

Advanced SVG Techniques Cheat Sheet

Advanced SVG Techniques: viewBox, Transforms & Symbols

About This Document

This reference accompanies the article: Advanced SVG Techniques: viewBox, Transforms & Symbols

Read the full article at: <https://svgeneration.com/docs/advanced-svg-techniques>

Article Summary

Master the less-known SVG features: viewBox manipulation, nested transforms, symbols, and use element power-ups.

Code example:

SVG Symbols: The Component System

`<symbol>` is SVG's reusable component system. Define a motif once inside a `<symbol>` element (which has its own viewBox), then instantiate it anywhere with `<use href="#symbolId" x="..." y="..." width="..." height="...">`. Each `<use>` can position and size the symbol independently. This is the most efficient way to build complex patterns from a single master shape.

Nested SVG Elements

SVG supports nested `<svg>` elements, each with its own viewBox and coordinate system. This enables a composition pattern where complex motifs are designed in their own coordinate space and placed within a parent SVG at any position and size. Nested SVGs are particularly useful for creating symmetrical motifs: design one quadrant, then mirror it four times.

Free Resources

Visit [SVGeneration.com](https://svgeneration.com) for 600 free SVG background patterns. No attribution required.

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