

Here is a detailed step-by-step guide to integrating Mermaid.js into your projects, including examples and instructions for various environments like web pages and Notion.

Step-by-Step Mermaid.js Integration Guide

Step 1: Choose Your Usage Environment

Mermaid.js can be used in multiple ways depending on your project setup:

Online live editor (quick experiments)

Within Notion or Markdown editors that support Mermaid natively

In web pages by adding Mermaid.js script

In applications by installing Mermaid as a dependency or calling its API

Step 2: Using Mermaid Live Editor (Easy Start)

Visit the Mermaid Live Editor at <https://mermaid.live/>

Write or paste Mermaid code in the left panel.

View rendered diagram in the right panel in real time.

Export diagrams as PNG or SVG or copy Mermaid code for embedding elsewhere.

Step 3: Embedding Mermaid in Notion

Create a code block in Notion (type `/code` and hit Enter).

Select “Mermaid” as the language from the block’s language dropdown.

Paste your Mermaid diagram code inside the block.

Notion will automatically render the diagram inline.

Example Mermaid code block for Notion:

```
text
graph TD
  A[Start] --> B{Decision}
  B -->|Yes| C[Process 1]
  B -->|No| D[Process 2]
```

Step 4: Embedding Mermaid in Web Pages

Using CDN (Quick and easy)

Add your Mermaid diagram inside a `<pre>` tag with class mermaid:

xml

```
<pre class="mermaid">
```

```
graph LR
```

```
  A --> B
```

```
  B --> C
```

```
</pre>
```

Include Mermaid.js script using ES module import inside a `<script>` tag:

xml

```
<script type="module">
```

```
import mermaid from 'https://cdn.jsdelivr.net/npm/mermaid@11/dist/mermaid.esm.min.mjs';
```

```
mermaid.initialize({ startOnLoad: true });
```

```
</script>
```

On page load, Mermaid scans for all `<pre class="mermaid">` blocks and renders the diagrams into SVG images automatically.

Using Mermaid with Traditional Script Tag (Non-ESM)

xml

```
<script src="https://cdn.jsdelivr.net/npm/mermaid/dist/mermaid.min.js"></script>
```

```
<script>
```

```
  mermaid.initialize({ startOnLoad:true });
```

```
</script>
```

Step 5: Using Mermaid API Programmatically

If you want to dynamically render diagrams in JavaScript:

xml

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

```
<script type="module">
```

```
import mermaid from 'https://cdn.jsdelivr.net/npm/mermaid@11/dist/mermaid.esm.min.mjs';
```

```
mermaid.initialize({ startOnLoad: false });
```

```
const graphDefinition = `
```

```
graph TD
```

```
  A-->B
```

```
  B-->C
```

```
`;
```

```
async function renderDiagram() {
```

```
  const { svg } = await mermaid.render('uniqueId', graphDefinition);
```

```
  document.getElementById('diagram').innerHTML = svg;
```

```
}
```

```
renderDiagram();  
</script>
```

Step 6: Installing Mermaid in Node.js Projects

Make sure you have Node.js installed (v16+ recommended).

Install Mermaid using npm or yarn:

```
bash  
npm install mermaid  
Or
```

```
bash  
yarn add mermaid
```

Import and use Mermaid in your code:

```
js  
const mermaid = require('mermaid');  
  
mermaid.initialize({ startOnLoad: true });
```

// Use Mermaid's API to render diagrams programmatically

Step 7: Basic Configuration Options

startOnLoad: (boolean) whether to render diagrams right after page load.

theme: choose diagram theme.

flowchart:{useMaxWidth: true} control chart styles.

Example in script:

```
js  
mermaid.initialize({  
  startOnLoad: true,  
  theme: 'forest',  
  flowchart: { useMaxWidth: false }  
});
```

Summary

Step	What to Do	Example/Code Snippet
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1	Choose environment	Live Editor, Notion, Web Page, Node.js
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2	Use Mermaid Live Editor	Visit https://mermaid.live/
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3	Embed in Notion	Use code block, language = Mermaid, paste code
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4	Embed in Web Page (CDN)	<pre><pre class="mermaid">diagram_code</pre> + <script type="module" src="mermaid.js"></script></pre>
---	-------------------------	---

5 Programmatic render with API Use `mermaid.render()` in JS

6 Install in Node projects `npm install mermaid`

7 Configure options `mermaid.initialize({ startOnLoad: true, theme: 'forest' })`

If you want, I can prepare a minimal example HTML file incorporating Mermaid.js that you can run locally or deploy, or create a Notion-ready sample with Mermaid diagrams embedded for your workflows. Just let me know!