



How to Create XY Charts with Mermaid.js

XY charts are useful for visualizing data points on two numeric axes—such as plotting time vs. value, performance vs. cost, or any other data pair. With Mermaid.js, you can generate simple XY plots using markdown-like syntax directly in HTML.



Step 1: Load Mermaid.js

Add the Mermaid ES module from a CDN and initialize it:

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



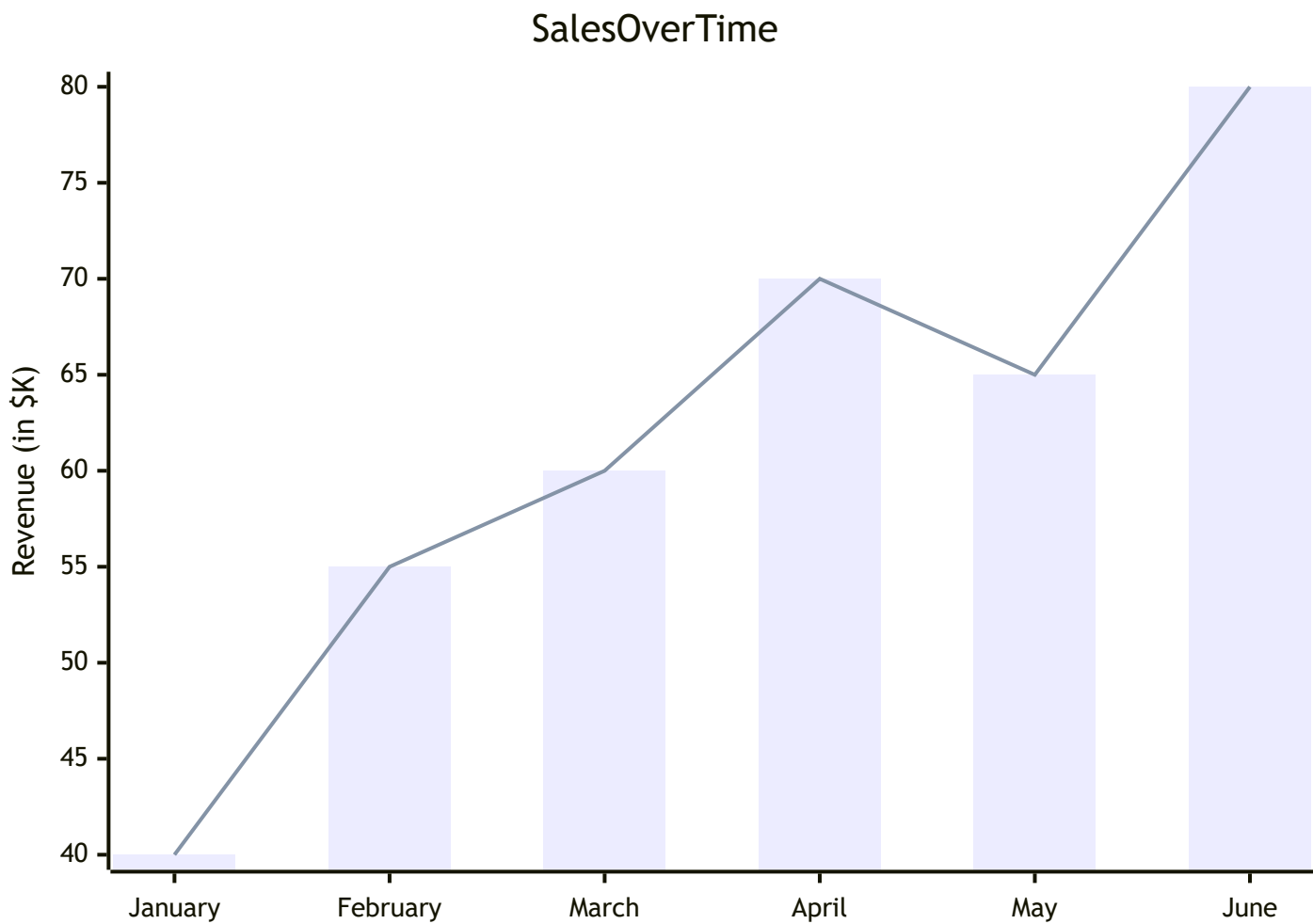
Step 2: Define Your XY Chart

The chart starts with `xychart-beta` and includes an `axis-x` and `axis-y` definition, followed by `series` data sets.



Example Chart

```
<div class="mermaid">
xvchart-beta
  title Sales Over Time
  x-axis ["January", "Februarv", "March", "April", "May", "June"];
  v-axis "Revenue (in $K)" 40 --> 80
  bar [40. 55. 60. 70. 65. 80]
  line [40, 55, 60, 70, 65, 80]
</div>
```



Syntax Breakdown

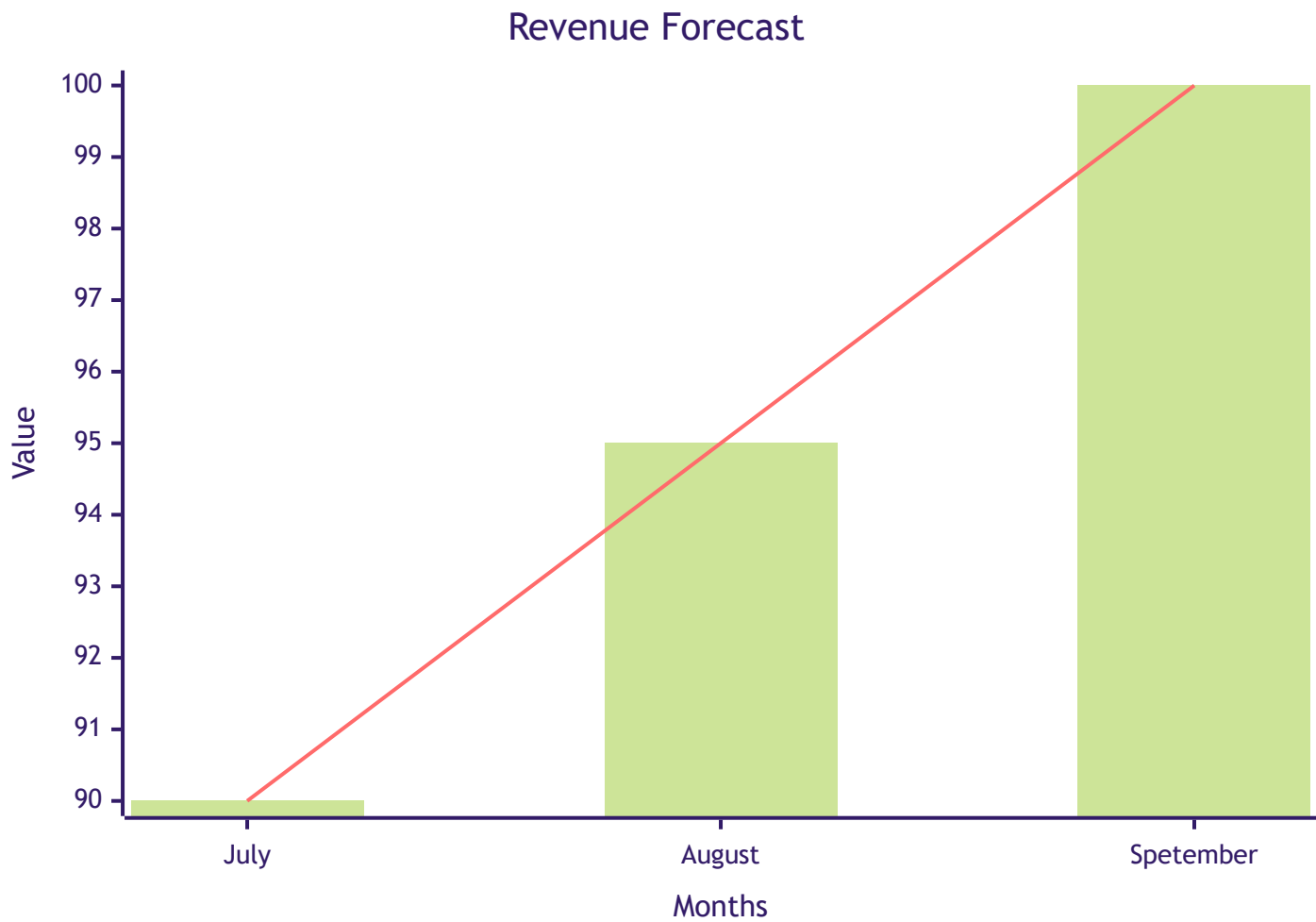
- `xychart-beta` : Keyword to define an XY chart (as of Mermaid v10.4+)
- `title` : Optional chart title
- `x-axis` : Defines the horizontal axis
- `y-axis` : Defines the vertical axis
- `series` : Grouped data points, e.g., Q1, Q2, etc.
- `"Label": value` : Defines a point with an x-label and y-value



Custom Themes

You can apply Mermaid’s built-in themes (e.g., `default` , `forest` , `dark`) using the `init` directive:

```
<div class="mermaid">
%%{ init: { "theme": "forest" } }%%
xvchart-beta
  title "Revenue Forecast"
  x-axis "Months" ["Julv", "August", "Spetember"];
  v-axis "Value" 90 --> 100
  bar [90. 95. 100]
  line [90, 95, 100]
</div>
```



Notes and Tips

- This feature is marked as **beta**, so syntax may evolve.
- Use consistent label types (e.g., all strings or all numbers on x-axis).
- Great for line charts, but currently doesn’t support scatter/point-style customizations.



References

- [Mermaid XY Chart Documentation](#)
- [Mermaid Live Editor](#) — Try it interactively

Mermaid’s XY charts make it easier than ever to embed lightweight, data-driven visuals directly into your HTML pages or markdown documents. Ideal for dashboards, analytics reports, or even technical documentation!