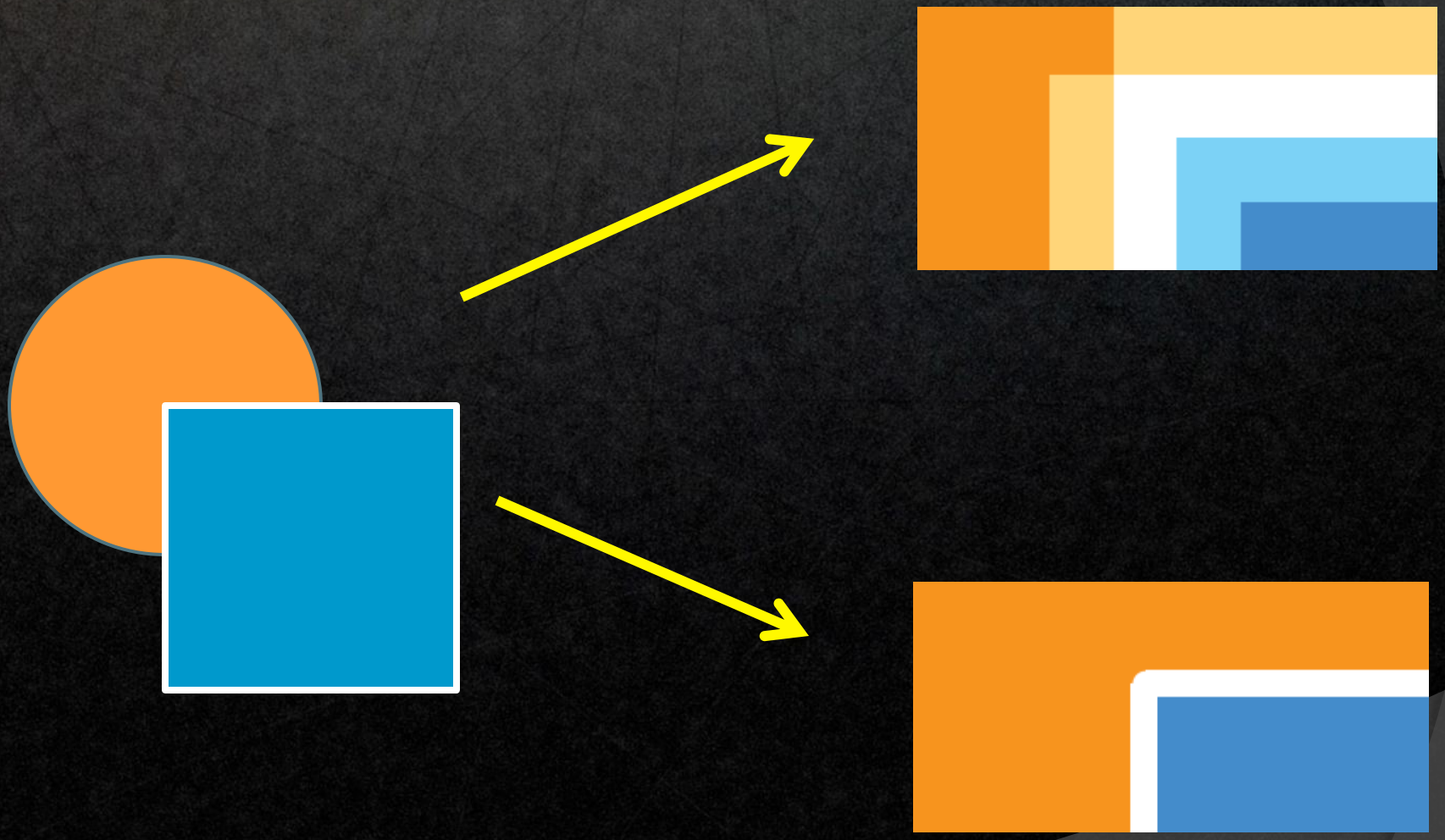
SVG
&
Raphaël . Js
http://raphaeljs.com

By: Andrey and Ariful

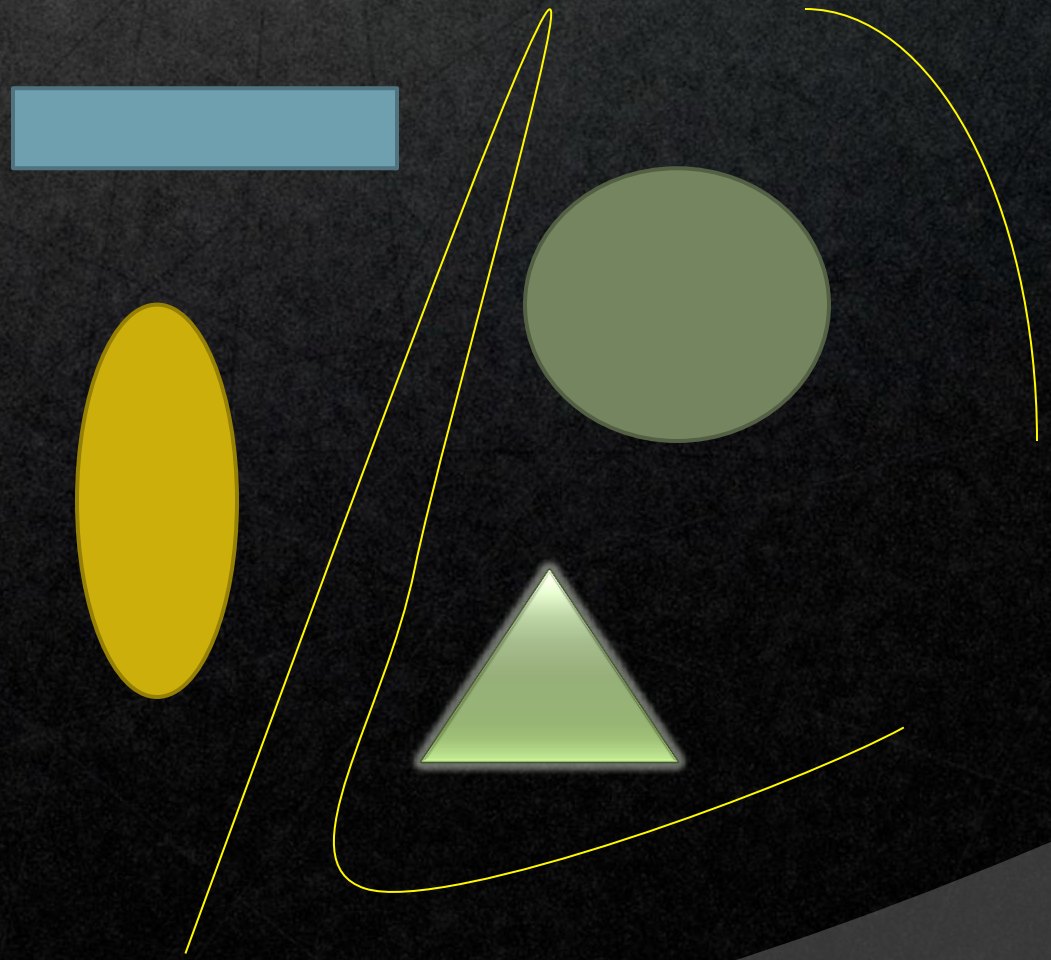
Scalable Vector Graphics

Canvas vs SVG



7 Elements

- rect
- circle
- ellipse
- line
- polyline
- polygon
- path



Attributes

- alignment-baseline
- baseline-shift
- clip
- clip-path
- clip-rule
- color
- color-interpolation
- color-interpolation-filters
- color-profile
- color-rendering
- cursor
- direction
- display
- dominant-baseline
- enable-background
- fill
- fill-opacity
- fill-rule
- filter

Format - DOM

```
<svg version="1.1" xmlns="http://www.w3.org/2000/svg">

        <rect x="0" y="0" width="320" height="200" fill="#ccc"/>
        <ellipse cx="160" cy="100" rx="50" ry="80" fill="#fc0"/>
        <circle cx="160" cy="100" r="50" fill="#000"/>
        <line x1="160" y1="100" x2="50" y2="80" stroke="#fff"/>
        <polyline points="10, 110, 10, 120, 20, 120, 20, 130, 30,
130,30, 140" stroke="#00f" fill="none" stroke-width="5"/>

<path d="M10,10C50,10 20,40 100,50L120,60l0,30
30,0-40,20L10,10z" fill="none" stroke="#f00" stroke-width="4"/>
</svg>
```

Path Syntax

M10,10C50,10 20,40

100,50L120,60L0,30

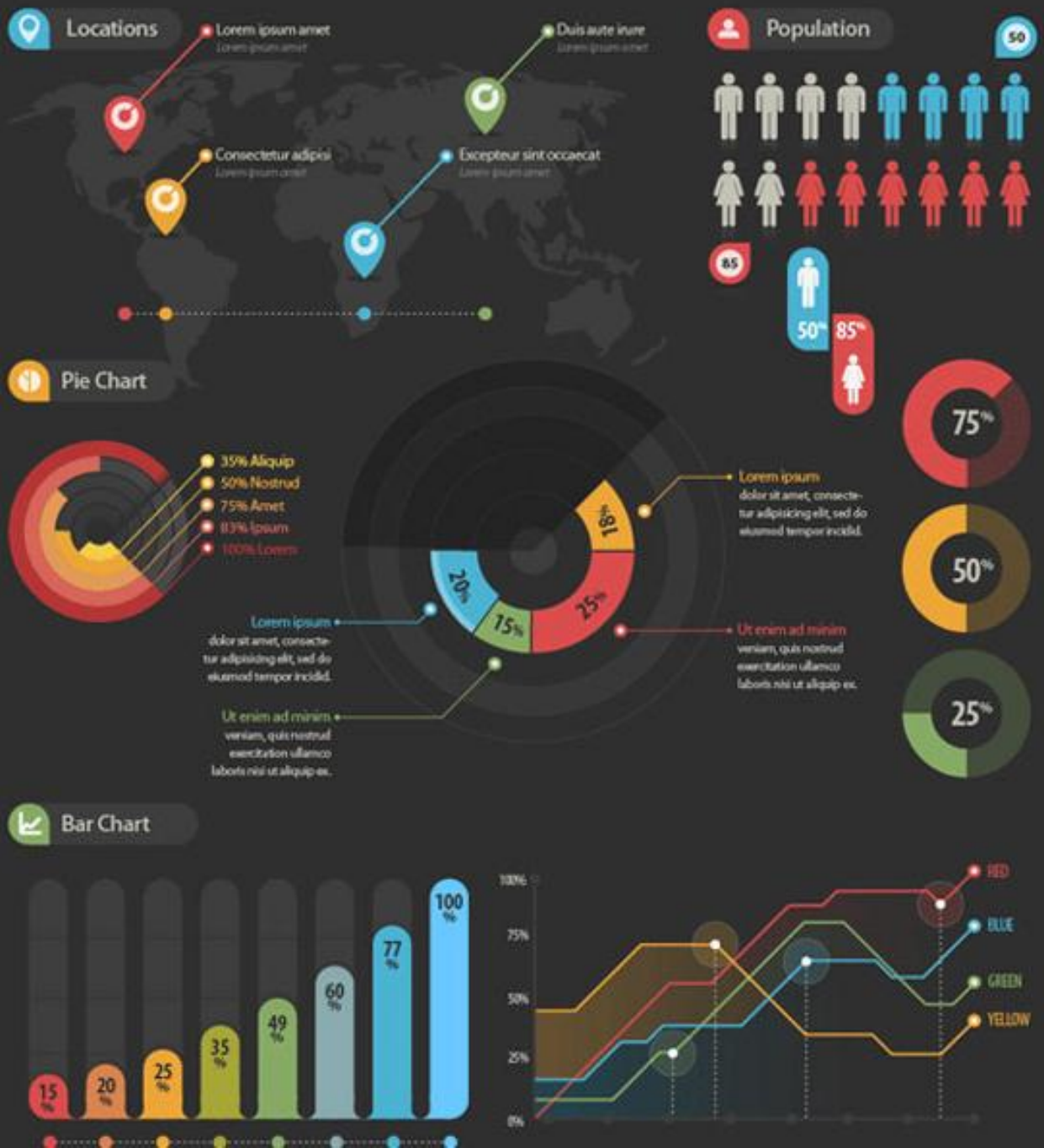
30,0-40,20z

Vector Icons from Paths

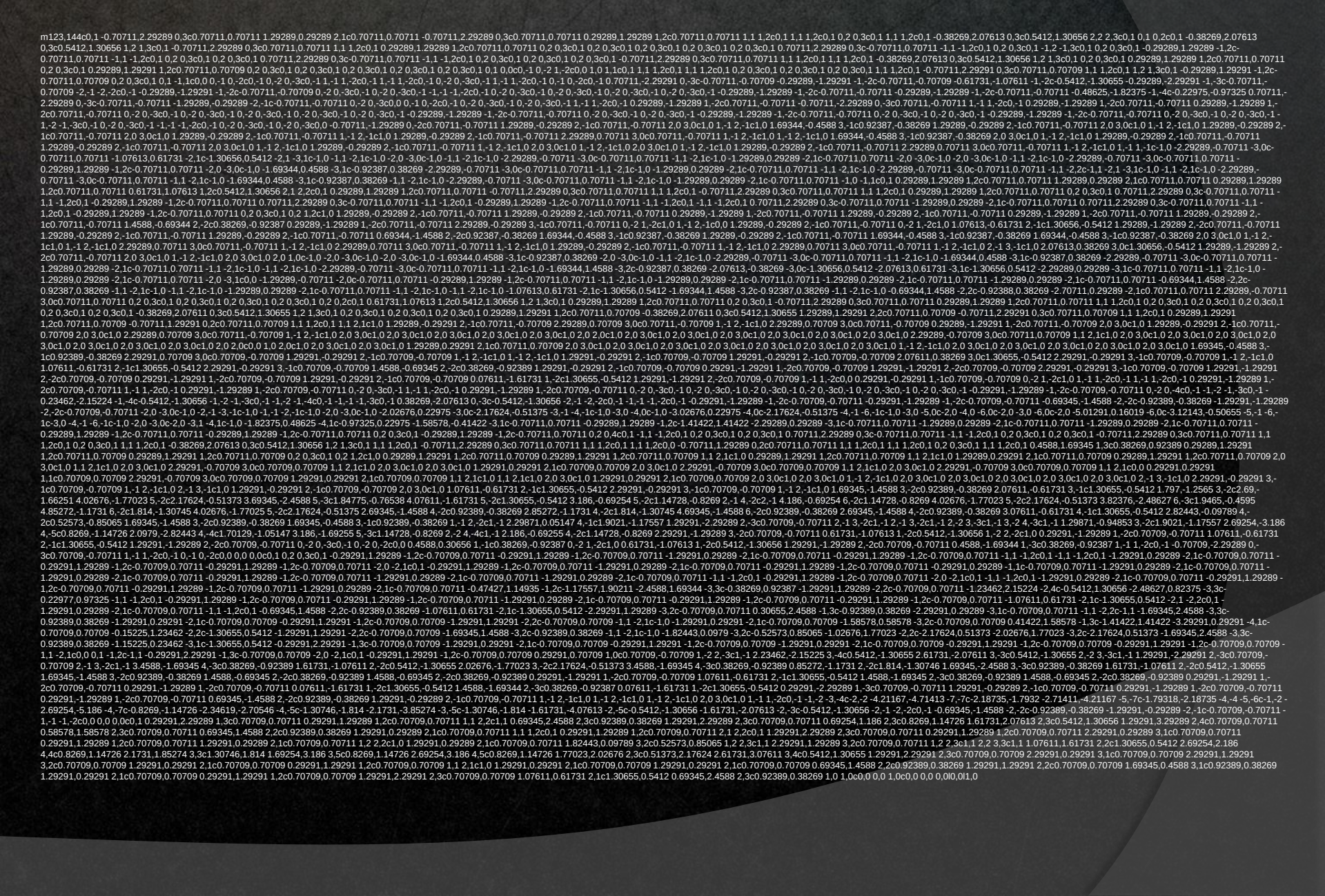
http://raphaeljs.com/icons/

To

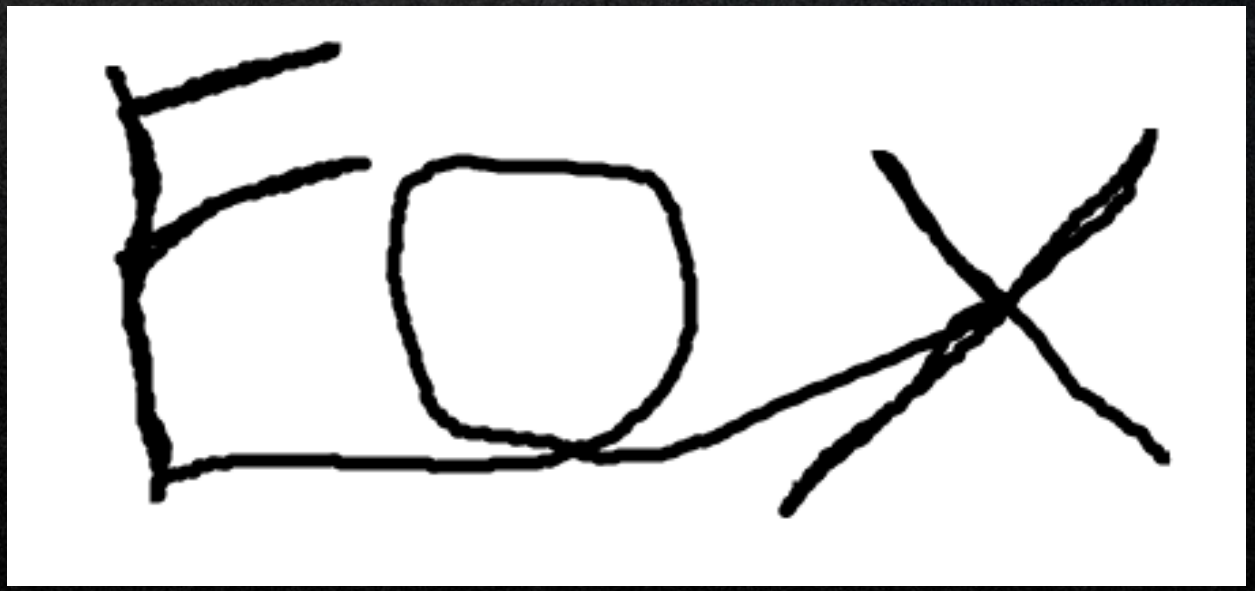
http://www.freevectorsdaily.com/infographic-vector-kit-free-download/


Locations
Lorem ipsum amet
Duis aute irure
Consectetur adipisi
Excepteur sint occaecat
Population
50
85
50%
85%
Pie Chart
35% Aliquip
50% Nostrud
75% Amet
83% Ipsum
100% Lorem
18%
25%
15%
20%
Lorem ipsum
dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incidid.
Ut enim ad minim
veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex.
Lorem ipsum
dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incidid.
Ut enim ad minim
veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex.
75%
50%
25%
Bar Chart
15%
20%
25%
35%
49%
60%
77%
100%
100%
75%
50%
25%
0%
RED
BLUE
GREEN
YELLOW

Easy Path Plotting


m123,144c0,1 -0.70711,2.29289 0,3c0.70711,0.70711 1.29289,0.29289 2,1c0.70711,0.70711 -0.70711,2.29289 0,3c0.70711,0.70711 0.29289,1.29289 1,2c0.70711,0.70711 1,1 1,2c0,1 1,1 1,2c0,1 0,2 0,3c0,1 1,1 1,2c0,1 -0.38269,2.07613 0,3c0.5412,1.30656 2,2 2,3c0,1 0,1 0,2c0,1 -0.38269,2.07613 0,3c0.5412,1.30656 1,2 1,3c0,1 -0.70711,2.29289 0,3c0.70711,0.70711 1,1 1,2c0,1 0.29289,1.29289 1,2c0.70711,0.70711 0,2 0,3c0,1 0,2 0,3c0,1 0,2 0,3c0,1

Who wants to do that path manual?



Additional Support

- CSS2/3 and beyond
- Masking & Clipping
- Filters

Filters for future research..

- feBlend
- feColorMatrix
- feComponentTransfer
- feComposite
- feConvolveMatrix
- feDiffuseLighting
- feDisplacementMap
- feFlood
- feGaussianBlur
- feImage
- feMerge
- feMergeNode
- feMorphology
- feOffset
- feSpecularLighting
- feTile
- feTurbulence
- feDistantLight
- fePointLight
- feSpotLight
- feFuncR
- feFuncG
- feFuncB
- feFuncA

What is Raphael?

Raphael is what
Jquery is for JavaScript.

The concept is very similar.
Robust coding, compatibility, and features.

Raphael SVG
Desktop Browser Support

- All except IE6
- IE7 and IE8 fallback is VML a bad version of SVG

Mobile SVG Support

Almost All Smart Phones, and Tablets,

With exception of Android 2.x Version, if used with native browser.

Our hack week...
SVG: Attack

Thank you

Brought to you by:

- Ariful and Andrey