

Visualization on the Web

SVG

SCALABLE VECTOR GRAPHICS

Service Communication

- No lesson on Friday 18, March 2016

Introducing SVG

- Descriptive tags for images
- Based on vector graphics
- D3.js can manage the creation and modification of tags

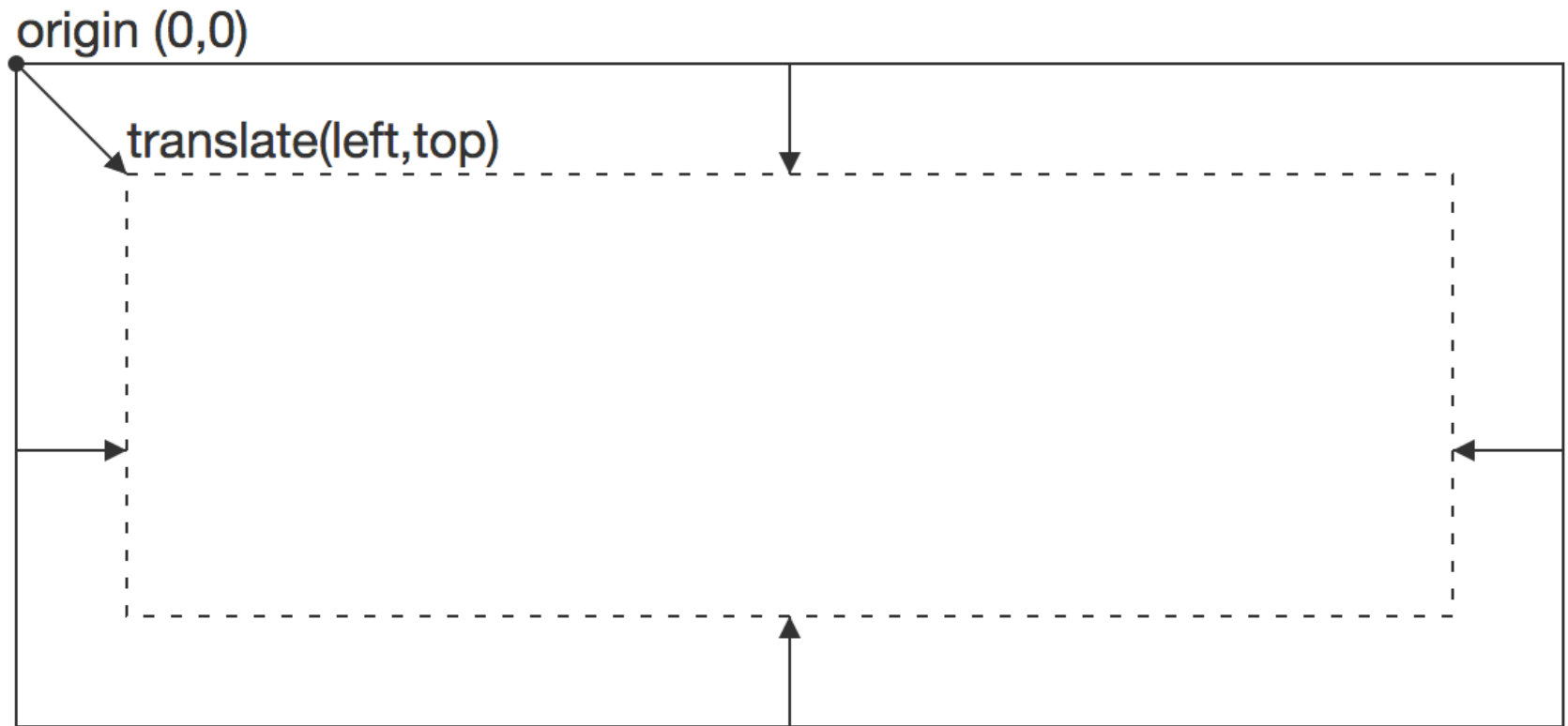
SVG External Resources

- SVG Specification
 - <http://www.w3.org/TR/SVG/>
- Mozilla Developer Network
 - <https://developer.mozilla.org/en/SVG>
- D3.js API Reference
 - <https://github.com/mbostock/d3/wiki/SVG-Shapes>

Hello World Example

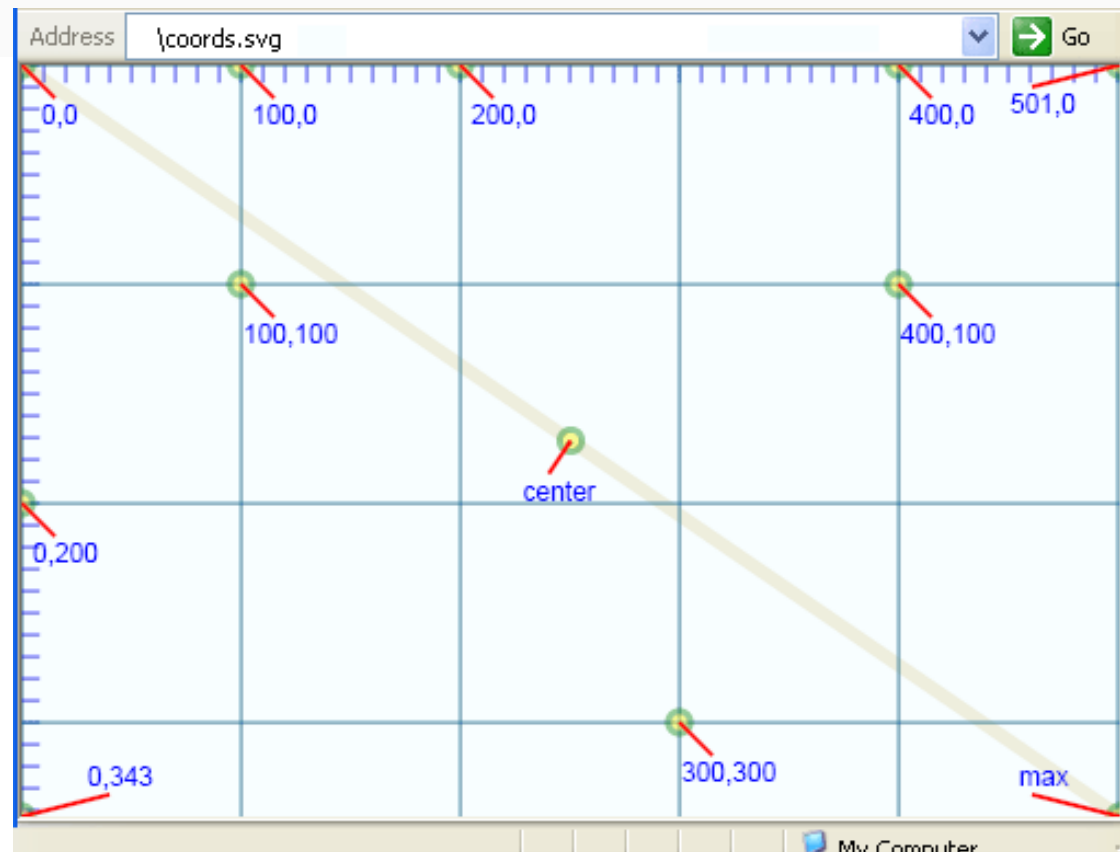
```
<!DOCTYPE html>  
<meta charset="utf-8">  
<svg width="960" height="500">  
  <text y="12">  
    Hello, world!  
  </text>  
</svg>
```

Coordinate System



SVG Viewport

```
<svg width="500" height="300">  
  <circle cx="250" cy="150" r="30" fill="red" stroke="black" stroke-width="4px"/>  
  <g transform="translate(50,50)">  
    <circle r="50px" stroke="red" fill="pink"/>  
    <text text-anchor="middle">Label</text>  
  </g>  
</svg>
```



SVG – Construction and Margins

```
var width = 960;
var height = 600;
var margins = {left:10, right:10, top:10,
bottom:10}
var svg = d3.select("body").append("svg")
    .attr("width", width)
    .attr("height", height);

var g = svg.append("g")
    .attr("transform", "translate("
        + margins.left + ","
        + margins.top + ")");
```


SVG Workshop

Mike Bostocks

External Slideshow

<https://bost.ocks.org/mike/d3/workshop/#109>

SVG Basic Shapes

SVG Spec

