SVG

For Assets and Apps

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What is an SVG file?

- Scalable Vector Graphics
- A subset of XML
- Uses coordinate system (No built in layout like in html)
- Basic primitive elements include rect, circle, line, path, text, g.
- Predefined elements style, linear-gradient, symbols
- Supports Animations
- Supports CSS

Inline SVG Demo

Paths

https://developer.mozilla.org/en-US/docs/Web/SVG/Attribute/d

Symbols via Inkscape

Benefits of SVG

- Vector means crisp lines at any scale (no pixelation)
- Familiar to people that work on html
- Does not break with custom elements/attributes etc
- Ubiquitous (Browsers, editors on all Operating Systems)
- Prevents Lock In (standardize on output and not tooling)
- Can be kept in version control with readable diffs
- Opens door to custom tooling
- CSS support adds flexibility at run time

Disadvantages of SVG

- Animation performance goes down as DOM complexity goes up
- No GPU acceleration in the browsers

Tooling Options

- Adobe tools (Mac Windows)
- Inkscape (Mac, Windows, Linux, *BSD)
- Affinity Designer (Mac, Windows, iOS)
- Sketch (Mac)
- ImageMagick CLI
- Inkscape CLI
- Modified static site generator eg. write a module for Metalsmith
- D3.js in browser (JS library)
- Normal DOM manipulation in the browser