## **Handling JSON Data**

This lesson teaches the use of JSON data in JavaScript through a series of interactive examples.

WE'LL COVER THE FOLLOWING
JSON and JavaScript
Example: Retrieving JSON Content

Let's advance to a more interesting and realistic scenario. Very often, data available on web servers are published under the JSON format.

## JSON and JavaScript #

The JavaScript language offers native support for the JSON format:

- The JSON.parse() method transforms a JSON string into a JavaScript object.
- On the contrary, the JSON.stringify() method transforms a JavaScript object into a JSON string.

```
// Define a JavaScript object
const plane = {
    manufacturer: "Airbus",
    model: "A320"
};
console.log(plane); // Display the object

const planeText = JSON.stringify(plane);
console.log(planeText); // Display the object as a JSON string

console.log(JSON.parse(planeText)); // Display the object
```

These methods can also handle joon arrays.

```
n
// Define an array containing two objects
const planes = [
    manufacturer: "Airbus",
   model: "A320"
 },
  {
   manufacturer: "Boeing",
   model: "737"
  }
];
console.log(planes); // Display the array of objects
const planesText = JSON.stringify(planes);
console.log(planesText); // Display the array as a JSON string
console.log(JSON.parse(planesText)); // Display the array of objects
                                                                                         []
```

## Example: Retrieving JSON Content #

For example, the following JSON file movies.json contains information about some movies. This file defines an array containing three objects.

```
{
    "title": "The Wolf of Wall Street",
    "year": "2013",
    "author": "Martin Scorsese"
},
{
    "title": "Inside Out",
    "year": "2015",
    "author": "Pete Docter"
},
{
    "title": "Babysitting",
    "year": "2013",
    "author": "Philippe Lacheau and Nicolas Benamou"
}
```

Here's how to retrieve this file from its URL and display each movie title in the console.

```
fetch(
   "https://raw.githubusercontent.com/bpesquet/thejsway/master/resources/movies.json"
)
```

```
.then(response => response.json()) // Access and return response's JSON content
.then(movies => {
    // Iterate on the movie array
    movies.forEach(movie => {
        // Display title of each movie
        console.log(movie.title);
    });
})
.catch(err => {
    console.error(err.message);
});
```

The <code>json()</code> method of the HTTP <code>Response</code> object returns a promise that resolves with the result of parsing the response text as JSON. As such, the <code>movies</code> parameter of the second <code>then()</code> is a plain JavaScript array that can be iterated upon.