HTTP

HYPERTEXT

TRANSFER

PROTOCOL

WHAT IS IT?

- A **protocol** to transfer **resources**
- Resource means **file** (HTML, CSS, images, JS, ...)
- Based on a system of **query / response**
- Between 2 machines, **a client and a server**
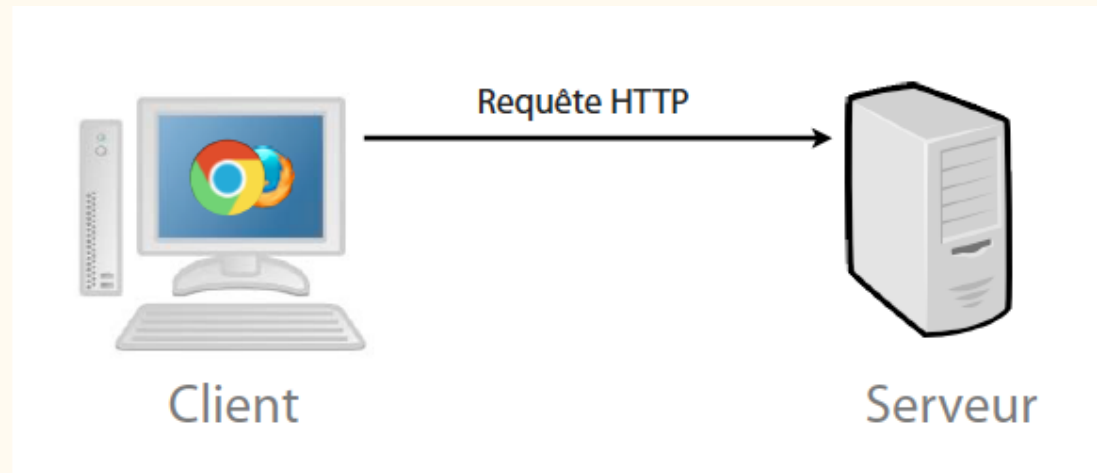
CLIENT

Client

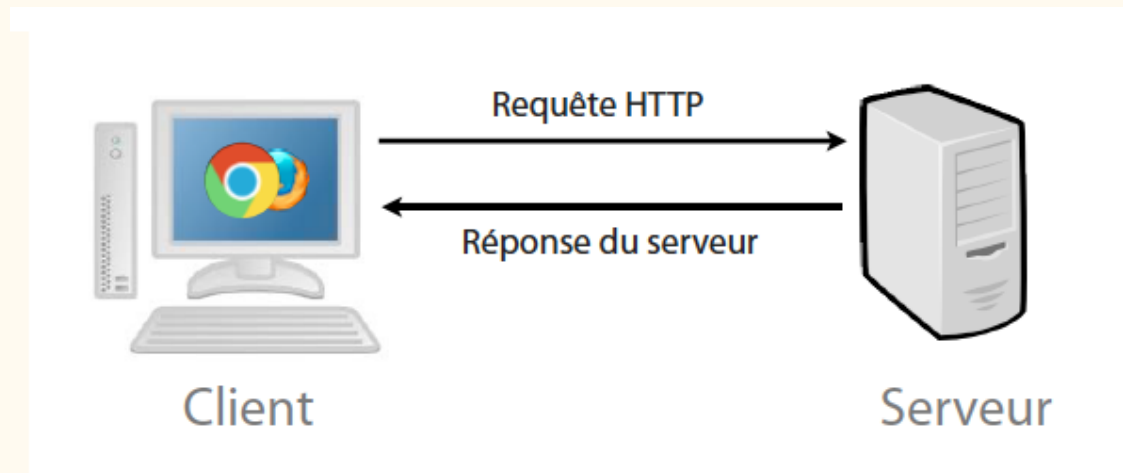# SERVER

Serveur

CLIENT - SERVER

A client (browser) sends a request to a server
ex: give me the page http://google.com

CLIENT - SERVER

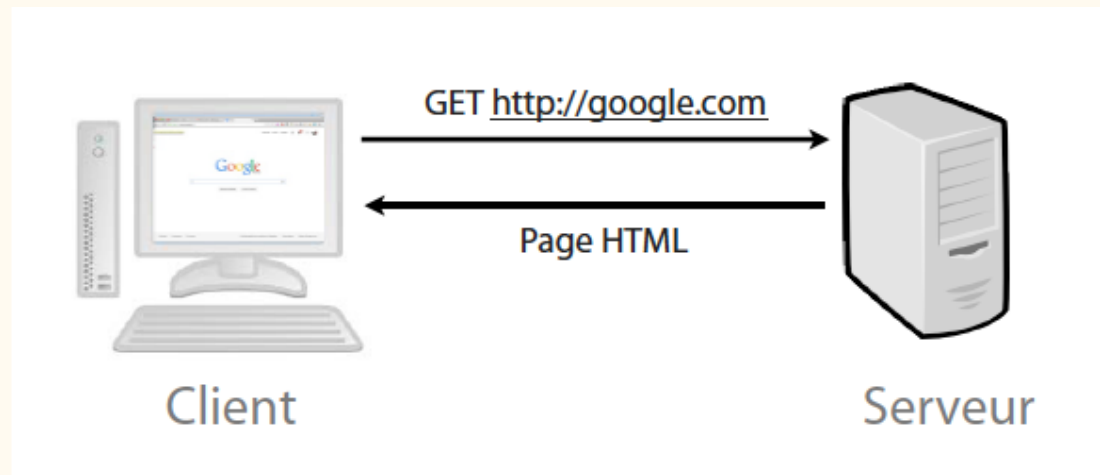The server treats client's request and send him back the response
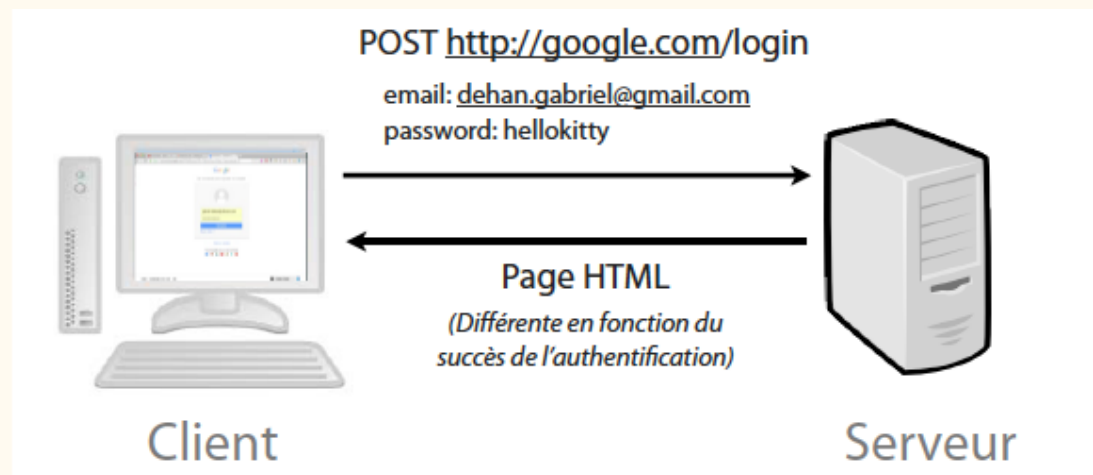
CLIENT & SERVER CHAT TOGETHER

HTTP REQUESTS

TYPE OF REQUEST

- **GET**: get a page => "I want the page http://google.com"
- **POST**: send data => "Here are my email and password, I want in!"
- **PUT**, **PATCH**: partially or totally replace data => "Change my password please"
- **DELETE**: delete data => "Delete my account! Your service sucks""

GET REQUEST

POST REQUEST

POST http://google.com/login

email: dehan.gabriel@gmail.com
password: hellokitty

Page HTML
(Différente en fonction du succès de l'authentification)

Client   Serveur

WHAT'S IN A HTTP REQUEST?

More than just an URL!!!!

INSIDE A HTTP REQUEST

REQUEST TYPE AND URL

- ex: GET 'http://lewagon.org', POST 'http://facebook.com')

HEADER

- Gives info on the content of the request's body
- ex: Content-Type, Content-Length, Host, User-Agent

BODY

- in the server **response**, the body contains the **HTML** of the page
- in a client **POST request**, the body includes the info to send.

EXAMPLES OF GET & POST

```
GET http://www.lewagon.org/ HTTP/1.1
Accept: text/html
User-Agent: Chrome/34.01847.131
Host: www.lewagon.org
```

```
POST http://www.lewagon.org/login HTTP/1.1
User-Agent: Chrome/34.01847.131
Content-Type: application/x-www-form-urlencoded
Content-Length: 32


email=dehan.gabriel@gmail.com&password=hellokitty
```

PLAY WITH IT

To deeply understand the structure of a request

Dev HTTP client

Postman REST client