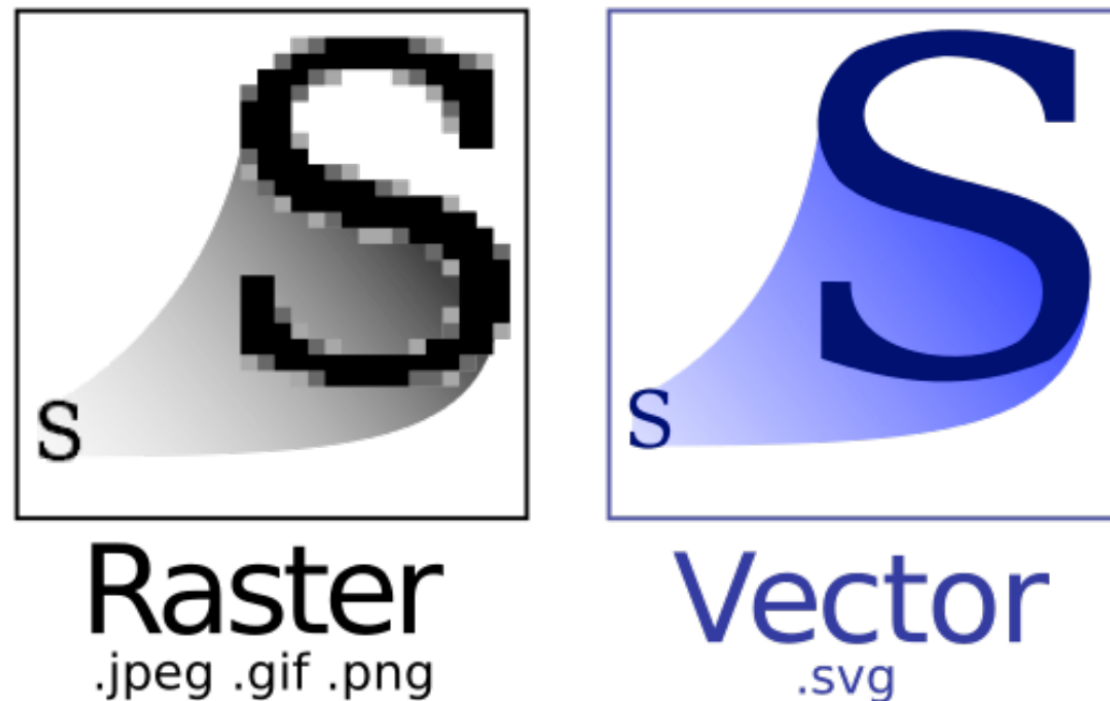


What is D3?

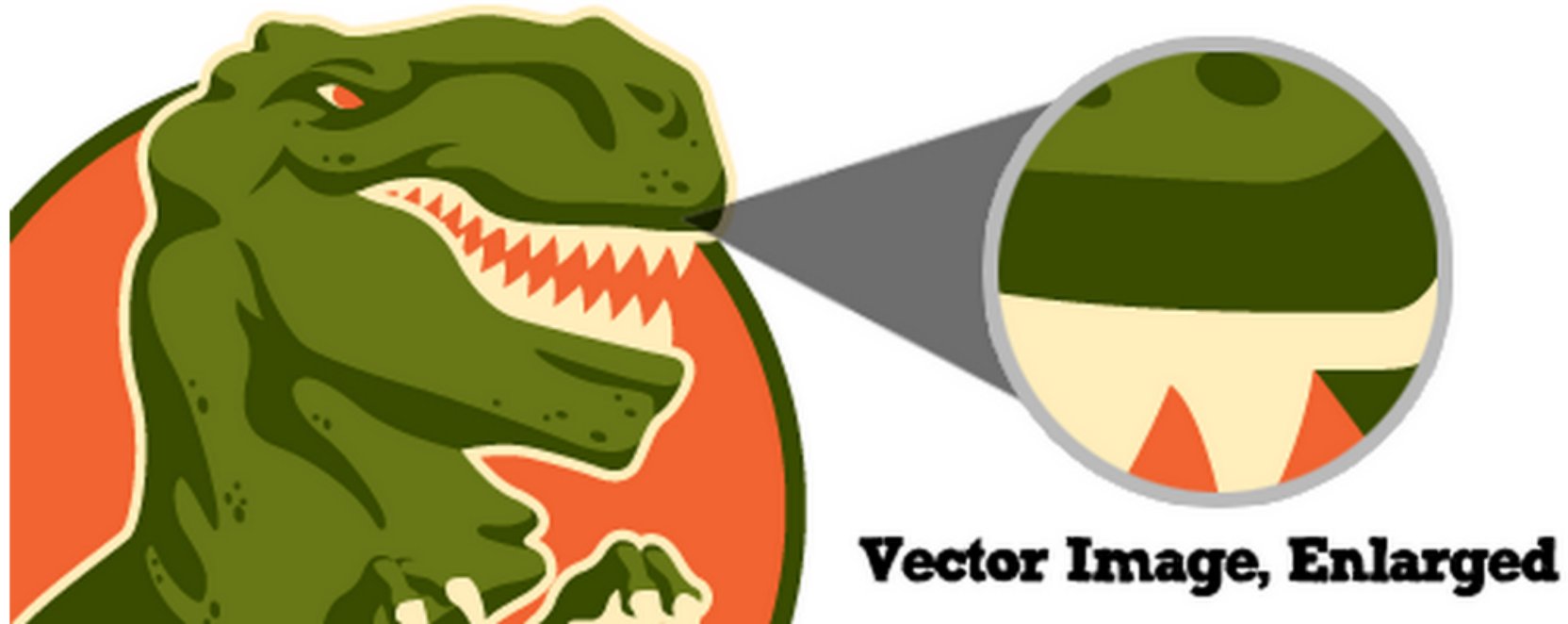
1,000 Foot View

- D3 is an open source JavaScript framework
- Similar to jQuery
 - But allows “data-binding,” a (or perhaps *the*) key component of D3
- Data binding allows you to bind data to DOM elements, like `<p>` tags.

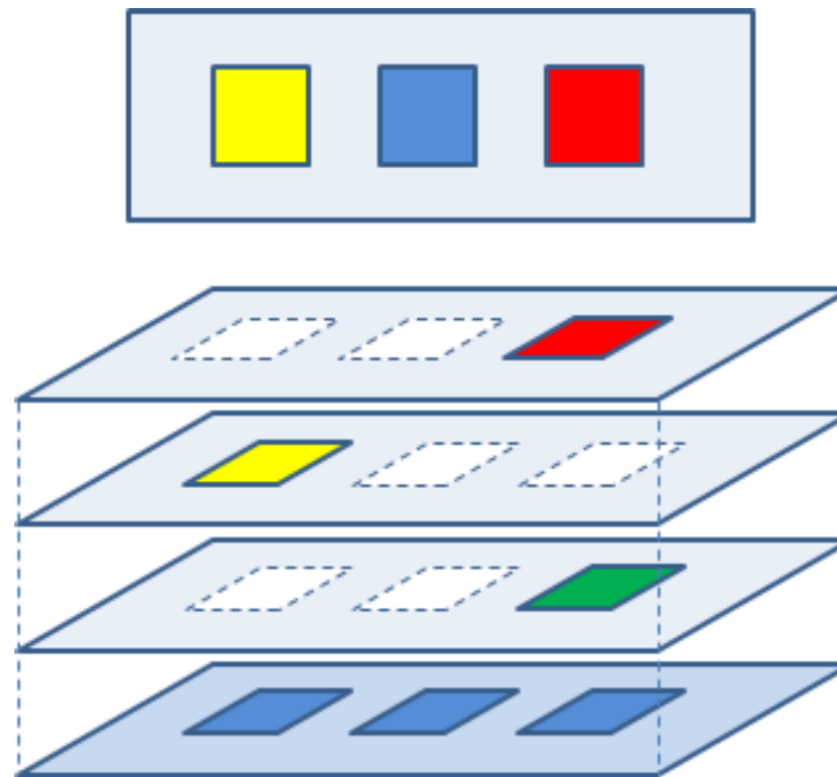
- D3 can use SVG (scalable vector graphics)



- Raster < Vector
- SVG's consist of DOM elements



- SVG works with layers over layers



- Sometimes what you're looking for is there, just underneath something else.

Say it again?

- D3 is a JavaScript framework for building data visualizations
- D3 binds data to DOM elements on an SVG, which acts like your canvas

The Building Blocks of a D3 Visualization

HTML


- HyperText Markup Language
- The initial setup for your D3 visualization
- Provides the structure that you work in

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>D3 Work</title>
5     <script src="http://d3js.org/d3.v3.min.js" charset="utf-8"></script>
6   </head>
7
8   <body>
9
10    <p> Hey! We're learning D3! </p>
11
12  </body>
13 </html>
14
```


CSS

- Cascading Style Sheets
- The look of your D3 visualization
- Maps visual attributes to HTML objects

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title>D3 Work</title>
5      <script src="http://d3js.org/d3.v3.min.js" charset="utf-8"></script>
6    </head>
7
8    <style>
9
10   p {
11     font: 10px sans-serif;
12   }
13
14 </style>
15
16 <body>
17
18   <p> Hey! We're learning D3! </p>
19
20 </body>
21 </html>
22
```



JavaScript

- JavaScript then says how your visualization works

```
1  <!DOCTYPE html>
2  <html>
3    <head>
4      <title>D3 Work</title>
5      <script src="http://d3js.org/d3.v3.min.js" charset="utf-8"></script>
6    </head>
7
8    <style>
9
10   p {
11     font: 10px sans-serif;
12   }
13
14 </style>
15
16 <body>
17
18   <p> Hey! We're learning D3! </p>
19
20   <script>
21
22     function somethingCool() {
23       d3.select(this)
24         .style("color", "red");
25     }
26
27     d3.select("p")
28       .on("mouseover", somethingCool)
29
30   </script>
31
32 </body>
33 </html>
34
```

