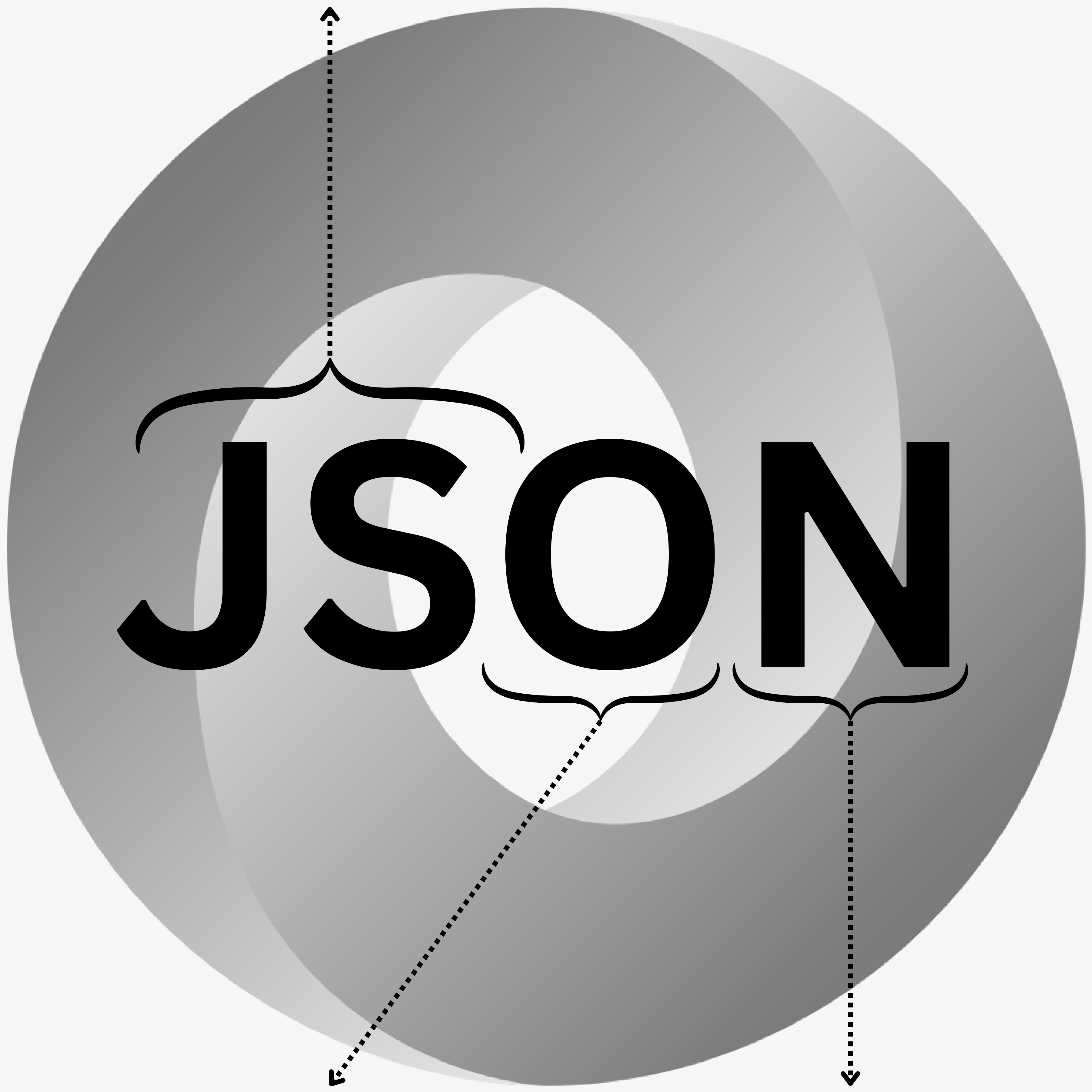


JAVASCRIPT

JSON

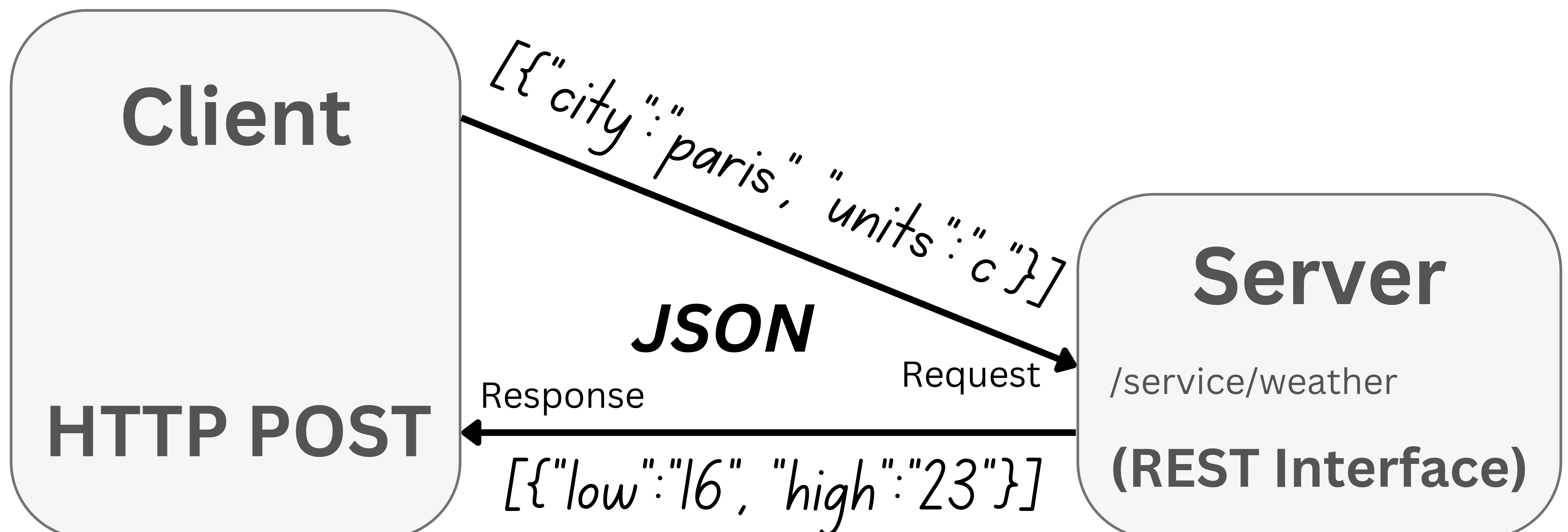
OBJECT

NOTATION



# JSON

- JSON stands for JavaScript Object Notation.
- JSON is a lightweight format for storing & transporting data.
- JSON is "self-describing" and easy to understand.
- JSON is often used when data is sent from a server to a web page.



# JSON EXAMPLE

```
{  
  "employees": [  
    {"firstName": "John", "lastName": "Doe"},  
    {"firstName": "Anna", "lastName": "Smith"},  
    {"firstName": "Peter", "lastName": "Jones"}  
  ]  
}
```

This example defines an employees object: *an array of 3 employee records (objects)*



# KEY AND VALUES

The two primary parts that make up **JSON** are **keys** and **values**.

*Together they make a key/value pair :-*

- **Key:** A key is always a string enclosed in quotation marks.
- **Value:** A value can be a string, number, boolean expression, array, or object.



The **key** is `"name"` and the **value** is `"aditya"`.



# JSON.parse()

When receiving data from a web server, the data is always a **string**.

Imagine we received this text from a web server

```
'{"name": "Aditya", "age": 19, "country": "India"}'
```

Use the JavaScript function **JSON.parse()** to convert text into a JavaScript object

```
var obj = JSON.parse('{"name":"Aditya", *age":19, "country":"India"}');
```





# JSON.stringify()

The **JSON.stringify()** method converts a JavaScript object or value to a JSON string, optionally replacing values if a replacer function is specified or optionally including only the specified properties if a replacer array is specified.

## SYNTAX

**JSON.stringify**(value, replacer, space)

### JSON String

```
{  
  "language": "JavaScript",  
  "IDE": "Visual Studio",  
  "Theme": "dark"  
}
```

JSON.parse()



### JavaScript Object

```
{  
  language: 'JavaScript',  
  IDE: 'Visual Studio',  
  Theme: 'dark'  
}
```

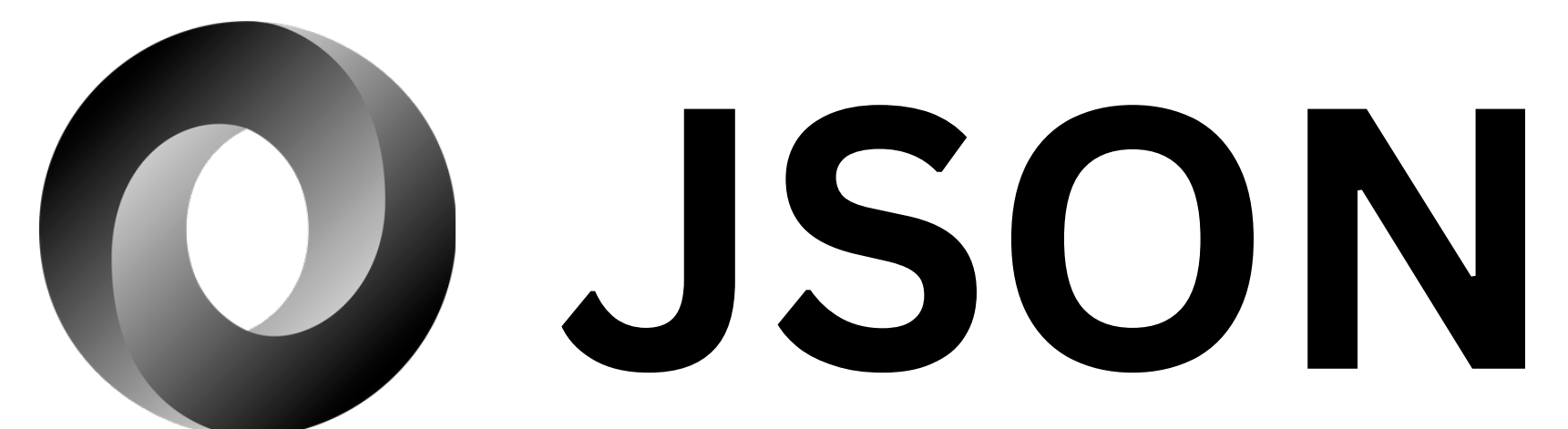
JSON.stringify()



# JSON VALUES

in JSON, values must be one of the following data types:

- **string**
- **number**
- **object (JSON object)**
- **array**
- **boolean**
- **null**



# RECAP

**JSON** is a **minimal data format**. Just by learning a **few key principles you can decode** an entire site's worth of **JSON**.



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