

What is JSON?

JSON is a file format used to make data easy to work with. It presents data in an easy-to-read (and parse) format like this:

```
{
  "firstName": "John",
  "lastName": "Smith",
  "isAlive": true,
  "age": 27,
  "address": {
    "streetAddress": "21 2nd Street",
    "city": "New York",
    "state": "NY",
    "postalCode": "10021-3100"
  },
  "phoneNumbers": [
    {
      "type": "home",
      "number": "212 555-1234"
    },
    {
      "type": "office",
      "number": "646 555-4567"
    },
    {
      "type": "mobile",
      "number": "123 456-7890"
    }
  ],
  "children": [],
  "spouse": null
}
```

How do I use it?

That's where the web API comes into play. The web API lets you access different categories of JSON-formatted data located at unique URLs (or "endpoints"). You can further limit this JSON data using parameters, appended to those URLs.

The CFRP project provides a good primer for their API here:

<https://www.cfreregisters.org/en/the-data/http-api> (The "JSONView" extension linked there for Chrome is highly recommended if you want to work with JSON, so you can see clearly what the format looks like. There is also a [Firefox extension](#).)

Click around on the sample endpoints they give so you can see what kinds of data they provide (and what the URL structure looks like). The basic list of CFRP's endpoints is here:

<http://api.cfreregisters.org/>

Although it was designed to work with JavaScript, most major programming languages have some method for parsing JSON. Here are various tutorials for [JavaScript](#), [Python](#), [PHP](#), and [Ruby](#).

For more information about JSON and APIs, see this tutorial:

<https://restfulapi.net/introduction-to-json/>.