Intro to SVG

Let's start \rightarrow



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- Grad Software Developer at Thoughtworks
- Writes about Web Dev, UI, Dev growth
- Experienced in creating mockups & graphics

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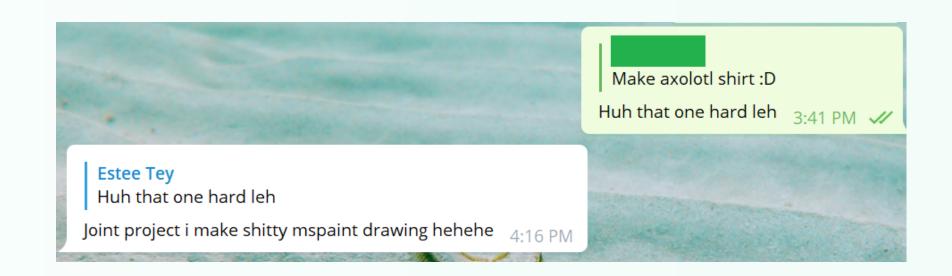
- 1. What is SVG?
- 2. Why do we use SVG?
- 3. How do we get SVG?
- 4. How to use SVG?

What is SVG?

Images

Story Time! \rightarrow















Raster vs Vector Images



Image File Types

File Extension	Description
.gif	Graphics Interchange Format
.png	Portable Network Graphic
.jpg/.jpeg	Image format by Joint Photographic Experts Group
.webp	A superior image format of .png & .jpg
.svg	Scalable Vector Graphics

Image File Types

.gif Indexed Color Loseless Animated images	
png Greyscale, True Color, Alpha (better than .GIF) Loseless (better than where transparency matters.	
.jpg / True Color Lossy Photographs, realistic images o people, venues etc.	f
webp Depends on compression Loseless / A superior image format of .pngjpg	g &
Anything that can be specified NA UI that requires to be redrawn accurately at different sizes	

How to get SVG

- 1. Create SVG from scratch
- 2. Generate SVG
- 3. Extract from websites

Create SVG with 3 basic elements

```
<rectangle />
  <circle />
  <polygon />
```

Code Time! →

Create SVG with 3 simple shapes in code



JP flag in SVG

```
<svg>
        <rect width="100%" height="100%" fill="white" />
        <circle cx="50%" cy="50%" r=60 fill="#BC002D" />
3
    </svg>
```

>_ TH flag in SVG

> VN flag in SVG



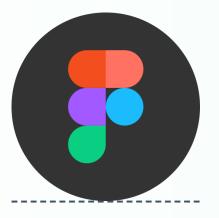
```
<svg>
       <defs>
         <polygon id="star" fill="yellow"</pre>
 3
           points="100,10 40,198 190,78 10,78 160,198" />
       </defs>
       <rect width="100%" height="100%" fill="red" />
       <svg viewBox="78 0 600 600" x="25%" y="25%">
         <use href="#star">
 8
         </use>
 9
       </svg>
10
11
     </svg>
```

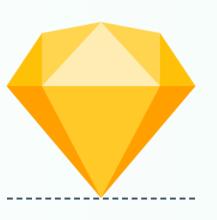
SG flag in SVG



```
<svg>
       <rect width="100%" height="50%" fill="red" />
       <rect width="100%" height="50%" y="50%" fill="white" />
 3
       <circle cx='15%' cy='25%' r='30' fill='white' />
       <circle cx='20%' cy='25%' r='30' fill='red' />
       <svg viewBox="600 -100 1000 1800">
         <use href="#white-star" />
         <use href="#white-star" x="-20%" y="10%" />
 8
         <use href="#white-star" x="20%" y="10%" />
 9
         <use href="#white-star" x="-12.5%" y="22%" />
10
         <use href="#white-star" x="12.5%" y="22%" />
11
       </svg>
12
     </svg>
13
```

Create SVG with Design Tools







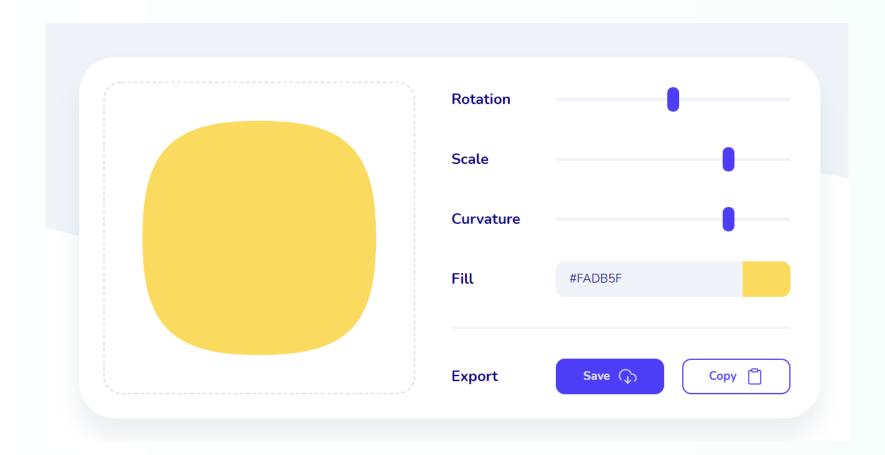
Figma Demo

Ellipse, Polygon, Paths, Bezier Curves



Generate SVG

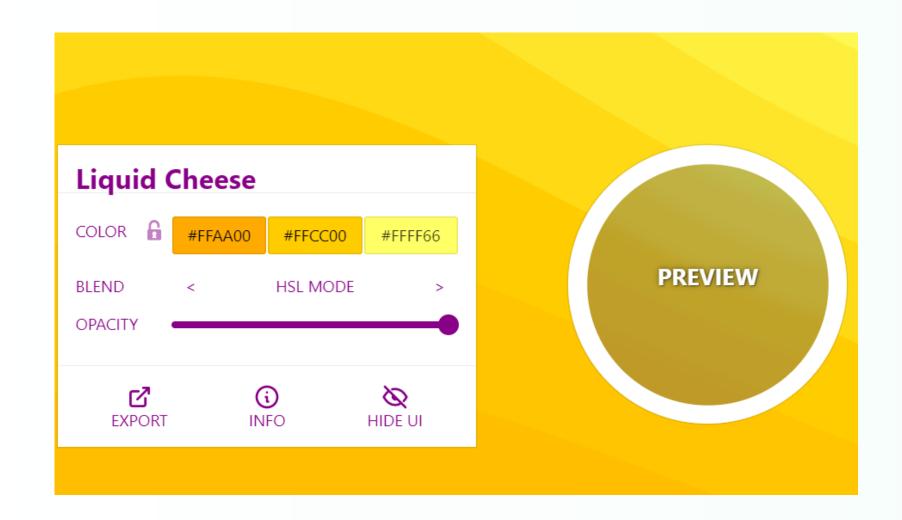
1. Squicley for generating Squircles

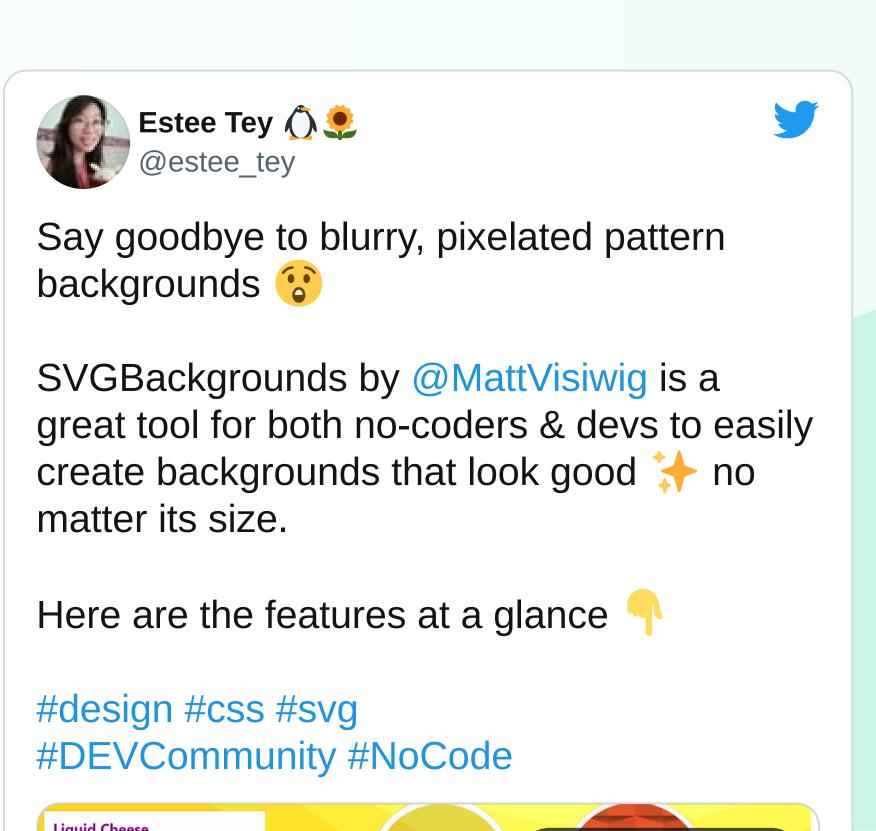




Generate SVG

2. SVGBackgrounds.com for generating backgrounds





Extract from websites

SVGOMG Demo with Hacktoberfest's SVG

More Resources

- MDN Web Docs on SVG
- Smashing Magazine SVG generators
- CSS Tricks how to scale SVG
- Frontend Masters SVG Essentials & Animations v2

Thank you!

Hope you enjoyed the L&L @ Any questions?

Feedback form -> ____