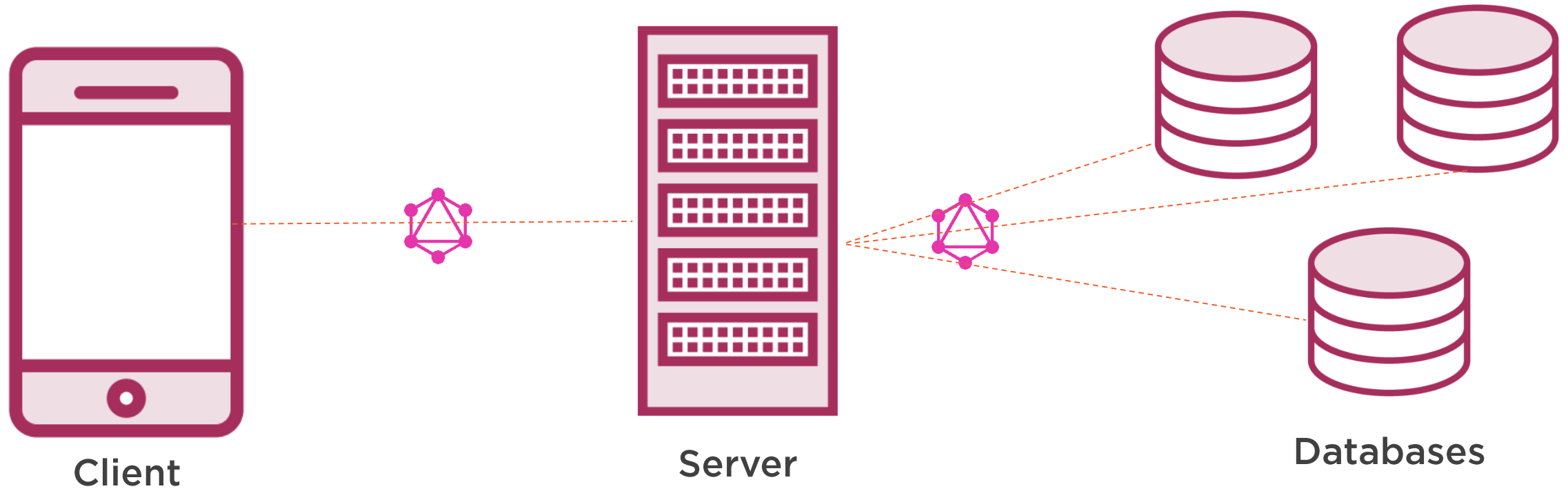
GraphQL Server



In simple terms, a GraphQL Server receives the query from the client and responds back



GraphQL Architecture

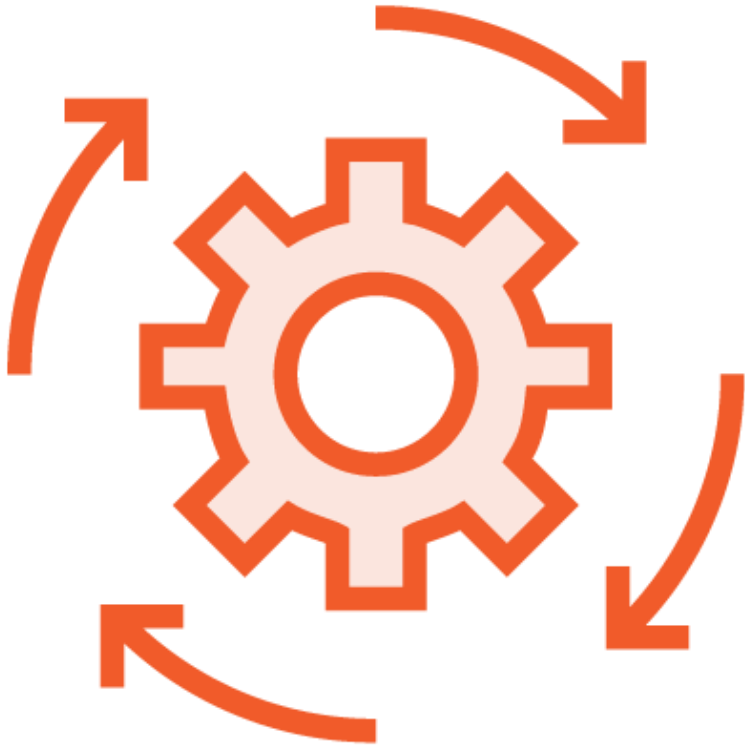


Resolvers

Resolver function is a function that resolves a value for a type/field in the GraphQL Schema.



GraphQL Execution Engine



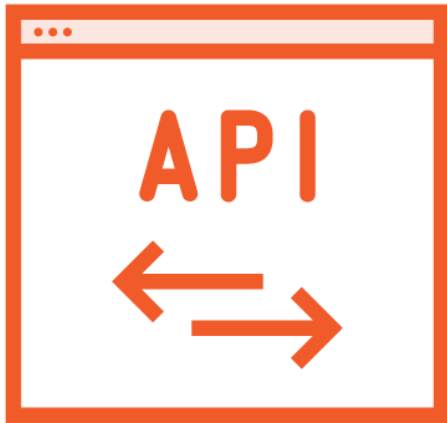
Parses query from client

Validate schema

Returns JSON response

Executes resolvers for each field

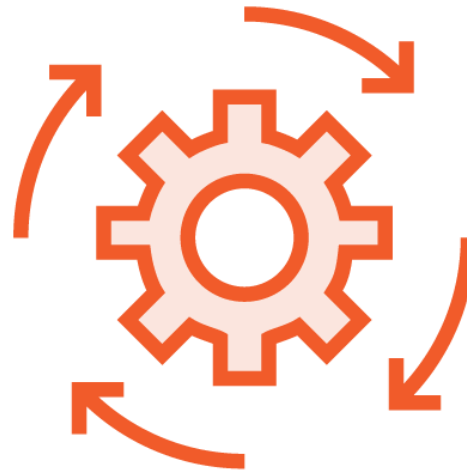
GraphQL Server



Schema and
Resolver Functions



Network Layer



GraphQL Execution
Engine



Batched
Resolving

Popular GraphQL Server Libraries

Apollo Server

Express GraphQL

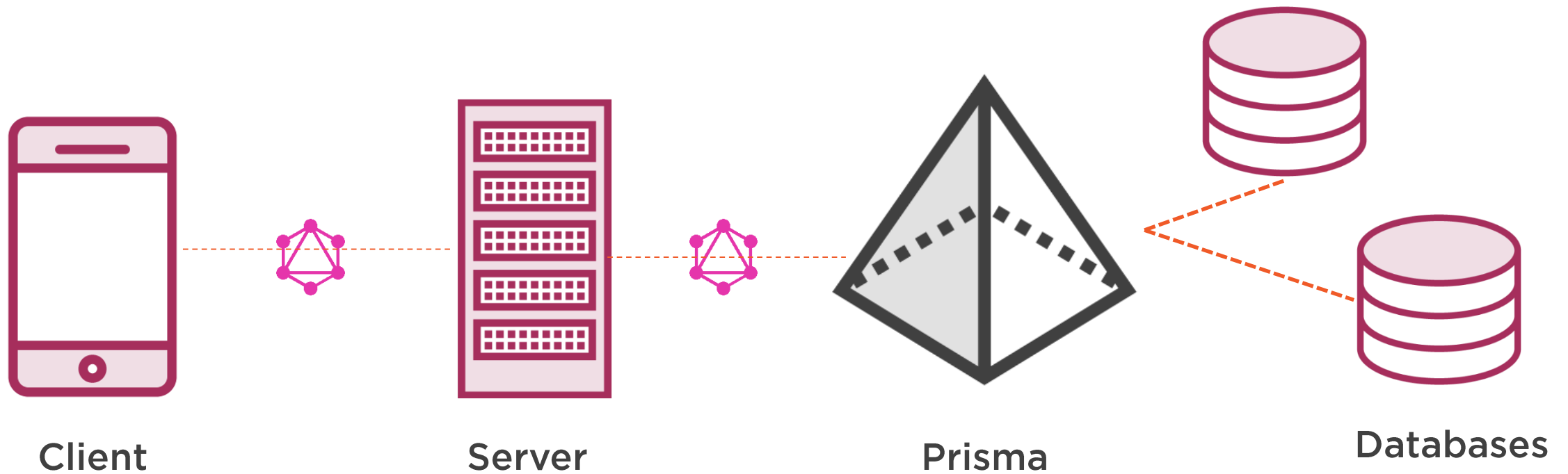
GraphQL Yoga



Database to GraphQL Server

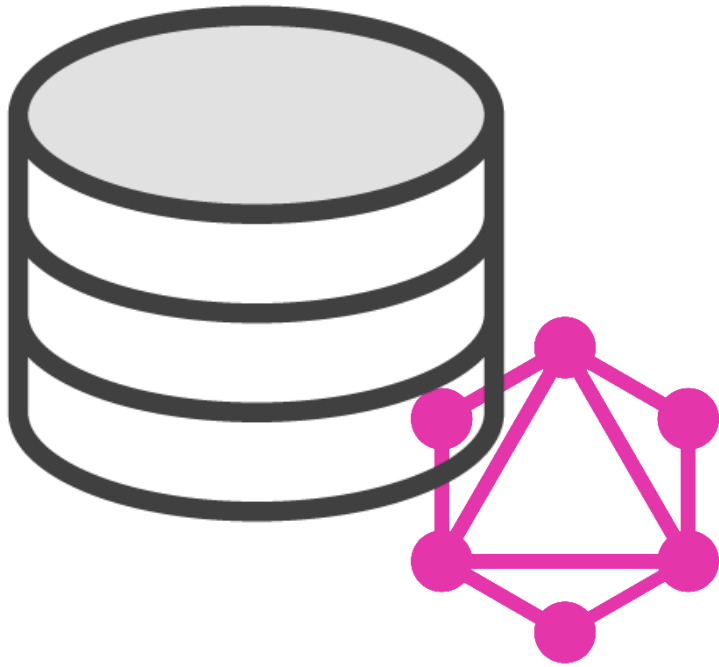


GraphQL Backend Architecture



Prisma sits between the GraphQL Server and the Database

Prisma



Replaces traditional ORMs and simplifies database workflows

Data access layer that makes it easy for API server to talk to DB through Prisma

Type-safe database access

GraphQL subscriptions

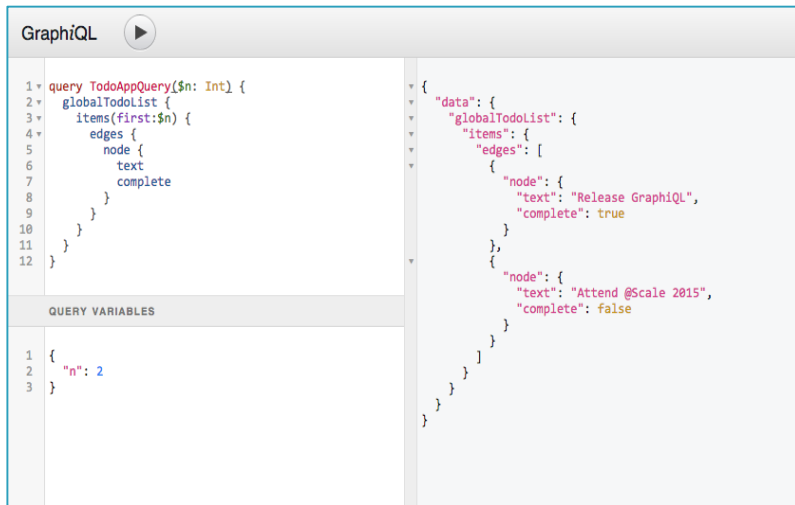
Powerful visual data management available with Prisma admin



Tools



GraphQL

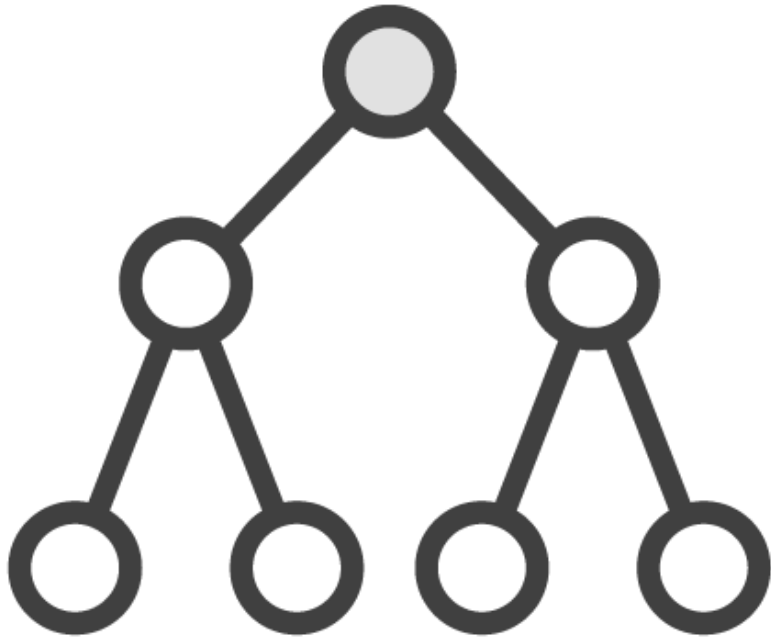


An in-browser IDE for writing, validating and testing GraphQL queries

- Write queries to retrieve data
- Perform mutations
- Live syntax and validation errors highlighted



GraphQL Voyager

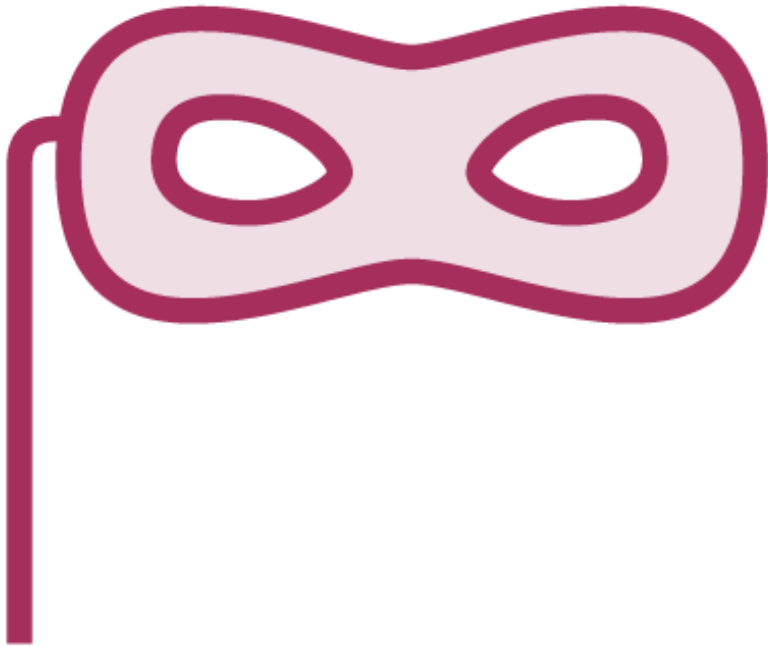


Represents any GraphQL API as an interactive graph

Perfect to explore complex GraphQL APIs

Great tool during design of data model

GraphQL Faker



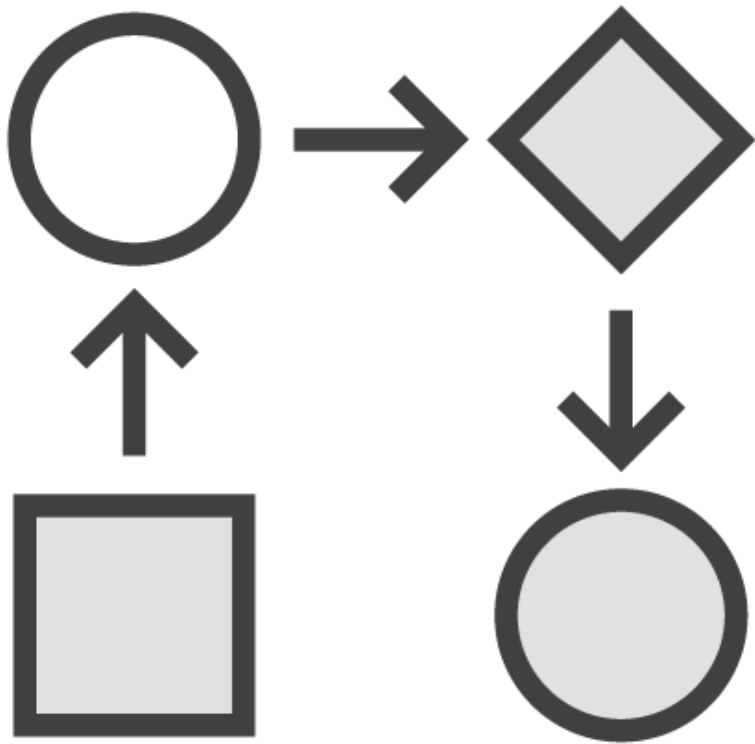
Mock your API with realistic data from `faker.js`

No additional coding required

Useful for testing and coding against future APIs



GraphQL Visual Editor



Create schemas by joining visual blocks

GraphQL editor transforms them into code

Don't need to write any code

Perfect to understand any GraphQL Schema



The GraphQL ecosystem is
growing at an amazing
speed with thousands of
contributors today



Summary



GraphQL Ecosystem & Tools

- Overall Architecture
- GraphQL Client
- GraphQL Server
- Database to GraphQL Server
- GraphQL Tools

