



DEVELOPER SUMMIT

March 10–13

Return of SVG

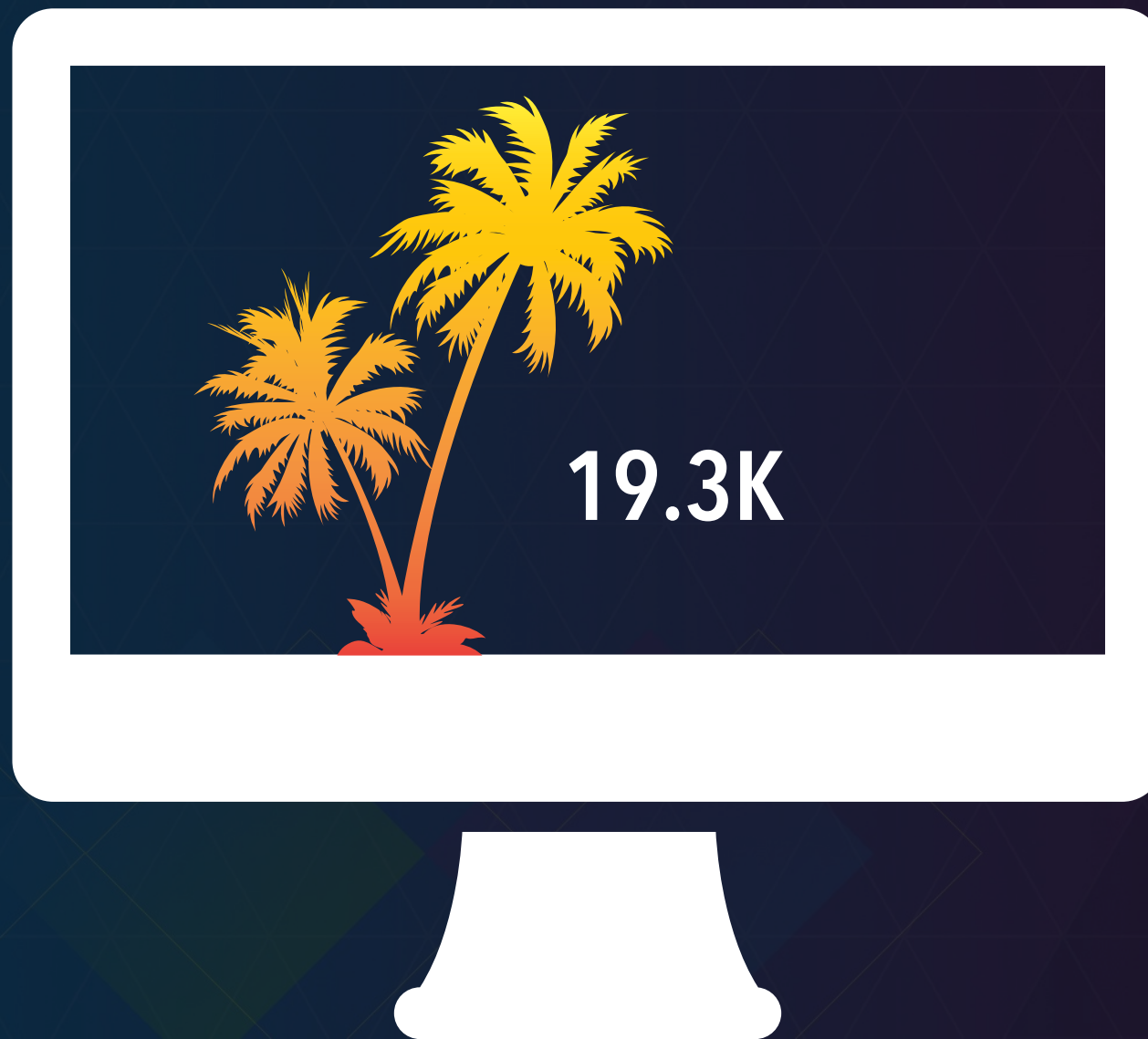
Erich Rainville / UI-UX Designer / ESRI R&D Center, Washington D.C.



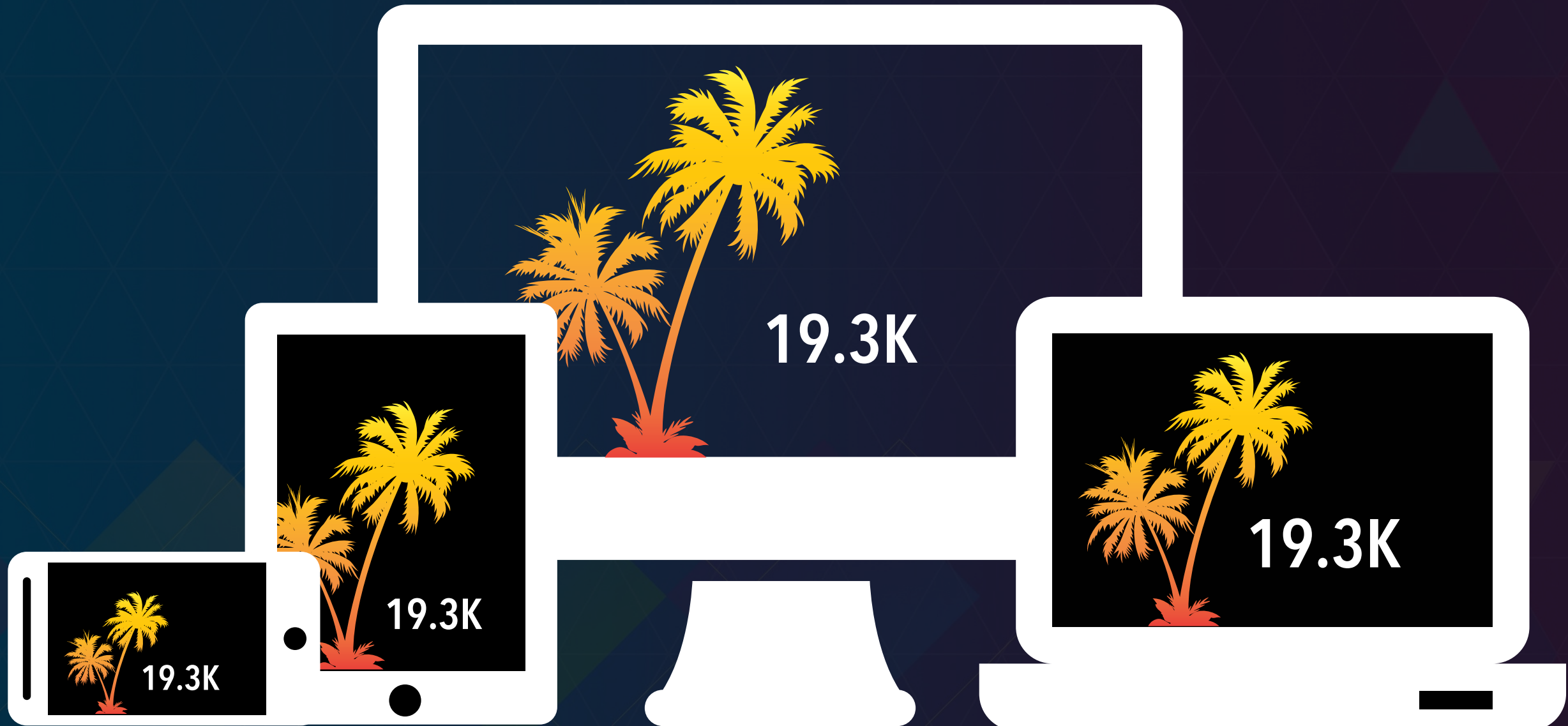
<SVG>



<SVG>



<SVG>



<SVG>

Flexible & Sharp

Small

Accessible

Stylable

Responsive

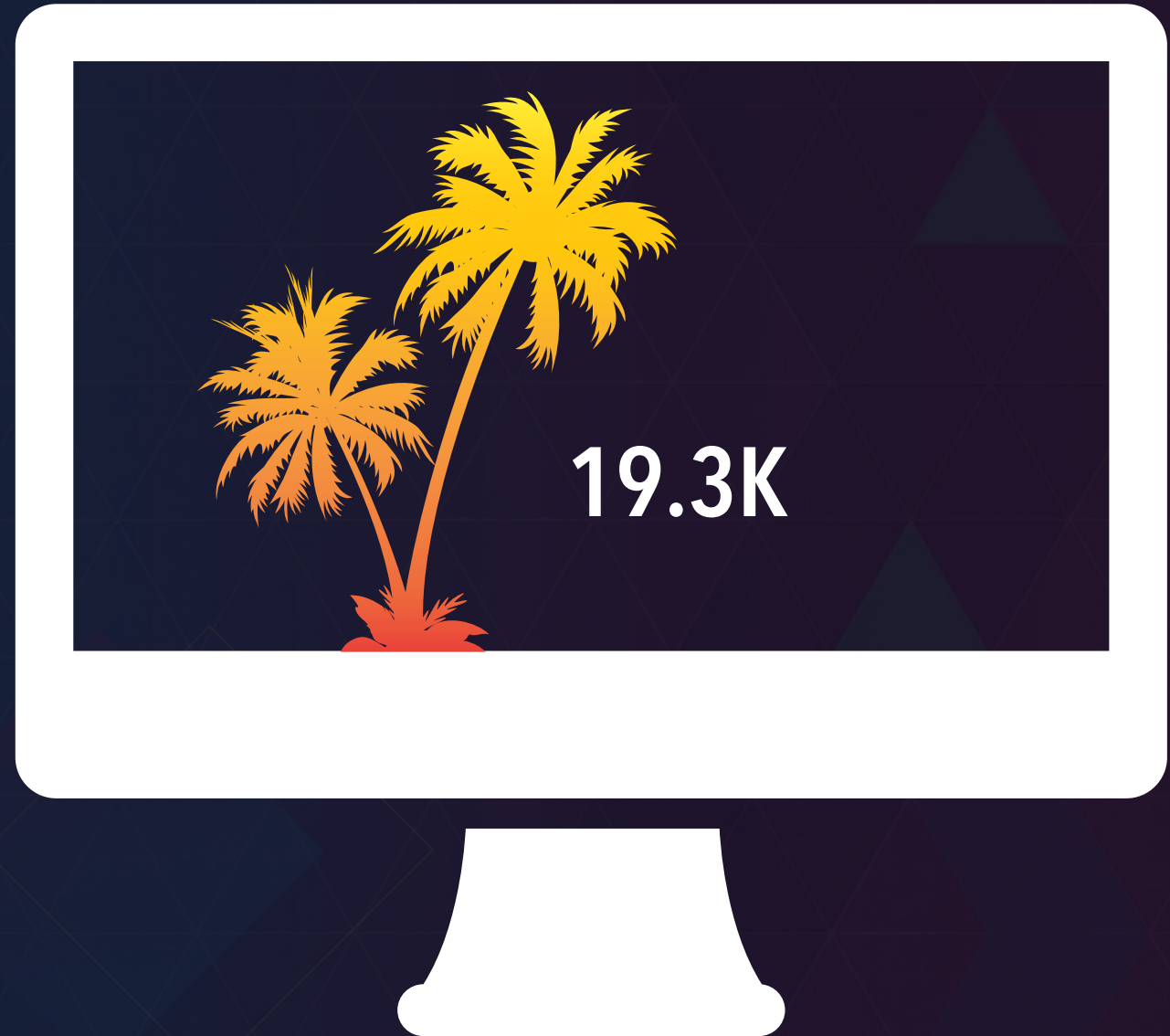
Scriptable

Systematic

Animation

Interactive

and yes, Well-Supported!







SVG (basic support) - REC

Global 91.4% + 2.44% = 93.85%
 U.S.A. 92.16% + 1.2% = 93.35%

Method of displaying basic Vector Graphics features using the embed or object elements. Refers to the SVG 1.1 spec.

Current aligned Usage relative Show all

IE	Firefox	Chrome	Safari	Opera	iOS Safari *	Opera Mini *	Android Browser *	Chrome for Android
		31						
		36						
		37					¹ 4.1	
8		38					¹ 4.3	
² 9		39					4.4	
² 10	35	40	7.1		7.1		4.4.4	
² 11	36	41	8	27	8.1	8	37	40
² TP	37	42		28				
	38	43		29				
	39	44						

Notes Known issues (2) Resources (7) Feedback

```

```

codepen.io/TheBlueDog/pen/JoaMBE/


CODEPEN Save Fork Info Share Editor

HTML

```
1 <svg class = "svg" xmlns="http://www.w3.org/2000/svg" viewBox="0
0 72 84" enable-background="new 0 0 72 84"><linearGradient
id="a" gradientUnits="userSpaceOnUse" x1="36" y1="-.02" x2="36"
y2="83.98"><stop offset="0" stop-color="#FFF33B"/><stop
offset=".059" stop-color="#FFE029"/><stop offset=".13" stop-
color="#FFD218"/><stop offset=".203" stop-color="#FEC90F"/><stop
offset=".281" stop-color="#FDC70C"/><stop offset=".668" stop-
color="#F3903F"/><stop offset=".888" stop-color="#ED683C"/><stop
offset="1" stop-color="#E93E3A"/></linearGradient><path
fill="url(#a)" d="M69.5 21.2c.6-.2 2.1.7 2.5 1.1-.6-1-1.5-2.4-
4.7-3.6.9-.1 2.4.3 3.5 1-.9-1.2-2.4-1.8-4.7-2.3.7-.5 1.9-.3
3-.1-3.1-1-5.5-1.1-8.4 0 .6-.7 1.5-.9 2.3-1.1-.9 0-2.4.4-4.1
1-.1-.3-.4-.6-.8-.7-.3-.1 1.2-.3
1.8.1-.1-.5-.4-.7-.7-.8.6-.1.9.2 1.3.4-.1-.3-.7-.9-1.3-1 .9-.2
1.6.3 2.2.7-.2-.7-.8-1.1-1.3-1.5.7-.1 1.4 0 2.1.4-.4-.8-.9-1.3-
1.7-1.4.6-.4 1.2-.4 1.7.3.4-.7-.1-1.1-.1-1.5.8.6.7 1.2.7
1.7.5-.5 1.1-1.7.8-2.8.5.3.7 1.1.6 1.8.7-1-.1-1.7.3-1.6.7.2
1.2.4 1.8 1.1.1-.5-.9-1.4-1.5-1.4.8-.2 1.6-.2 2.3-.2-.6-.2-
1.3-.4-1.9-.5.9-.4 1.8-1 3-1.3-1.1 0-2.5.4-3.4.9.3-.3.7-.9 1.3-
1.2-.9 0-1.6.5-2.2.8.3-.8 1.3-1.3 2-1.8-1.2.3-3.1 1.4-4.7
3 2 2- 3 1 2-2 1 2 2-2 8-2 1 1-5 9 5-6 7 6 1- 5 6-1 7 1 9-2 8
```

CSS (SCSS)

```
1 .svg {
2   max-height: 100%;
3 }
```



Collections Assets Embed Details Delete

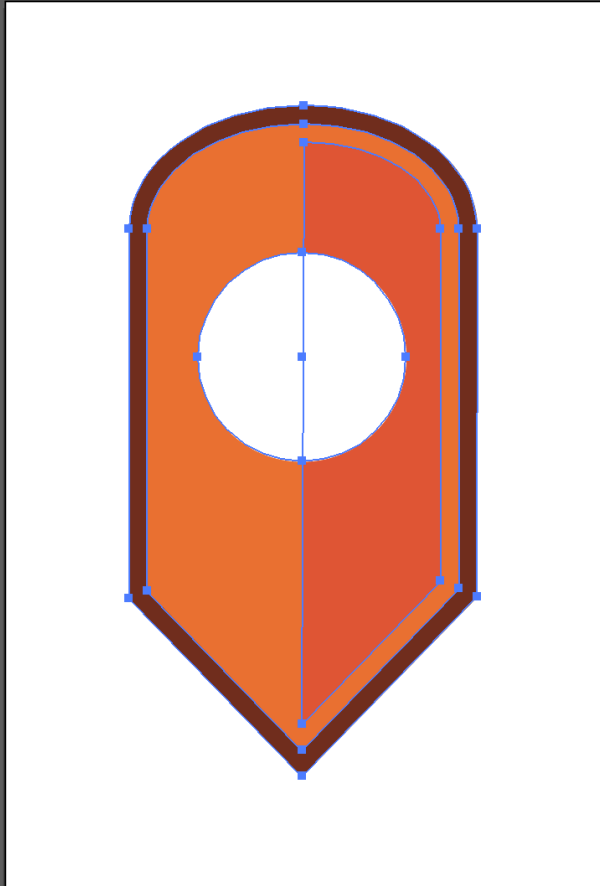
Last saved less than a minute ago Pen Settings HTML CSS JS

<http://codepen.io/TheBlueDog/pen/JoaMBE/>

Learn the syntax

```
<svg>
  <rect x="0.5" y="17.5" fill="#FFFFFF" stroke="#000000" stroke-miterlimit="10"
width="169" height="65"/>
  <circle fill="#FFFFFF" stroke="#000000" stroke-miterlimit="10" cx="280.5"
cy="53.5" r="53"/>
  <ellipse fill="#FFFFFF" stroke="#000000" stroke-miterlimit="10" cx="464.5"
cy="61.5" rx="95" ry="21"/>
  <line fill="none" stroke="#000000" stroke-miterlimit="10" x1="579.5"
y1="17.5" x2="657.5" y2="82.5"/>
  <polyline fill="none" stroke="#000000" stroke-miterlimit="10" points="674.5,
41 722,41 722,74 754,74 754,18 798.5,18 "/>
</svg>
```

Instead, lets use tools we like.



800%



1



Toggle Direct Selection



SVG Options

SVG Profiles: SVG 1.1

Fonts

Type: SVG


Subsetting: None (Use System Fonts)

Options

Image Location: Embed Link

Preserve Illustrator Editing Capabilities

Description

 Hold the cursor over a setting for additional information.

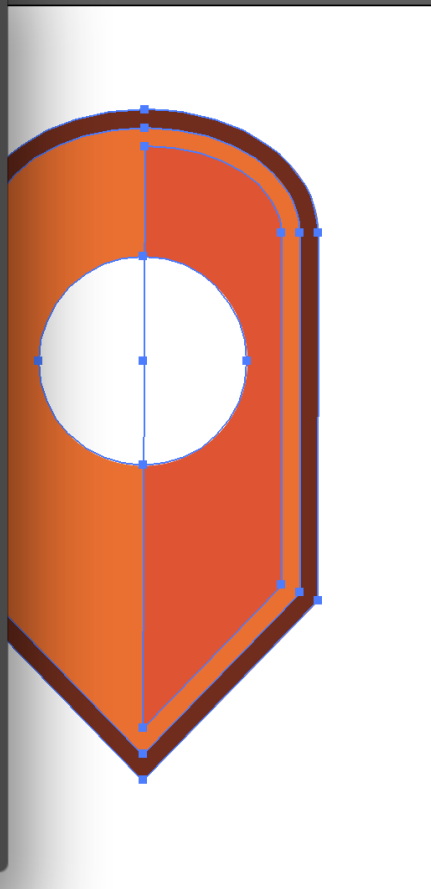
More Options

SVG Code...



Cancel

OK



How to start using SVG in your project


```

```

Inline SVG


Inline SVG Example

codepen.io/TheBlueDog/pen/e79c8f5b701f5485b4774ee17e74947d?editors=110

CODEPEN Save Fork Info Share Editor

```
HTML
1 <div class="jumbotron">
2   <div class="container">
3     <svg class="map-pin" viewBox="0 0 26 50">
4       <g>
5         <path fill="#702C1D"
6           d="M12.9,50L0,36.8V9.2C0,4.1,5.7,0,13.1,0S26,4.1,26,9.2L12.9,50z"/>
7         <path fill="#F8C820" d="M14.26,21.11L5.11,0L24.6,26.86L4.3,4.07L0,11.51z"/>
8       </g>
9     </svg>
10  </div>
11 </div>
```

```
CSS (SCSS)
1 .map-pin {
2   height: 120px;
3 }
```



Hello, #DevSummit!

This is a jumbotron, or also referred to as a hero.

[Learn more »](#)

Collections Assets Embed Details Delete Pen Settings HTML CSS JS

Last saved 1 minute ago

<http://codepen.io/TheBlueDog/pen/OPoKvZ/>

SVG Templates

```
<body>
  <svg style="display:none">
    <defs>
      <symbol id="twitter-bird">
        <desc>Twitter logo</desc>
        <path d="M100,10c-3.6,1.6-7.5"/>
      </symbol>
      <symbol id="octocat">
        <desc>Github logo</desc>
        <path d="M50,0C22.4,0,0,22.4,0,50c0,22.1,14.3,40.8,34.2,47.4
      </symbol>
      <symbol id="facebook">
        <desc>Facebook logo</desc>
        <path id="facebook-block" d="M94.5,100c3,0,5.5-2.5,5.5-5.5v-89c0"/>
        <path id="facebook-f" d="M69,100V61.3h13l1.9-15.1H69v-9.6c0"/>
      </symbol>
    </defs>
  </svg>
```

```
<svg class="blue">  
  <use xlink:href="#twitter-bird" </use>  
</svg>
```


```
<svg viewBox="0 0 25 25" class="blue">  
  <use xlink:href="defs.svg#twitter-bird" </use>  
</svg>
```

Responsive Icons

Responsive Icons

www.responsiveicons.co.uk

Responsive Icons



- Information icon (i)
- Twitter icon

Resize your window

Isn't this easier with icon fonts?

	Icon Fonts	SVGs
Vector	Yes, but...	Yes

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Vector	Yes, but...	Yes
CSS Control	Single Color	Better

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Vector	Yes, but...	Yes
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Positioning	Let's Not Even	Good

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Weird Failures	Yup	Less

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CSS Control	Single Color	Better
Positioning	Let's Not Even	Good
Weird Failures	Yup	Less
Semantics	none 	Better <svg>

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Vector	Yes, but...	Yes
CSS Control	Single Color	Better
Positioning	Let's Not Even	Good
Weird Failures	Yup	Less
Semantics	none 	Better <svg>
Accessibility	Be Careful	Better <title><desc>

	Icon Fonts	SVGs
Vector	Yes, but...	Yes
CSS Control	Single Color	Better
Positioning	Let's Not Even	Good
Weird Failures	Yup	Less
Semantics	none 	Better <svg>
Accessibility	Be Careful	Better <title><desc>
Ease of Use	OK	Better

	Icon Fonts	SVGs
Vector	Yes, but...	Yes
CSS Control	Single Color	Better
Positioning	Let's Not Even	Good
Weird Failures	Yup	Less
Semantics	none 	Better <svg>
Accessibility	Be Careful	Better <title><desc>
Ease of Use	OK	Better
Browser Support	IE 6+	IE 9+

Resources and Props to

Chris Coyer @ css-tricks.com / codepen.io

Thanks!

Erich Rainville / UI-UX Designer / ESRI R&D Center, Washington D.C.



@TheBlueDog