JavaScript Object Notation (JSON) is a human-readable text-based data exchange format that represents data objects in the context of attribute-value pairs. JSON was originally based on a subset of the JavaScript scripting language (Standard ECMA-262 3rd Edition).

Although it is typically used with JavaScript, JSON is language-independent and code for parsing and generating JSON data is available for a large variety of programming languages. JSON’s Web site (http://www.json.org) has a complete listing of existing JSON libraries, organized by language.

JSON’s basic types are:

- Number (double-precision floating-point format in JavaScript, generally depends on implementation)
- String (double-quoted Unicode, with backslash escaping)
- Boolean (true or false)
- Array (an ordered, comma-separated sequence of values enclosed in square brackets; the values do not need to be of the same type)
- Object (an unordered, comma-separated collection of key:value pairs enclosed in curly braces, with the ‘:’ character separating the key and the value; the keys must be strings and should be distinct from each other)
- null (empty)

Non-significant white space may be added freely around the “structural characters” (i.e. brackets “{ } [ ]”, colons “:” and commas “,”).

JSON was designed to be minimal, portable, and textual—it is generally considered to be a lightweight alternative to XML for data exchange.

JSON Example:

```json
{
  "firstName": "John",
  "lastName": "Smith",
  "age": 25,
  "address": {
    "streetAddress": "21 2nd Street",
    "city": "New York",
    "state": "NY",
    "postalCode": 10021
  },
  "phoneNumbers": [
    {
      "type": "home",
      "number": "212 555-1234"
    },
    {
      "type": "fax",
      "number": "646 555-4567"
    }
  ]
}
```