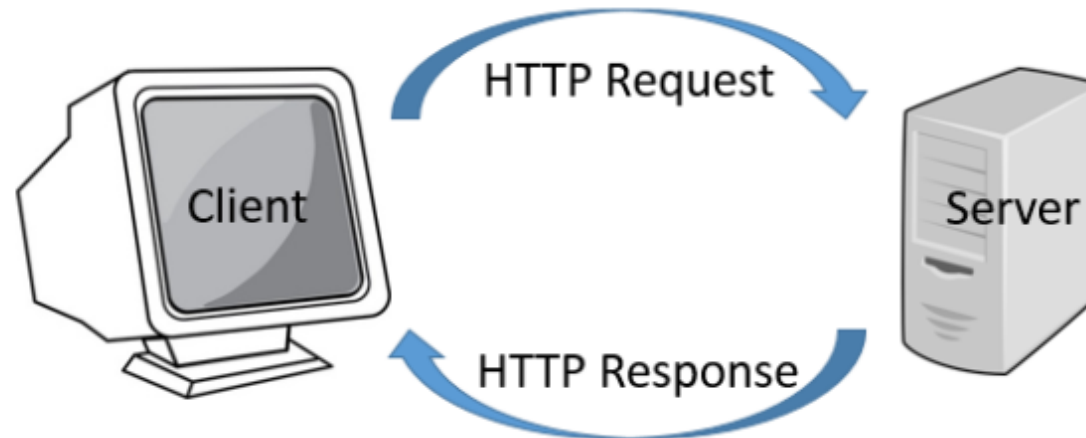**HTTP is the format used to structure request and responses on communication between a client and a server**

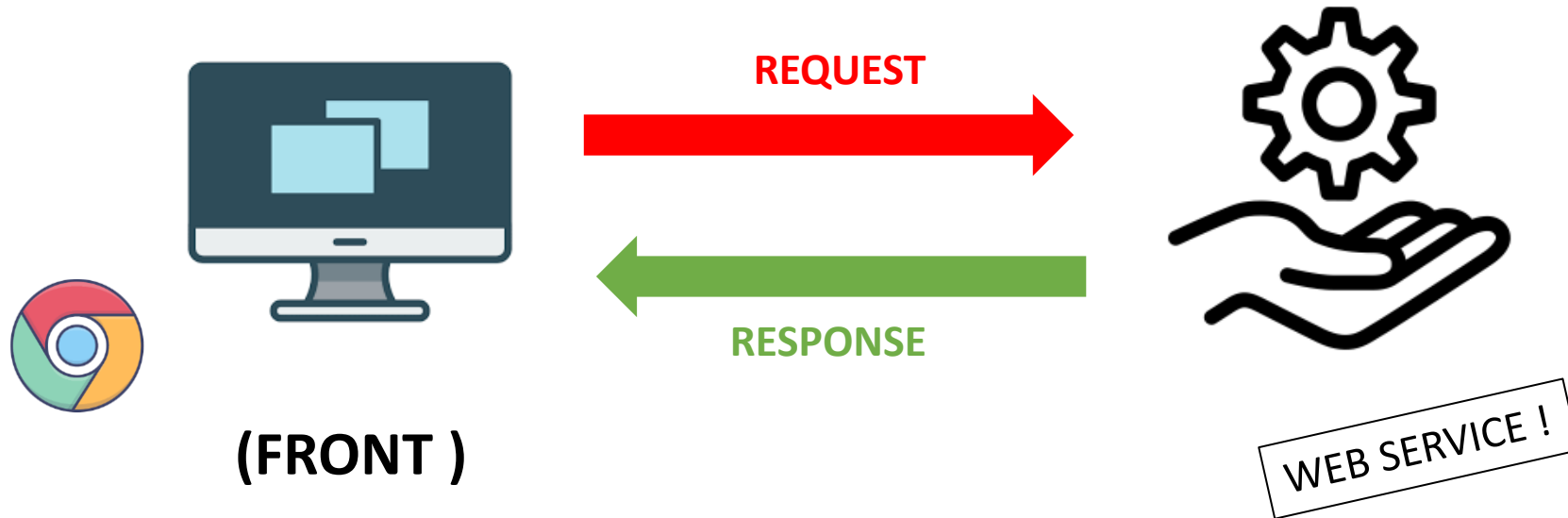**In Javascript we use Axios to send an HTTP request and handle their responses,**

🥇 OBJECTIVES 🥇

✓ Understand what is an **API** and how to use them

✓ Understand the anatomy of an **HTTP request**

✓ Be able to define requests

On your website, you can ask a web service to help you

REQUEST

RESPONSE

(FRONT)

WEB SERVICE !

What is an API ?

THE MENU OF THE SERVICES

Kitchen

Web Service

Customer
(App/Client)

Waiter
(API)

A web API (Application Programming Interface)
Gives you the menu :

Endpoints (URL) to send requests to **web service**

parameters to specify for each request

WEB API

```
https://www.smashingmagazine.com/tag/javascript/?query1=value1&query2=value2
```

Root-endpoint= *host of server* + *Path*

PARAMETERS

= *ENDPOINT*

ACTIVITY 1 🕐 10 MIN

Example of API : omdbapi

1 – Go to http://www.omdbapi.com/

2 – What are the **web services** available ? What are their **endpoints** ?

3 – What are the **parameters**, and their **roles** ?

OMDb API
The Open Movie Database

The OMDb API is a RESTful web service to obtain movie information, all content and images on the site are contributed and maintained by our users.

If you find this service useful, please consider making a one-time donation or become a patron.

Poster API
The Poster API is only available to patrons.

Currently over 280,000 posters, updated daily with resolutions up to 2000x3000.

Example of API : omdbapi

Service 1 : movies

Send all data requests to:

http://www.omdbapi.com/?apikey=[yourkey]&

Service 2 : posters

Poster API requests:

http://img.omdbapi.com/?apikey=[yourkey]&

Endpoints

Parameters and roles ...

Parameters

By ID or Title

Parameter	Required	Valid Options	Default Value	Description
i	Optional*		<empty>	A valid IMDb ID (e.g. tt1285016)
t	Optional*		<empty>	Movie title to search for.
type	No	movie, series, episode	<empty>	Type of result to return.
y	No		<empty>	Year of release.
plot	No	short, full	short	Return short or full plot.
r	No	json, xml	json	The data type to return.
callback	No		<empty>	JSONP callback name.
v	No		1	API version (reserved for future use).

*Please note while both "i" and "t" are optional at least one argument is required.

By Search

A special parameter : the API key

Send all data requests to:

http://www.omdbapi.com/?apikey=[yourkey]&

API key

Poster API requests:

http://img.omdbapi.com/?apikey=[yourkey]&

= Security for accessing the service

Can be private/public with access restriction...

Generate API Key

Account Type   ○ Patreon
               ● FREE! (1,000 daily limit)

ACTIVITY 2   🕐 10 MIN

Find the URL !

Send in message to the conversation, what is the corresponding URL for each service ! The first who is correct wins the point !

QUERY	URL
1- Get info of « Avengers »	1: http://www.omdbapi.com/?apikey=[yourkey]&t=Avengers
	Get ready !

ACTIVITY 2 🕐 10 MIN

Find the URL !

Send in message to the conversation, what is the corresponding URL for each service ! The first who is correct wins the point !

QUERY	URL
1- Get all info of « Fight Club »	
2- Get all movies from 2013 with « jedi » in title	
3- Get the full plot of the serie named « utopia »	
4- Search all posters of series with title « potatoe »	
5- get the second page of search for all movies with « friend » in their title, get the result in xml type	