

📊 How to Create Gantt Charts with Mermaid.js

Gantt charts are an excellent way to visualize timelines, tasks, and dependencies in a project. With [Mermaid.js](#), you can create Gantt charts using a simple text-based syntax that’s perfect for developers and project managers alike.

🚀 Step 1: Include Mermaid.js in Your HTML

First, add Mermaid as a module in your HTML document:

```
<script type="module">
  import mermaid from 'https://cdn.jsdelivr.net/npm/mermaid@10/dist/mermaid.esm.min.mjs';
  mermaid.initialize({ startOnLoad: true });
</script>
```

Now you’re ready to start rendering Gantt charts inside elements with the class `mermaid`.

🏗️ Basic Gantt Chart Syntax

A Gantt chart starts with the keyword `gantt`. You can define a title, date format, and axis formatting using directives. Then you define tasks under sections.

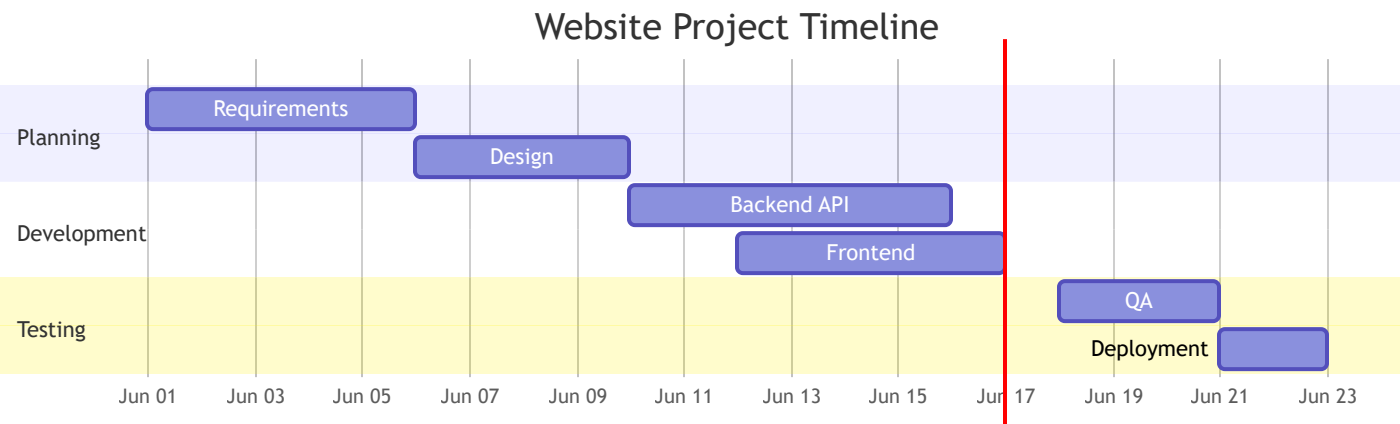
```
<div class="mermaid">
  gantt
    title Website Project Timeline
    dateFormat YYYY-MM-DD
    axisFormat %b %d

    section Planning
      Requirements :a1, 2025-06-01, 5d
      Design :after a1, 4d

    section Development
      Backend API :2025-06-10, 6d
      Frontend :2025-06-12, 5d

    section Testing
      QA :2025-06-18, 3d
      Deployment :2025-06-21, 2d
</div>
```

Rendered Example:



📌 Gantt Syntax Explained

- `title` – Sets the chart’s title
- `dateFormat` – Specifies input date format (e.g. `YYYY-MM-DD`)
- `axisFormat` – Customizes how dates appear on the axis (e.g. `%b %d` = Jun 16)
- `section` – Groups tasks under a label
- Tasks are written as: `Task Name :id, start_date, duration`
- You can chain tasks using `:after task_id` or `:crit, milestone, active` for status styling

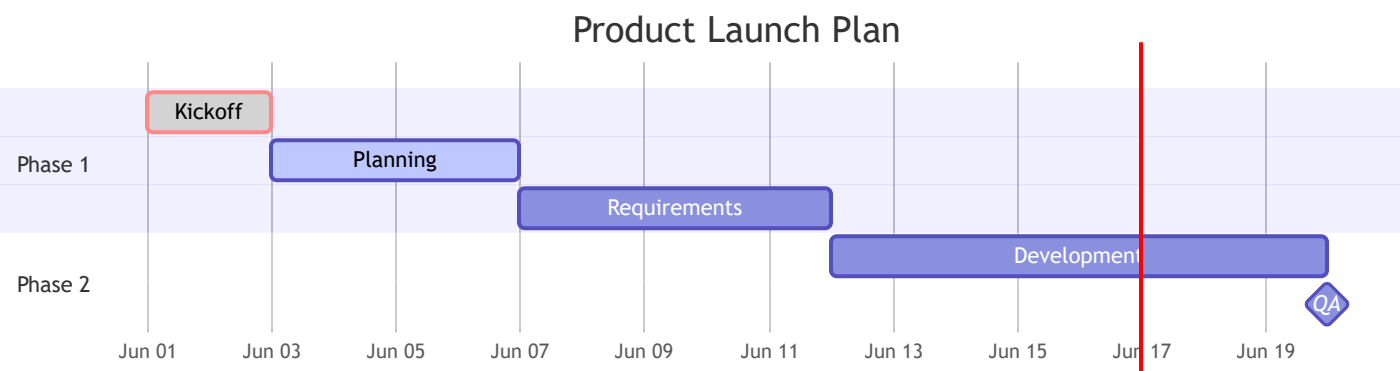
🎨 Task Styling and Statuses

Mermaid allows you to add visual styling to indicate critical paths, active tasks, and milestones:

```
<div class="mermaid">
  gantt
    title Product Launch Plan
    dateFormat YYYY-MM-DD
    axisFormat %b %d

    section Phase 1
      Kickoff :crit, done, 2025-06-01, 2d
      Planning :active, 2025-06-03, 4d
      Requirements :2025-06-07, 5d

    section Phase 2
      Development :2025-06-12, 8d
      QA :milestone, 2025-06-20, 0d
</div>
```

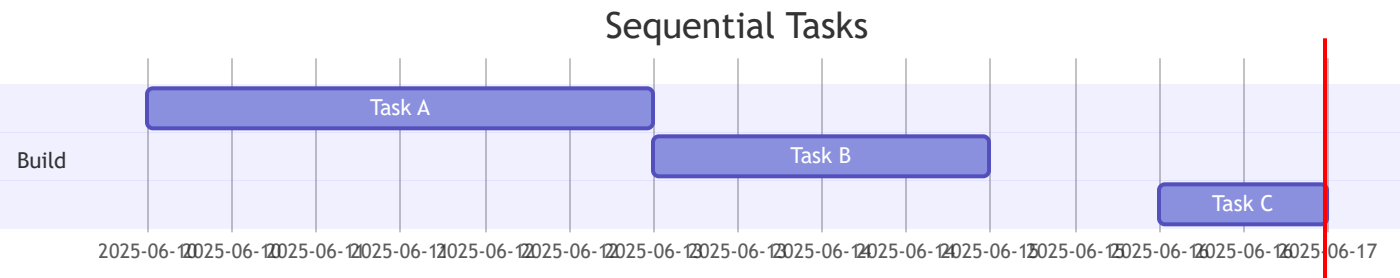


🔗 Dependencies Using after

Use `:after task_id` to specify that a task should begin immediately after another ends:

```
<div class="mermaid">
  gantt
    title Sequential Tasks
    dateFormat YYYY-MM-DD

    section Build
      Task A :a, 2025-06-10, 3d
      Task B :after a, 2d
      Task C :after b, 1d
</div>
```

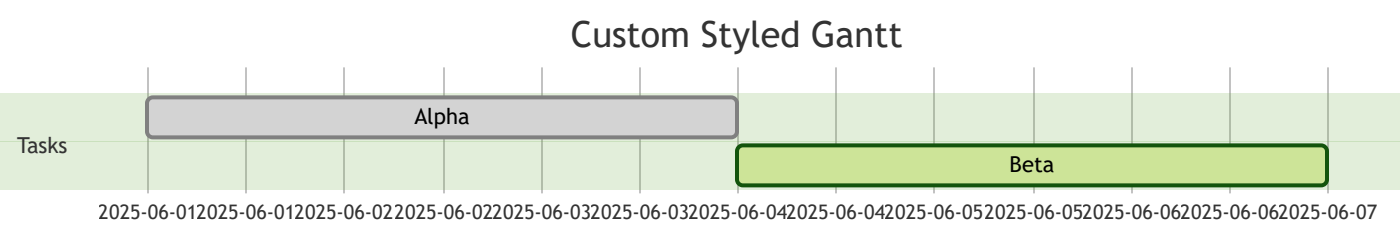


🌿 Advanced: Using External Configuration

You can apply theming and global configurations using a Mermaid directive at the top of the diagram:

```
<div class="mermaid">
  %%{ init: { "theme": "forest" } }%%
  gantt
    title Custom Styled Gantt
    dateFormat YYYY-MM-DD

    section Tasks
      Alpha :done, 2025-06-01, 3d
      Beta :active, 2025-06-04, 3d
</div>
```



📚 Resources and Reference

This tutorial is based on the official Mermaid documentation for Gantt charts. For all options, refer to: <https://mermaid.js.org/syntax/gantt.html>

✅ Summary

- Mermaid makes Gantt chart creation fast and code-friendly
- Define tasks, timelines, and dependencies with simple syntax
- Supports customization, sections, and styling for clarity
- Works well in docs, blogs, PM tools, and dev sites

Use Mermaid to embed live, editable Gantt charts in your documentation without ever needing design tools. It’s a great fit for modern dev workflows!