In this thread I want to discuss what JSON is, how JSON is used in JavaScript programs, why JSON is being adopted in the IT industry, and how to validate JSON markup. Let’s first define what JSON is. JSON is. “The JSON object contains methods for parsing JavaScript Object Notation and converting values to JSON. It can’t be called or constructed, and aside from it two method properties, it has not interesting functionality of its own.” (*JSON – JavaScript*/ MDN, 2022). “JSON is a syntax for serializing objects, arrays, numbers, strings, Booleans, and null. It is based upon JavaScript syntax but is distinct from it: some JavaScript is *not* JSON.” (*JSON -JavaScript*/ MDN, 2022).

So how is JSON used in JavaScript programs? JSON is used in JavaScript to store data, generate data structures from user input, to transfer data from server to client, client to server, and server to server. JSON is also used to configure and verify data. (Tagliaferri, 2021). The reason that JSON is being adopted so heavily by the IT industry is that “it is lightweight and is readily transferred between programming languages and systems.” (Tagliaferri, 2021). Other reasons that JSON is popular are that its “easier to read compared to XML, its cleaner than XML, and there are not too many closing and opening tags involved. JSON also integrates very nicely with JavaScript since JSON is a subset of JavaScript, which means anything you write in JSON is a valid JavaScript.” (Kunwar, 2021). Another reason that JSON is popular is that it is easy to validate. You can validate JSON through several different tools. You can use the following:

* <https://jsononline.net/json-validator>
* <https://sitechecker.pro/json-ld-markup/>
* <https://free-validator.com/json/json-validator>

Any one of these sites are free and easy to use. You can copy and paste, direct input or upload a file, or even enter a URL to test a specific page.

In conclusion JSON is very simple to work with inside a programming language, especially JavaScript. Being that it is easier to read than XML, and that anything that a developer writes in JSON is a valid JavaScript it is no wonder that it has become a favorite of developers. It is easy and free to validate JSON as well. We as developers can visit any of the three sites listed above and there are resources if you do not find those links useful. JSON is without a doubt making the lives of developers easier and simpler.

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