**< HTML5 SVG >**

**What is SVG?**

SVG stands for **S**calable **V**ector **G**raphics

SVG is used to define graphics for the Web

SVG is a W3C recommendation

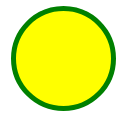
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The HTML <svg> Element

The HTML <svg> element is a container for SVG graphics.

SVG has several methods for drawing paths, boxes, circles, text, and graphic images

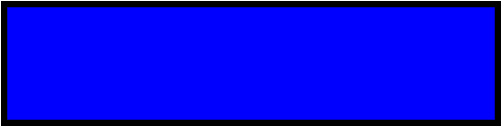
## SVG Circle



### **Example**

<!DOCTYPE html>  
<html>  
<body>  
  
**<svg** width="100" height="100">  
  <circle cx="50" cy="50" r="40" stroke="green" stroke-width="4"fill="yellow" **/**>  
**</svg>**  
  
</body>  
</html>

## SVG Rectangle

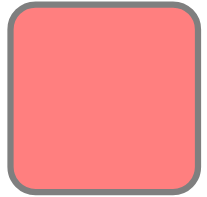


### **Example**

### <svg width="400" height="100">   <rect width="400" height="100" style="fill:rgb(0,0,255);

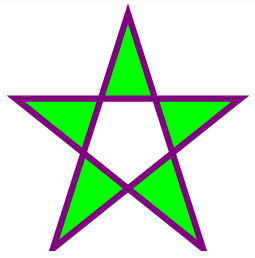
### stroke-width:10;stroke:rgb(0,0,0)" /> </svg>

## SVG Rounded Rectangle



<svg width="400" height="180">  
  <rect x="50" y="20" rx="20" ry="20" width="150" height="150"  
  style="fill:red;stroke:black;stroke-width:5;opacity:0.5" />  
</svg>

## SVG Star



<svg width="300" height="200">  
  <polygon points="100,10 40,198 190,78 10,78 160,198"  
  style="fill:lime;stroke:purple;stroke-width:5;fill-rule:evenodd;" />  
</svg>

## SVG Logo



### **Example**

**<svg** height="130" width="500"**>**  
**<defs>**  
    **<linearGradient** id="grad1" x1="0%" y1="0%" x2="100%" y2="0%">  
      **<stop** offset="0%" style="stop-color:rgb(255,255,0);stop-opacity:1" **/>**  
      **<stop** offset="100%" style="stop-color:rgb(255,0,0);stop-opacity:1" **/>**  
    **</linearGradient>**  
  **</defs>**  
  **<ellipse** cx="100" cy="70" rx="85" ry="55" fill="url(#grad1)" **/>**  
  **<text** fill="#ffffff" font-size="45" font-family="Verdana" x="50"y="86"**>** SVG **</text>**  
  Sorry, your browser does not support inline SVG.  
**</svg>**

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| **Canvas** | **SVG** |
| * Resolution dependent * No support for event handlers * Poor text rendering capabilities * You can save the resulting image as .png or .jpg * Well suited for graphic-intensive games | * Resolution independent * Support for event handlers * Best suited for applications with large rendering areas (Google Maps) * Slow rendering if complex (anything that uses the DOM a lot will be slow) * Not suited for game applications |