

# Creating a Security Dashboard from JSON Data

In this tutorial, you will create a simple dashboard that summarises the data and highlights important security information.

The dashboard will display:

- Total Devices
- Total Events
- Critical Events
- High Severity Events
- Medium Severity Events

Using the sample JSON file, there are 2 devices and 3 events, including one critical event.

---

## Create a Dashboard Section

Open:

```
script.js
```

Replace the existing code with:

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

    let totalDevices = data.devices.length;

    let totalEvents = 0;
    let criticalEvents = 0;
    let highEvents = 0;
    let mediumEvents = 0;
```

```
data.devices.forEach(device => {

    device.events.forEach(event => {

        totalEvents++;

        if (event.severity === "critical") {
            criticalEvents++;
        }

        if (event.severity === "high") {
            highEvents++;
        }

        if (event.severity === "medium") {
            mediumEvents++;
        }

    });

});

});
```

This code calculates summary statistics from the JSON data.

---

## Create Dashboard Cards

Below the calculations, add:

```
let html = `
    <h2>Security Dashboard</h2>

    <div class="card">
        <h3>Total Devices</h3>
        <p>${totalDevices}</p>
    </div>
```

```
<div class="card">
  <h3>Total Events</h3>
  <p>${totalEvents}</p>
</div>

<div class="card">
  <h3>Critical Events</h3>
  <p>${criticalEvents}</p>
</div>

<div class="card">
  <h3>High Events</h3>
  <p>${highEvents}</p>
</div>

<div class="card">
  <h3>Medium Events</h3>
  <p>${mediumEvents}</p>
</div>
```

```
`;
```

---

# Display the Dashboard

Add:

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

The completed code should now display the dashboard cards.

---

# Add Dashboard Styling

Open:

```
index.html
```

Inside the `<style>` section, add:

```
.card {  
  border: 1px solid #cccccc;  
  border-radius: 8px;  
  padding: 15px;  
  margin-bottom: 10px;  
}  
  
.card h3 {  
  margin-top: 0;  
}
```

Save the file.

---

## View the Dashboard

Open:

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

Using the sample JSON file, you should see something similar to:

```
Security Dashboard  
  
Total Devices: 2  
Total Events: 3  
Critical Events: 1  
High Events: 1  
Medium Events: 1
```

## Display the Event Table Below the Dashboard

The dashboard is useful, but users often want to see the detailed events as well.

Add the following code underneath the dashboard cards:

```
html += `  
  <h2>Security Events</h2>  
  
  <table border="1">  
  
    <tr>  
      <th>Device ID</th>  
      <th>Event Type</th>  
      <th>Severity</th>  
    </tr>  
  
  `;  
`;
```

---

# Add Event Rows

Add:

```
data.devices.forEach(device => {  
  
  device.events.forEach(event => {  
  
    html += `  
      <tr>  
        <td>${device.deviceId}</td>  
        <td>${event.eventType}</td>  
        <td>${event.severity}</td>  
      </tr>  
    `;  
  
  });  
  
});
```

Close the table:

```
html += "</table>";
```

---

# Complete JavaScript File

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

    let totalDevices = data.devices.length;

    let totalEvents = 0;
    let criticalEvents = 0;
    let highEvents = 0;
    let mediumEvents = 0;

    data.devices.forEach(device => {

      device.events.forEach(event => {

        totalEvents++;

        if (event.severity === "critical") criticalEvents++;
        if (event.severity === "high") highEvents++;
        if (event.severity === "medium") mediumEvents++;

      });

    });

    let html = `
      <h2>Security Dashboard</h2>

      <div class="card">
        <h3>Total Devices</h3>
        <p>${totalDevices}</p>
      </div>

      <div class="card">
        <h3>Total Events</h3>
        <p>${totalEvents}</p>
```

```
</div>
```

```
<div class="card">
```

```
  <h3>Critical Events</h3>
```

```
  <p>${criticalEvents}</p>
```

```
</div>
```

```
<div class="card">
```

```
  <h3>High Events</h3>
```

```
  <p>${highEvents}</p>
```

```
</div>
```

```
<div class="card">
```

```
  <h3>Medium Events</h3>
```

```
  <p>${mediumEvents}</p>
```

```
</div>
```

```
<h2>Security Events</h2>
```

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

```
  <tr>
```

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

```
    <th>Event Type</th>
```

```
    <th>Severity</th>
```

```
  </tr>
```

```
`;
```

```
data.devices.forEach(device => {
```

```
  device.events.forEach(event => {
```

```
    html += `
```

```
      <tr>
```

```
        <td>${device.deviceId}</td>
```

```
        <td>${event.eventType}</td>
```

```
        <td>${event.severity}</td>
```

```
      </tr>
```

```
    `;
```

```
        });  
  
    });  
  
    html += "</table>";  
  
    document.getElementById("output").innerHTML = html;  
  
    });
```

You now have a dashboard that summarises JSON data and displays detailed event information underneath.

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Revision #2

Created 2026-06-10 02:00:39 UTC by Mr Napper

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