



JSON - Introduction

- Aditya Kumar
Chief Technology Officer, edwisor.com

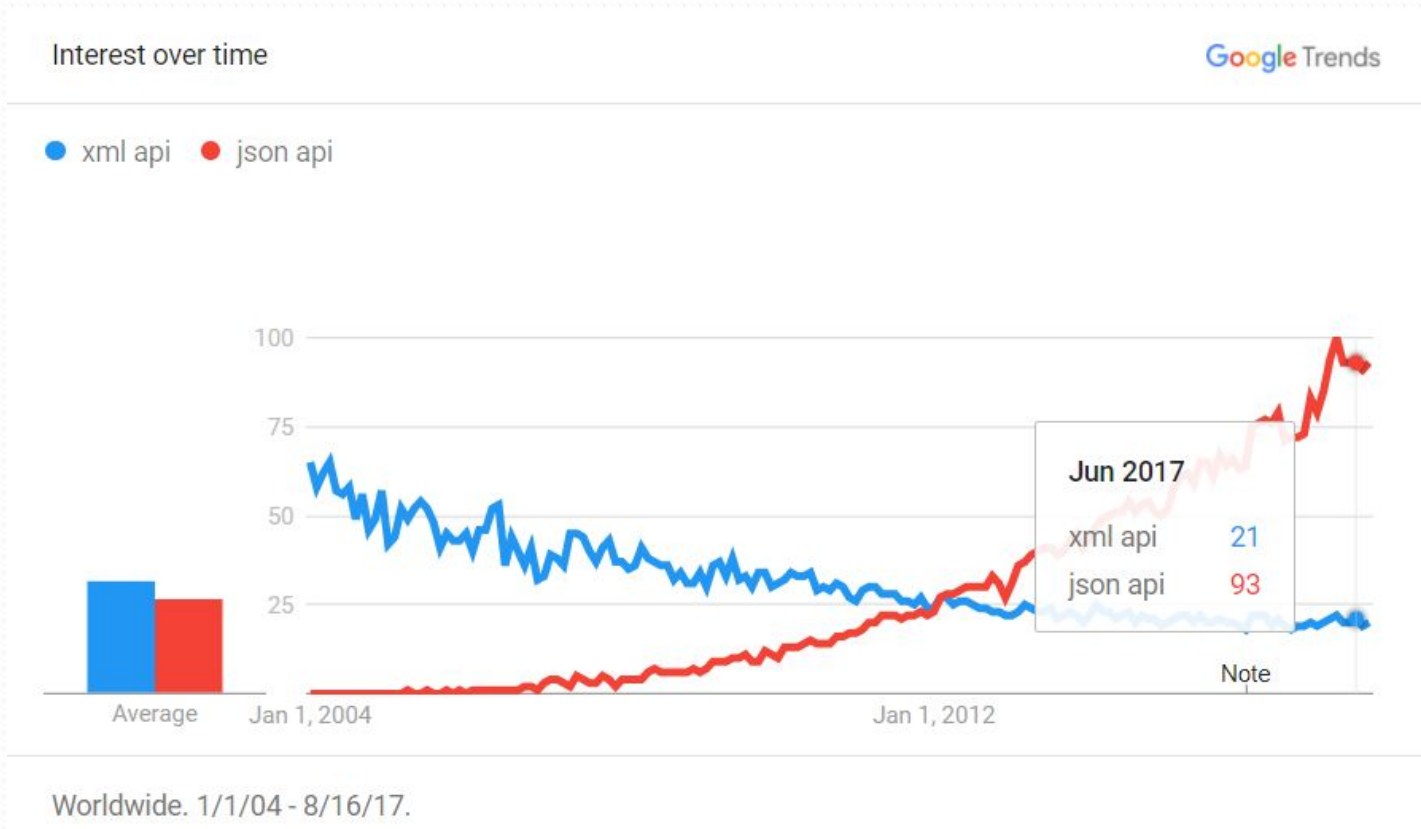
We will start with the following concepts

- 1) What is JSON?
- 2) Why JSON?
- 3) JSON Data types
- 4) Operations with JSON

JSON - A standard for data exchange in Modern web

- JSON stands for Javascript Object Notation
- It's a syntax for storing and exchanging data.
- Its language independent, self describing and easy to understand
- It has almost completely replace its predecessor - XML

Rise of JSON to Power!!



JSON looks very cool and familiar

“Key “: “value” pair

`"firstName":"Aditya"`

Object: {“key1”:"value1", "key2":“value2” }

`{"firstName":"John", "lastName":"Doe"}` -its storing the full name of a person

Array :

`"students":[`

`{"firstName":"Aditya", "lastName":"Kumar"},`

`{"firstName":"Anamika", "lastName":"Saini"},`

`{"firstName":"Sidharth", "lastName":"Sharma"}`

`]`

JSON values can be -

- A number (integer or floating point) - eg 1, 1.01 etc
- A string (in double quotes) - "Aditya", "sidharth"
- A Boolean (true or false) - True/False
- An array (in square brackets) - ["Aditya","sidharth"]
- An object (in curly braces) - {"name": "Aditya", "profile": "Full Stack Developer"}
- Null - intentionally left blank

JSON Objects are brother of JS objects

JSON objects can contain multiple name/values pairs. They are used to couple the data representing a single entity. For example, a user data on any website is stored in a single object and contains all information of that user -

```
{“firstName”:”Aditya”,”lastName”:”Kumar”,”email”:”aditya@edwisor.com”,  
“mobileNumber”:8588837942}
```

This object contains information about a single user. Similarly, we can create objects to couple data belonging to an individual entity.

JSON Objects can be written in “pretty form

JSON objects can be written in more simpler form by including spaces and newline like this

```
{  
  
    "firstName": "Aditya",  
  
    "lastName": "Kumar",  
  
    "email": "aditya@edvisor.com",  
  
    "mobileNumber": 8588837942  
  
}
```


JSON Array values can be -

- A number (integer or floating point) - eg 1, 1.01 etc
- A string (in double quotes) - "Aditya", "sidharth"
- A Boolean (true or false) - True/False
- An object (in curly braces) - {"name": "Aditya", "profile": "Full Stack Developer"}
- Null - intentionally left blank

Lets look at few examples in real life

Accessing Data in JSON array and objects is similar to javascript

- We use the dot notation to access data in JSON
- Let me show you with the help of a few complex examples

Want to validate your own JSON?

- You can check for syntax errors using online JSON validators
- Just google “online json validation” and you will find a bunch of them.

The next steps are ...

- The Journey forward