



JavaScript Object Notation

STRINGIFY AND PARSE

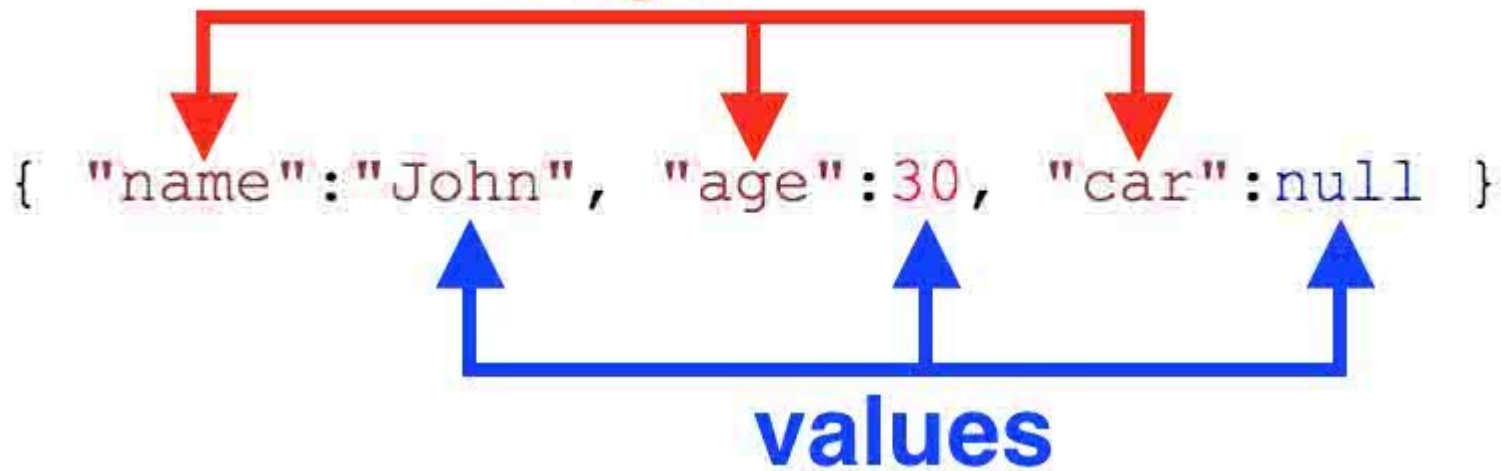
METHOD OF JSON



What is a JSON Object?

- JSON stands for JavaScript Object Notation .It is a standard readable file format used primarily to transmit data between a server and a web application. JSON Objects are surrounded by curly braces “{ }” and are written in key/value pairs.

Keys



MAIN JSON OBJECT

ARRAY OF OBJECTS

```
{  
  "doorsWindows": [  
    {  
      "ID": "A",  
      "style": "roller",  
      "height": 3,  
      "width": 3,  
      "wall": "front",  
      "bay": 2,  
      "location": [0.3,0],  
      "dimensions": false  
    },  
    {  
      "ID": "B",  
      "style": "zincPA",  
      "width": 0.9,  
      "openingSide": "out",  
      "hingePost": "right",  
      "wall": "intWall_1",  
      "bay": 4,  
      "location": [4,0],  
      "dimensions": true  
    }  
  ]  
}
```

KEY ⇒ [ARRAY OF NUMBERS]

OBJECT WITH KEYS

⇒
VALUE PAIRS

Object in JavaScript

```
menuSetup = {  
  width: 300,  
  height: 200,  
  title: "Menu"  
}
```



<i>key</i>	<i>value</i>
width	300
height	200
title	Menu



JSON	JavaScript
Names require double quote	Names do NOT require double quote
Keys MUST be strings with double quotes	Keys can be strings, numbers, identifier names
String values MUST have double quotes	String values with double OR single quotes



DATA TYPES	
JSON	JavaScript
String	String
Number	Number
Object (JSON Object)	Object
Array	Array
Boolean	Boolean
Null	Null
	Function
	Date
	Undefined



JSON

```
{  
  "type": "Phone",  
  "price": 120,  
  "inStock": true,  
  "features": [  
    "HD Camera",  
    "Wi-Fi",  
    "LTE"  
  ]  
}
```

JSON.parse()



JSON.stringify()



JavaScript Object

```
{  
  type: "Phone",  
  price: 120,  
  inStock: true,  
  features: [  
    "HD Camera",  
    "Wi-Fi",  
    "LTE"  
  ]  
}
```



JSON.parse()

- A common use of JSON is to exchange data to/from a web server.
- When receiving data from a web server, the data is always a string.
- Parse the data with `JSON.parse()`, and the data becomes a JavaScript object.



Example - Parsing JSON

Imagine we received this text from a web server:

```
'{ "name":"John", "age":30, "city":"New York"}'
```

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

```
var obj = JSON.parse('{ "name":"John", "age":30, "city":"New York"}');
```



#JS JSON

`JSON.stringify()`

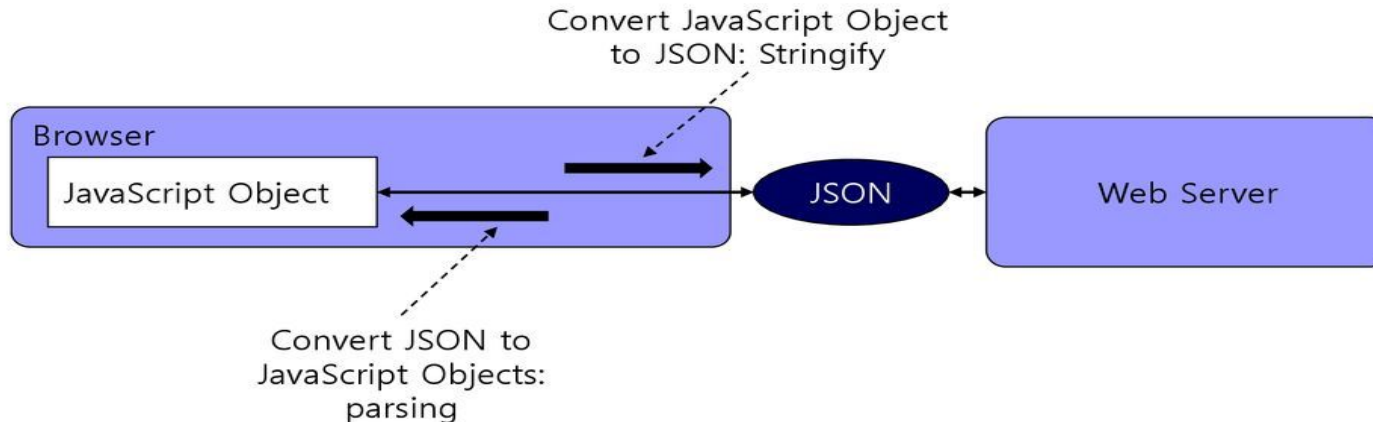


JSON.stringify()

- A common use of JSON is to exchange data to/from a web server.
- When sending data to a web server, the data has to be a string.
- Convert a JavaScript object into a string with `JSON.stringify()`.

JSON – Parse and Stringify

```
var obj = { "name": "John", "age": 30, "city": "New York"};  
var myJSON = JSON.stringify(obj);
```



```
var obj = JSON.parse('{ "name": "John", "age": 30, "city": "New York"}');
```