

How to Create Gitgraph Diagrams with Mermaid.js

Visualizing your Git workflow with a graph helps simplify complex development histories. Mermaid.js supports **Gitgraph diagrams** to simulate branches, merges, tags, and commits with a simple syntax.

Step 1: Load Mermaid.js

Add the following ES module script in your HTML:

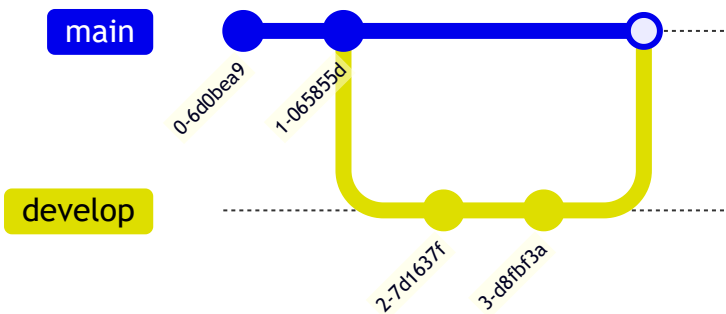
```
<script type="module">
  import mermaid from 'https://cdn.jsdelivr.net/npm/mermaid@10/dist/mermaid.esm.min.mjs';
  mermaid.initialize({ startOnLoad: true });
</script>
```

Basic Syntax for Gitgraph

Start your diagram with `gitGraph` and define commits, branches, merges, and tags. Here's a simple example:

```
<div class="mermaid">
gitGraph
  commit
  commit
  branch develop
  checkout develop
  commit
  commit
  checkout main
  merge develop
</div>
```

Rendered Example:



Gitgraph Elements Explained

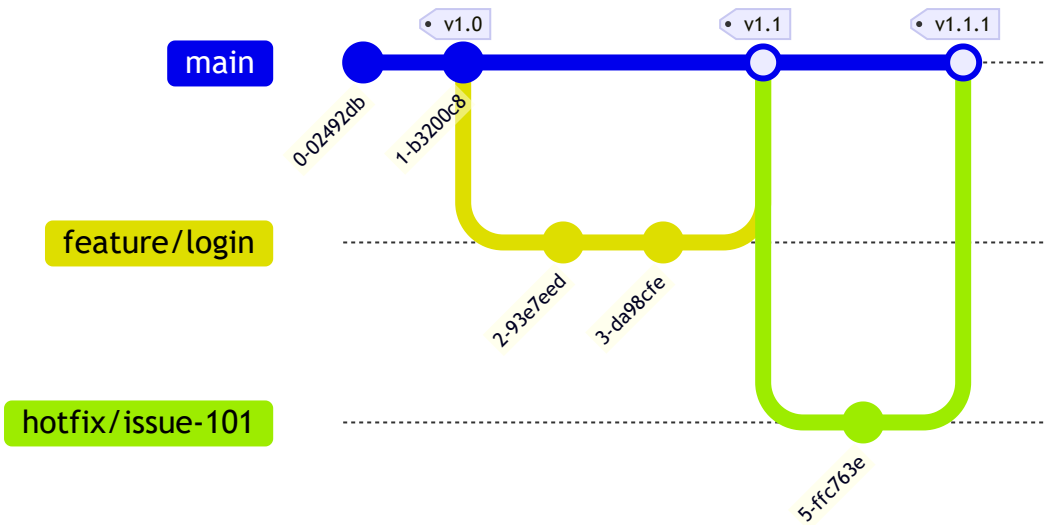
- `commit` – Adds a commit to the current branch
- `branch <name>` – Creates a new branch from the current one
- `checkout <name>` – Switches to the specified branch
- `merge <branch>` – Merges the specified branch into the current one
- `tag <label>` – Adds a tag to the current commit

Advanced Gitgraph Example

This example includes multiple branches, tags, and merges to mimic a more realistic workflow:

```
<div class="mermaid">
gitGraph
  commit
  commit tag: "v1.0"
  branch feature/login
  checkout feature/login
  commit
  commit
  checkout main
  merge feature/login tag: "v1.1"
  branch hotfix/issue-101
  checkout hotfix/issue-101
  commit
  checkout main
  merge hotfix/issue-101 tag: "v1.1.1"
</div>
```

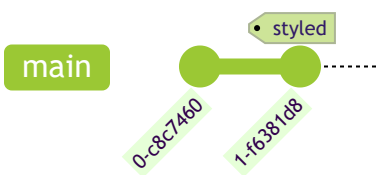
Rendered Diagram:



Theming and Customization

To customize appearance, use the Mermaid initialization syntax:

```
<div class="mermaid">
%%{ init: { "theme": "forest" } }%%
gitGraph
  commit
  commit tag: "styled"
</div>
```



Reference

Learn more at the official Gitgraph syntax guide:
<https://mermaid.js.org/syntax/gitgraph.html>

Summary

- Use `gitGraph` to simulate Git commit history
- Support for branches, checkouts, merges, and tags
- Ideal for visualizing Git strategies in documentation
- Fully renderable in HTML with Mermaid.js

Mermaid's Gitgraph syntax makes it easy to explain your version control workflows in markdown, documentation, or dev blogs. Happy diagramming! 🍷