JSON also known as JavaScript Object Notation is a human readable text that helps to store and transmit data most often between servers and web applications. It is stored in key value pairs and or arrays that help organize the data. It is a language independent data format that was derived from JavaScript, hence the name. However, today just about any modern programming language can parse JSON. It was built largely as a replacement for XML.

JSON has various data types that include; Number (no distinction between integers or floats), Strings, Booleans, Arrays, Objects and null.

Much like AJAX, AJAJ or Asynchronous JavaScript and JSON is a dynamic web page method that instead of return XML in AJAX case, return JSON. Today AJAX calls still can return JSON.

Some of the major advantages to JSON is that it is faster than XML in comparison. It is also a bit easier to work with as it better represents JS objects and it easier to parse.

Some of the disadvantages to JSON is that it is not quite as robust as XML and you cannot leave comments in the code if needed. It is also not the best when combining information from different systems. This is due to the clash that can take place if naming is the same in two different systems. Another thing to note is, at this time JSON doesn’t have a set of universal standards due to the opensource nature. This is in part due to its infancy in use in comparison XML which has a set of universal standards and conventions.

It is possible to parse JSON in just about any language. The way it can be done in Python is by importing json and using the json.loads() method.