JSON: Java Script Object Notation.

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JSON is a Syntax for Storing and exchanging data. When exchanging data between a browser and a server, the data can only be text. JSON is text, and we can convert any JavaScript object into JSON, and send JSON to the server. We can also convert any JSON received from the server into JavaScript objects. This way we can work with the data as JavaScript objects.

JSON is built on two structures:

*A collection of name/value pairs. In various languages, this is realized as an object, record, struct, dictionary, hash table, keyed list, or associative array.

*An ordered list of values. In most languages, this is realized as an array, vector, list, or sequence.

Use of JSON

Since the JSON format is text only, it can easily be sent to and from a server, and used as a data format by any programming language. JavaScript has a built in function to convert a string, written in JSON format, into native JavaScript objects: **JSON.parse()**

So, if you receive data from a server, in JSON format, you can use it like any other JavaScript object.

Like XML, JSON also self describing, parsed and used by different programming language. But it also have several advantages over XML, it doesn't use any end tags and it is shorter and uses arrays.

```
myObj= { "name":"John", "age":30, "car":null }; 
x = myObj.name; gives John
```

1.1 sample JSON snippet

The **YML** file type is primarily associated with Javascript by **YAML**. **YAML** stand for "**YAML** Ain't Markup Language;". It uses a text file and organizes it into a format which is Human-readable. **YAML** may be used with multiple platforms of programming languages such as PHP, Python, Ruby, Perl, Javascript amongst others.

- YAML is case sensitive.
- YAML does not allow the use of tabs. Spaces are used instead as tabs are not universally supported.

One of the benefits of using YAML is that the information in a single YAML file can be easily translated to multiple language types.

Use of YAML

YAML is a human-readable data-serialization language. It is commonly used for configuration files and in applications where data is being stored or transmitted.

Basic Types:

- Mappings (hashes / dictionaries)
- Sequences (arrays / lists)
- Scalars (strings / numbers)

Scalars:

Scalars are a pretty basic concept. They are the strings and numbers that make up the data on the page. A scalar could be a boolean property, like *Yes*, integer (number) such as 5, or a string of text.

Eq: integer: 25

string: "25"

boolean: Yes

Sequences:

It is a basic list with each item in the list placed in its own line with an opening dash.

Eg: - Cat - Dog

- Pig

Mappings:

Mapping gives you the ability to list keys with values. This is useful in cases where you are assigning a name or a property to a specific element.

Eg:

animal: pets

pets:

- Cat

- Dog

- Goldfish