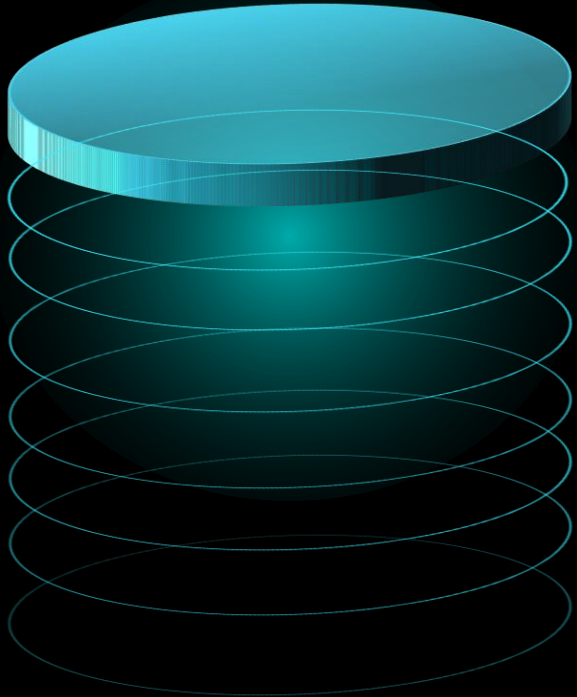
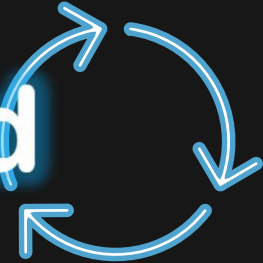
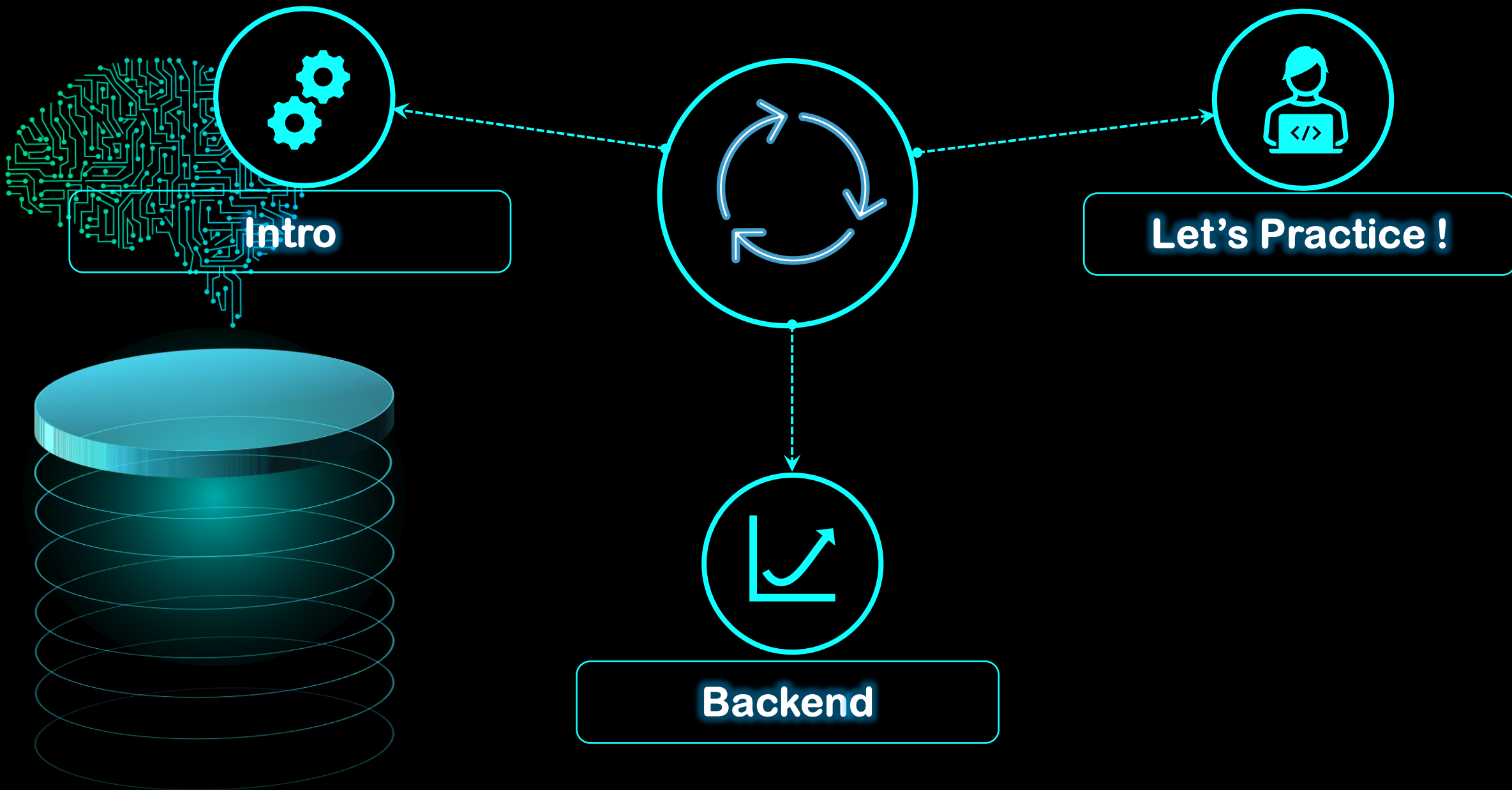


Web Programming

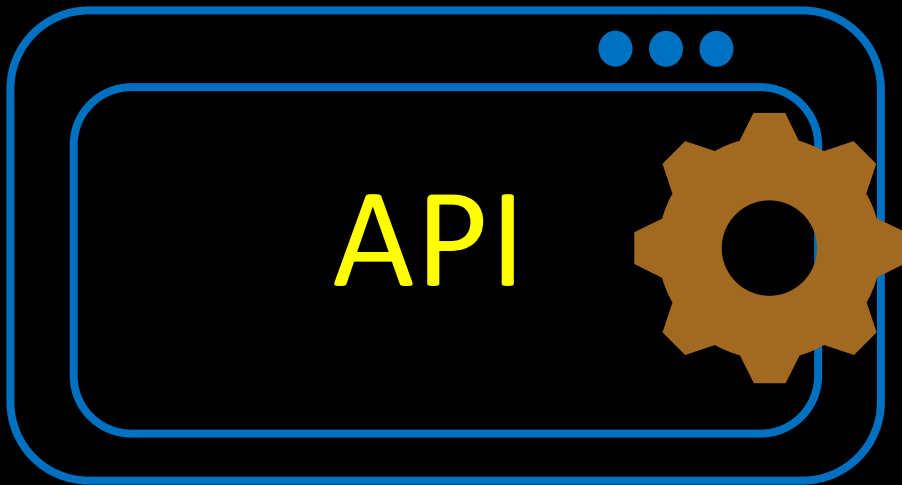


Backend





API?



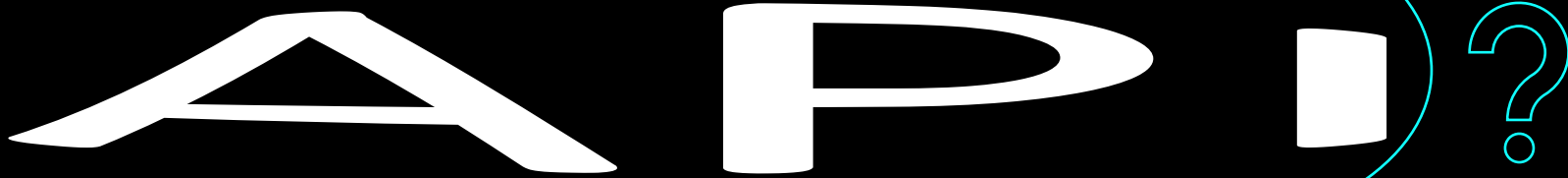
Application Programming Interface

API?

Application Programming Interface



Any software that has a specific purpose and function

A stylized logo for API. The letters 'A' and 'P' are large and white. The letter 'I' is a small white rectangle. To the right of the 'I' is a large white question mark. The entire logo is enclosed in a thin white rounded rectangular border.

Application Programming Interface



Contract between two applications that dictates how they talk to each other using requests and responses

API?

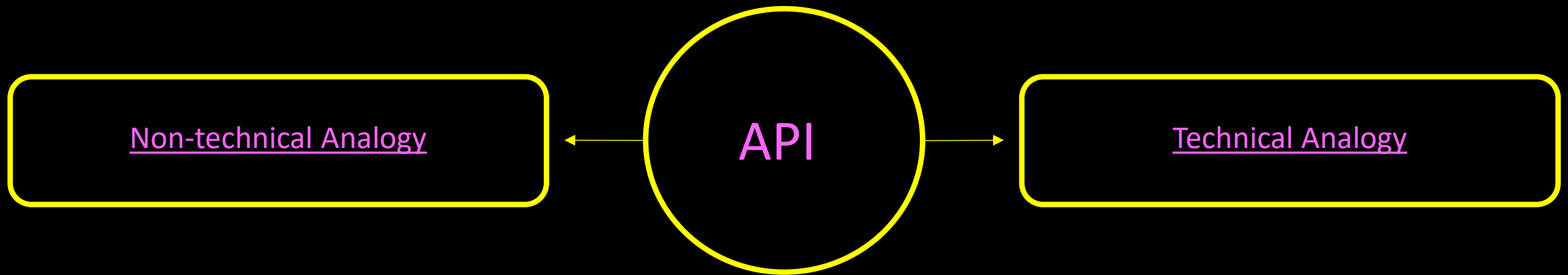
Application Programming Interface



A way for different applications to communicate with each other

API

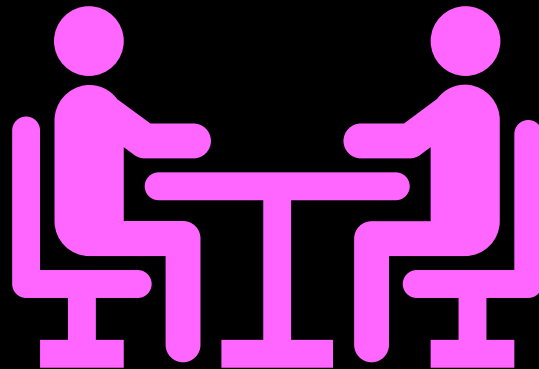
API?



API



Non-technical Analogy



Call

Request

Response

API ?

Technical Analogy

API ?

Apple Weather
App

Apple decided to set up weather monitoring stations.

These weather monitoring stations are very expensive.

Apple weather app store all data coming from stations.

No one can access Apple weather's data directly.

Apple created Weather.com API to share the data with people.

Anyone can access Apple weather's data through this API but in specific way that weather.com allows.

Apple can populate its weather data through this API.

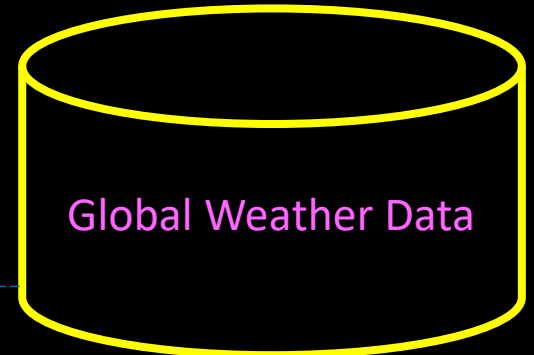
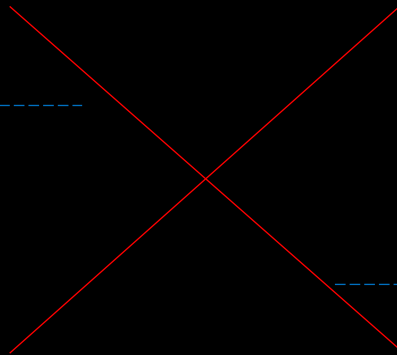
API



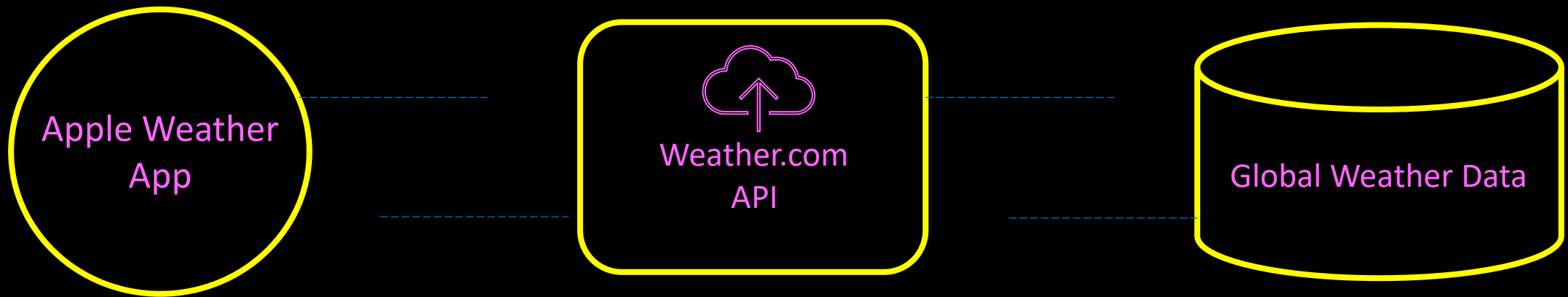
Apple Weather
App

Global Weather Data

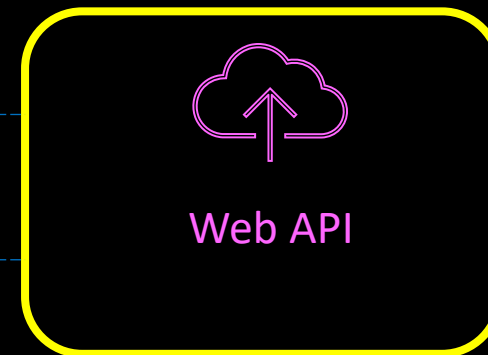
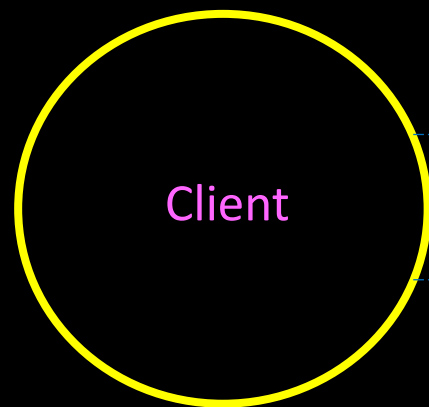
API?



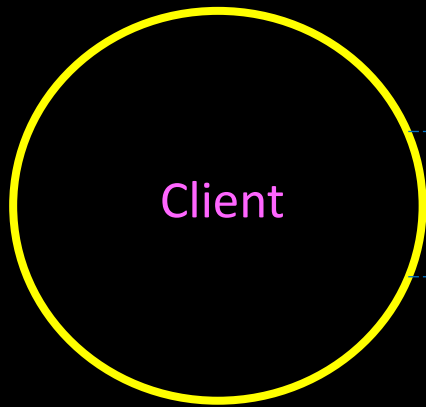
API?



API ?



API

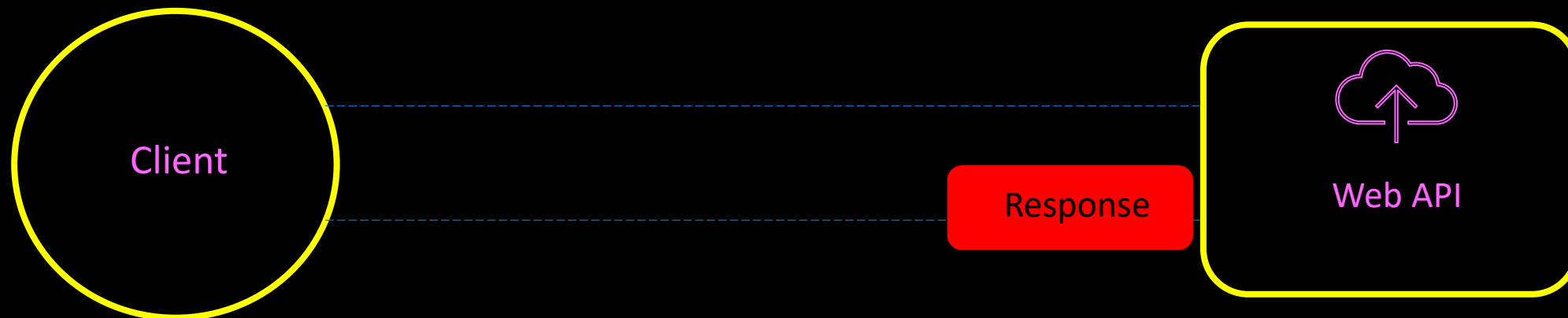


Request

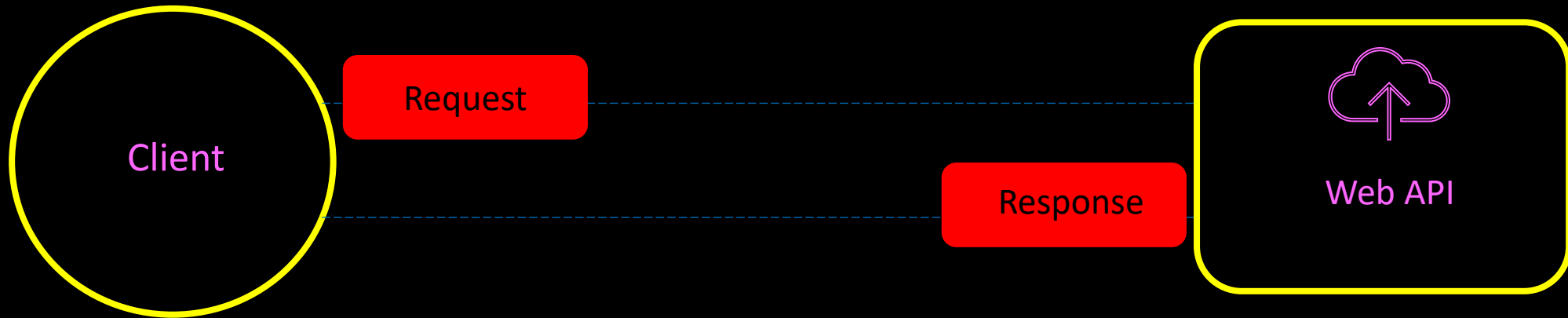


Web API

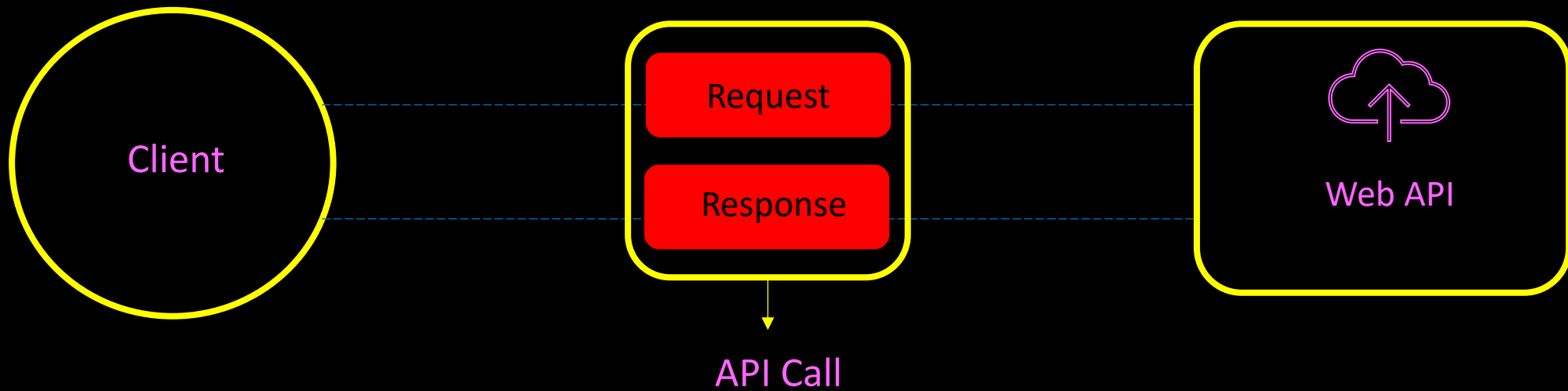
API ?



API



API?



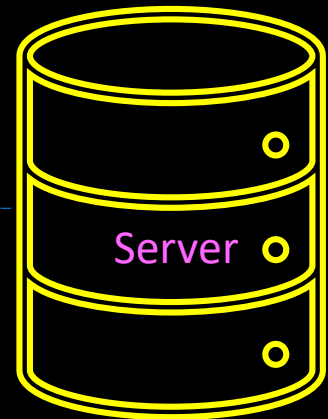
HTTP



Hyper Text Transfer Protocol



Enable communication between client and server



Request



Anatomy

URL / URI

Method Type

Header

Body

Request



Anatomy

URL / URI

Uniform Resource Identifier

Method Type

Header

Body

Request



Anatomy

URL / URI

Method Type

Header

Body

Many types :

GET

POST

PUT

DELETE

Request



Anatomy

URL / URI

Method Type

Header

Body

Content type:
What kind of content are you
sending through this request

Request



Anatomy

URL / URI

Method Type

Header

Body

It is where the content lie.
Some methods have body and
other don't.

Request Method ?

HTTP Verbs

Can have one of handful of predefined values.

GET POST PUT HEAD
DELETE
PATCH OPTIONS
TRACE
CONNECT

Request Method ?

HTTP Request is referred to by the value of its request method

POST

GET

UPDATE

DELETE

C

R

U

D

GET Request ?

GET requests are only used to request data (not modify)

GET request can be bookmarked

GET request can be cached

GET request is used to request data from a specified resource

GET request should never be used when dealing with sensitive data

GET request have length restrictions

GET request remain in the browser history

The data sent to the server with GET is stored in the request header

POST Request ?

POST request is used to send data to a server to create/update a resource

POST request is never cached

POST request cannot be bookmarked

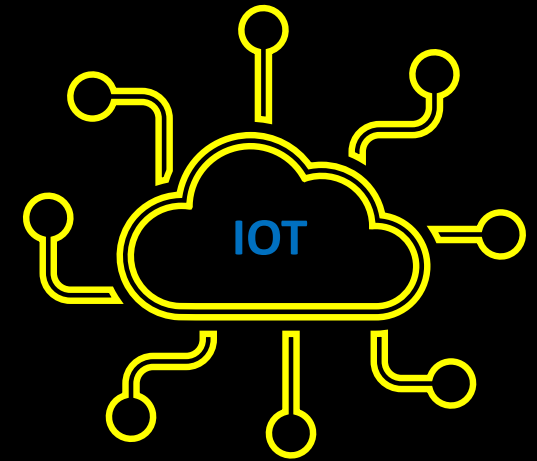
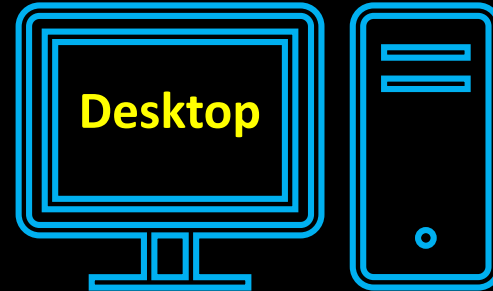
POST requests have no restrictions on data length

POST request does not remain in the browser history

The data sent to the server with POST is stored in the request body

Backend?

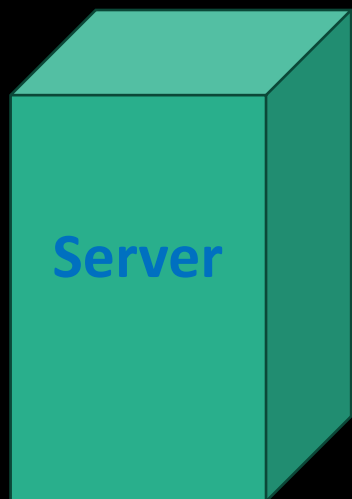
It isn't restricted to only one platform



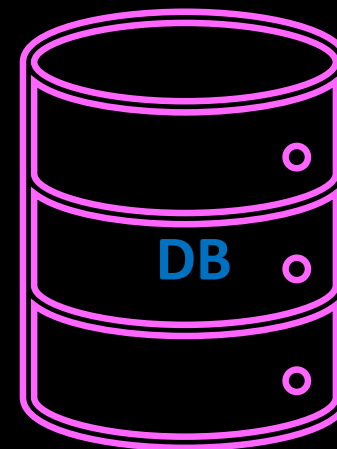
Backend?

Backend Service

Backend?



Backend Service



PHP

?

Variables

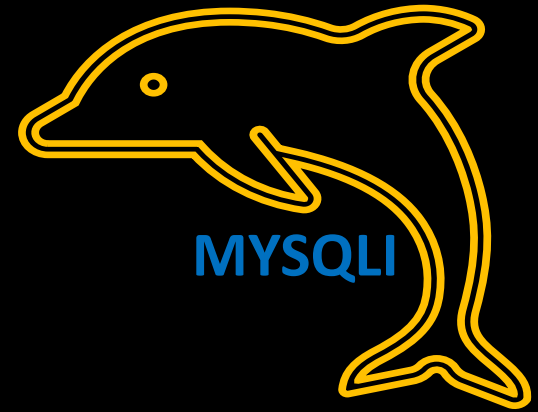
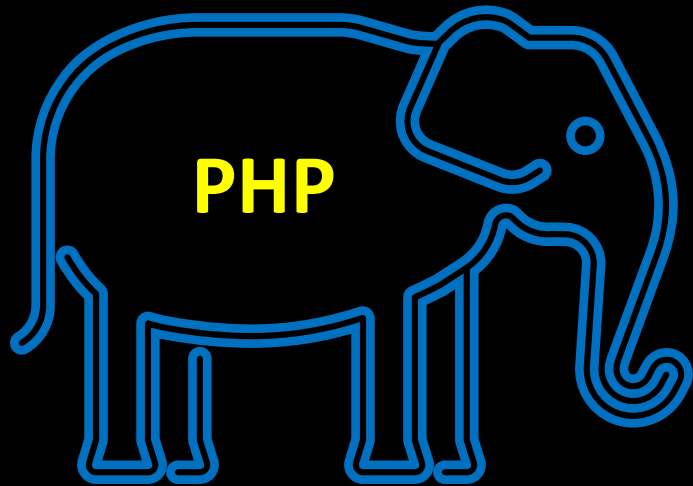
Arrays

Superglobals

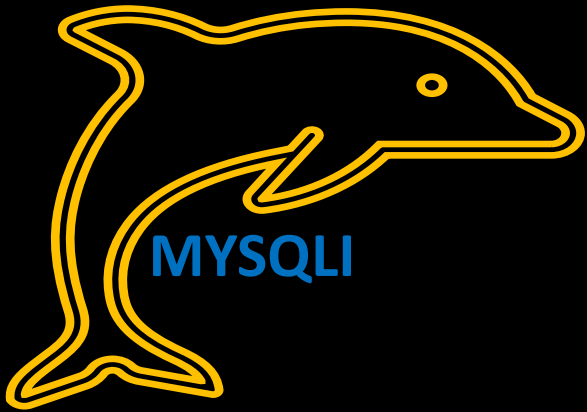
PHP

?

MYSQLI vs PDO



PHP?



using built-in functions

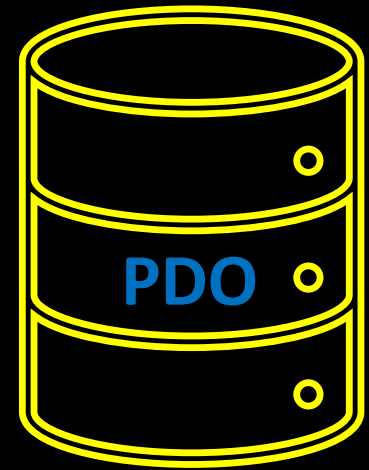
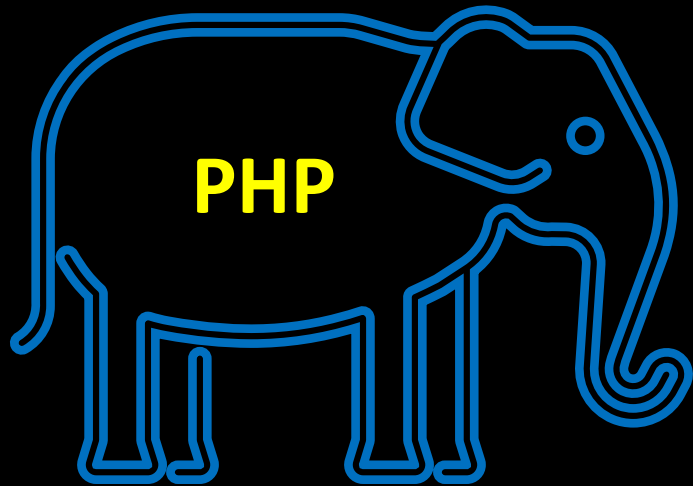
using OOP

Support MySQL

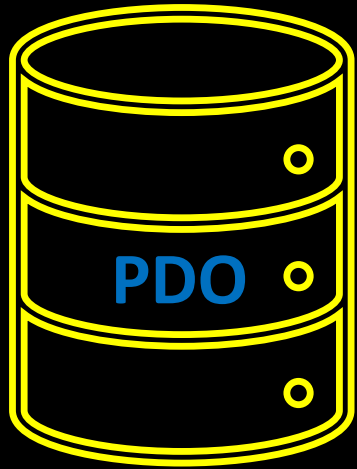
PHP



MYSQLI vs PDO



PHP?



using OOP

Support most databases (12 DBs)

Framework connection uses PDO

PHP

?



