

Displaying JSON Data in a Table

In the previous tutorial, you loaded a JSON file and displayed basic information about the smart home. In this tutorial, you will display the device data in an HTML table using JavaScript.

Current Project Structure

Your project should contain:

```
json-demo
├─ index.html
├─ script.js
└─ smart_security_data.json
```

Create a Table Container

Open:

```
index.html
```

Update the page so it contains:

```
<!DOCTYPE html>
<html>
<head>
  <title>JSON Demo</title>
</head>
<body>

<h1>Smart Home Dashboard</h1>
```

```
<div id="output"></div>

<script src="script.js"></script>

</body>
</html>
```

The table will be generated inside the `output` div.

Create the Table Structure

Open:

```
script.js
```

Replace the previous code with:

```
fetch("smart_security_data.json")
  .then(response => response.json())
  .then(data => {

    let html = `
      <h2>Devices</h2>

      <table border="1">

        <tr>
          <th>Device ID</th>
          <th>Device Type</th>
          <th>Room</th>
        </tr>
      `;

    data.devices.forEach(device => {

      html += `
        <tr>
```

```
        <td>${device.deviceId}</td>
        <td>${device.deviceType}</td>
        <td>${device.room}</td>
    </tr>
    `;

    });

    html += "</table>";

    document.getElementById("output").innerHTML = html;

    });
```

Save the file.

View the Results

Open:

`http://localhost/json-demo/`

You should see:

Device ID	Device Type	Room
CAM-01	Security Camera	Front Entrance
LOCK-02	Smart Door Lock	Back Door

Add Basic Styling

The table works, but it looks very plain.

Add the following CSS inside the `<head>` section of `index.html`:

```
<style>
```

```
table {  
  border-collapse: collapse;  
  width: 100%;  
}  
  
th,  
td {  
  border: 1px solid #cccccc;  
  padding: 10px;  
  text-align: left;  
}  
  
th {  
  background-color: #f2f2f2;  
}  
  
</style>
```

Refresh the page.

The table should now be easier to read.

Display the Home Information Above the Table

Update the start of the HTML string:

```
let html = `  
  <p>  
    <strong>Home ID:</strong>  
    ${data.homeId}  
  </p>  
  
  <p>  
    <strong>Location:</strong>  
    ${data.location}  
  </p>
```

```
<h2>Devices</h2>
```

```
<table border="1">
```

```
  <tr>
```

```
    <th>Device ID</th>
```

```
    <th>Device Type</th>
```

```
    <th>Room</th>
```

```
  </tr>
```

```
`;
```

The page should now display:

Home ID: GC-HOME-014

Location: Gold Coast

Devices

followed by the table.

Smart Home Dashboard

Devices

Device ID	Device Type	Room
CAM-01	Security Camera	Front Entrance
LOCK-02	Smart Door Lock	Back Door

Complete JavaScript File

```
fetch("smart_security_data.json")
  .then(response => response.json())
  .then(data => {

    let html = `
      <p>
```

```

        <strong>Home ID:</strong>
        ${data.homeId}
    </p>

    <p>
        <strong>Location:</strong>
        ${data.location}
    </p>

    <h2>Devices</h2>

    <table border="1">

        <tr>
            <th>Device ID</th>
            <th>Device Type</th>
            <th>Room</th>
        </tr>
`;

data.devices.forEach(device => {

    html += `
        <tr>
            <td>${device.deviceId}</td>
            <td>${device.deviceType}</td>
            <td>${device.room}</td>
        </tr>
    `;

});

html += "</table>";

document.getElementById("output").innerHTML = html;

});

```

You have successfully loaded JSON data and displayed it in an HTML table.

Next tutorial: **Displaying Nested Event Data from JSON.**

Revision #1

Created 2026-06-10 02:00:02 UTC by Mr Napper

Updated 2026-06-10 02:00:09 UTC by Mr Napper