JSON

When exchanging data between a user's browser and a server, the data passed can only be text. JSON provides the ability to convert a JavaScript object into text and then send this information to a server and vice versa. As JSON is text it is easy for humans to read and write as it uses understandable language and an understandable and readable format.

JSON is built on two structures:

- A collection of name/value pairs. Similar to objects, records, dictionaries and hash tables in other programming languages
- An ordered list of values, like an array

Once a JSON file is received from an external source, we can use JavaScript to store this information in an Array, which we can then use in different ways later on within other functions by referencing the array index we need. To do this we need to first make a call to an external API by calling its endpoint, which will return a JSON file. When making calls to API's we would use an Ajax call like this:

```
$.ajax({
      type: "GET",
      url: "{JSON_API_ENDPOINT}",
      contentType: "application/json",
      success: function (result) {
         console.log('JSON result: ', result);
      },
      Error: function (result) {
         console.log('Error Result')
      }
});
```

The code above specifies that the request is expecting a response of JSON from this endpoint and would provide us with information that looks like this:

```
{
   "name": "Mark",
   "age": "25",
   "city": "Glasgow"
 },
 {
   "name": "Ross",
   "age": "19",
```

```
  "city": "Glasgow"
},
        ...
```

References

Although we hope this tutorial has been all the help you need, here are some useful links that may be of use:

Useful Resources:

- Introducing JSON, JSON Data Interchange Standard: https://www.json.org/
- W3Schools, JSON Introduction: https://www.w3schools.com/js/js_json_intro.asp