WHAT IS
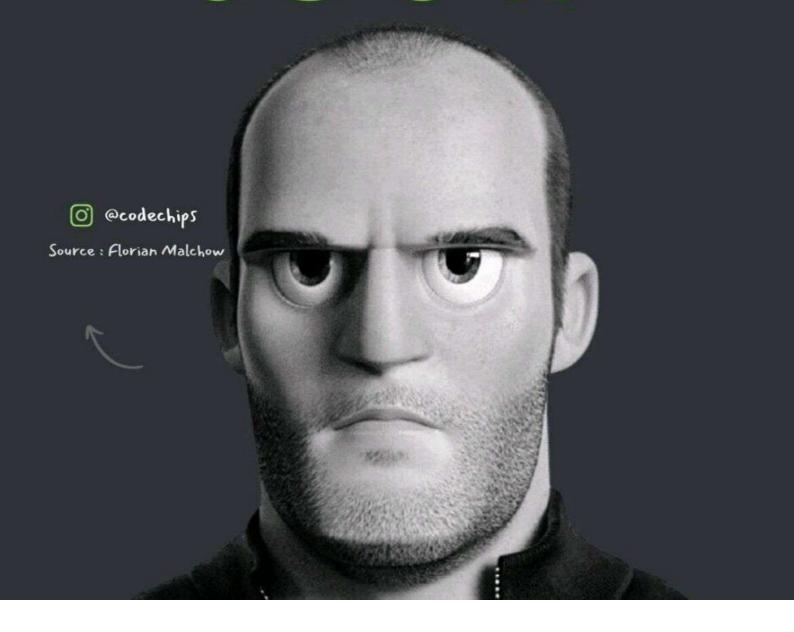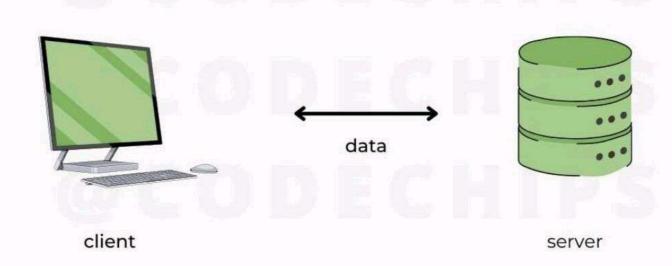# JSON
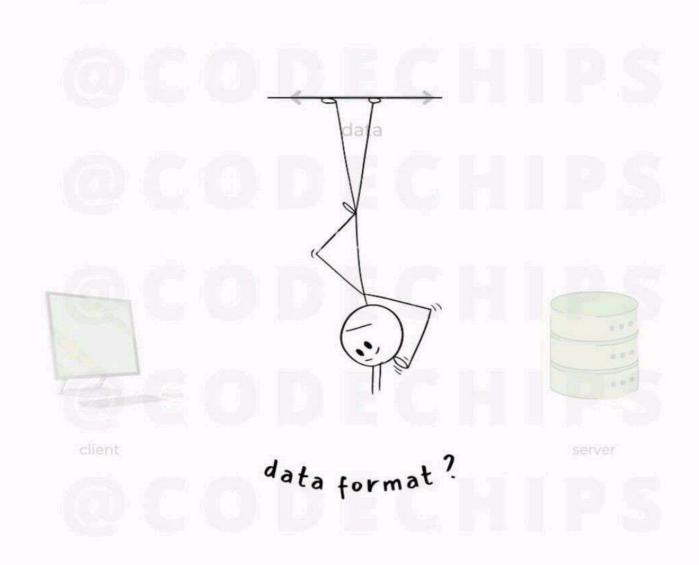
Lets say there is website to display information about pizzas

And they need to talk to
each other and transfer data

data

client

server

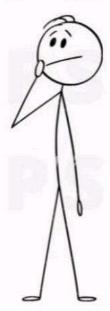But in what format can the data be tranferred ?

data format ?

What about plain text format ?

The 1st Pizza is **Neapolitan** Pizza which has a **thin** crust and Mozzarella cheese, Tomatoes, Basil toppings .

The 2nd Pizza is **New York-Style** Pizza which has a **thick** crust and **Mozzarella** cheese, Tomatoes toppings

It is easy to read for us but not easy to interpret on the client side
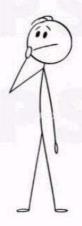
how can I fetch individual data ?

Then XML was introduced

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<root>
  <pizza>
    <id>01</id>
    <name>Neapolitan  Pizza</name>
  </pizza>
  <pizza>
    <id>02</id>
    <name>New York-Style Pizza</name>
  </pizza>
</root>
```

XML has been in use for many years, still the format could be bulky and cause too much overhead for web services
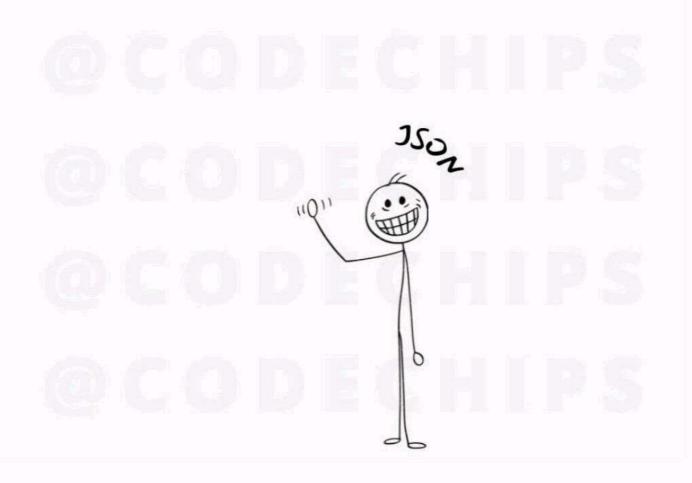
Is there anything easy to read and retrieve ?

That is when JSON came into play

JSON stands for JavaScript Object Notation, a lightweight format for **storing** and **transporting** data from a server to a web page, it is "self-describing" and **easy** to understand

JSON Syntax Rules

```
{
    "name" : "value" ,
    "array" : [   ]
}
```

- Data is in name/value (any type) pairs
- Data is separated by commas
- Curly braces hold objects
- Square brackets hold arrays

JSON looks like this

```json
{
  "pizza": [

    {
      "id":"01",
      "name": "Neapolitan Pizza",
      "toppings": ["Mozzarella","Tomatoes",Basil"]
    },

    {
      "id":"02",
      "name": "New York-Style Pizza",
      "toppings": ["Mozzarella","Tomatoes","Basil"]
    }
  ]
}
```