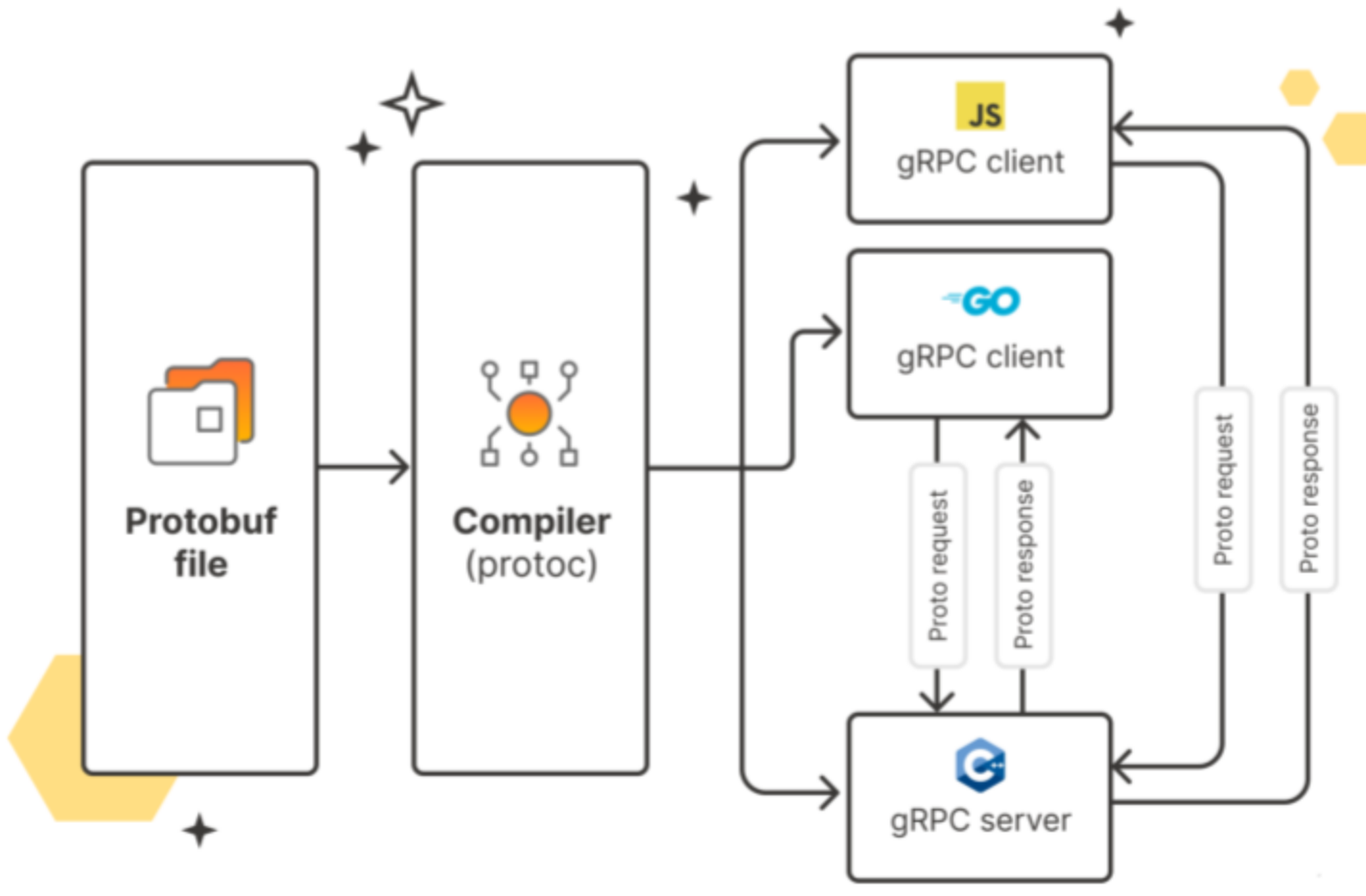
What is gRPC?



POSTMAN

gRPC is a **schema-driven framework** that facilitates service-to-service communication in distributed environments.

It is a **language-agnostic implementation of the RPC** (Remote Procedure Call) protocol that supports streaming and strongly typed service contracts through its use of HTTP/2 and Protocol Buffers (Protobuf).

gRPC defines **four primary service methods** that are used for remote procedure calls (RPCs) between clients and servers. These methods represent the **basic communication patterns** between clients and servers.

Unary RPC: In a unary RPC, the client sends a single request to the server and waits for a single response. This one-to-one communication pattern is the simplest form of RPC, and it is similar to traditional HTTP requests.

Server streaming RPC: In a server streaming RPC, the client sends a single request to the server and receives a stream of responses in return.

Client streaming RPC: In a client streaming RPC, the client sends a stream of requests to the server and waits for a single response. This method is useful when the client needs to send a series of data to the server, and the server responds after processing the entire stream of requests.

Bidirectional streaming RPC: In a bidirectional streaming RPC, both the client and the server can send a stream of messages to each other concurrently. This enables real-time communication between the client and server, with the ability to send and receive messages as the need arises.

Thanks for reading!

🚀