# HTML5 and CSS3 for Mobile Applications

**SVG: Scalable Vector Graphics** 

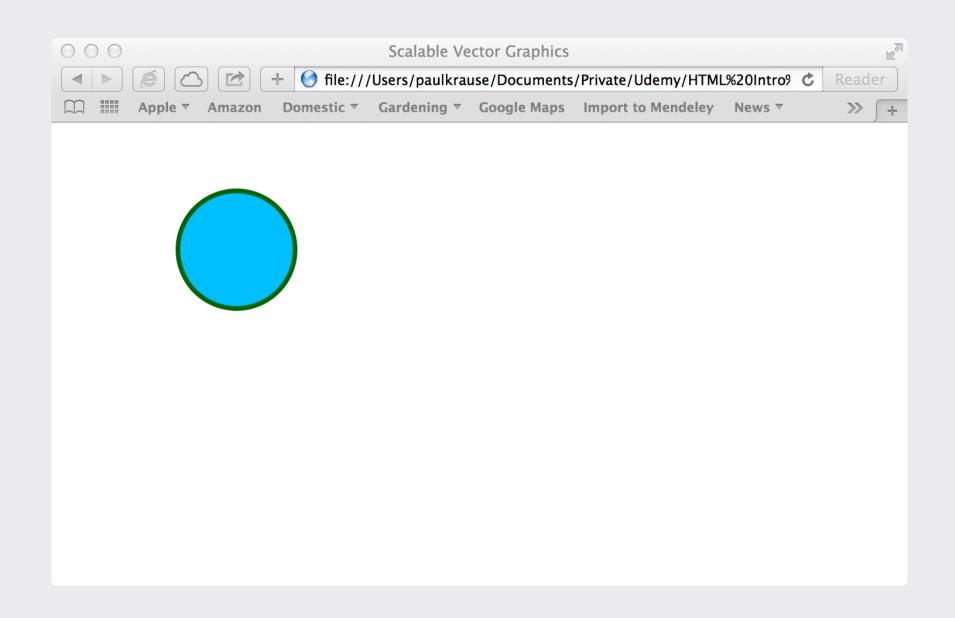
Prof. Paul Krause, University of Surrey

Scalable Vector Graphics

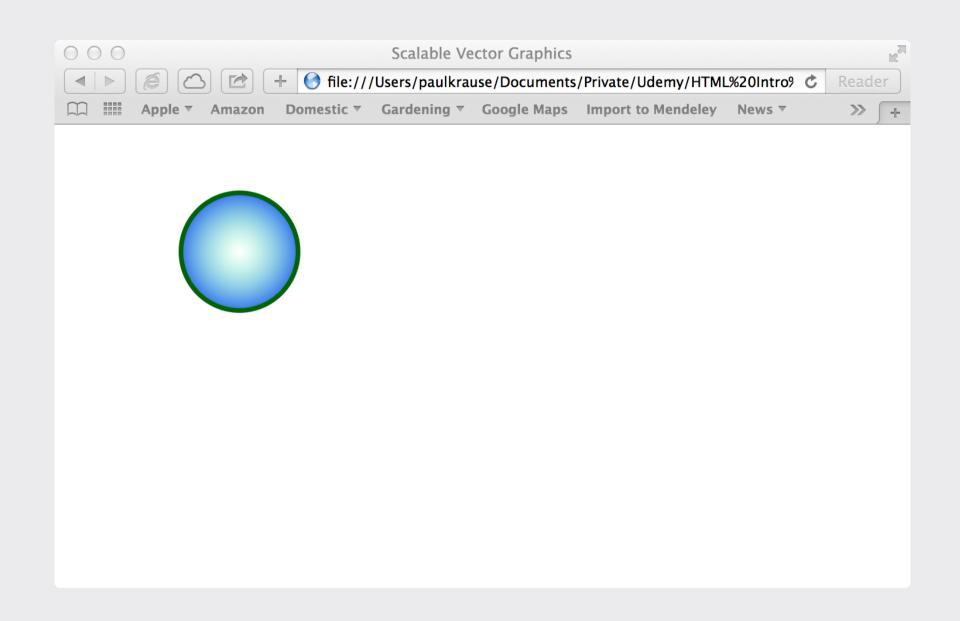
## Advantages of SVG

- Small file size
- Can be changed with scripting
- Scales without pixelated or jagged edges
- Easy to understand
- Can be animated

### Simple Circle in svg



### Circle with gradient fill



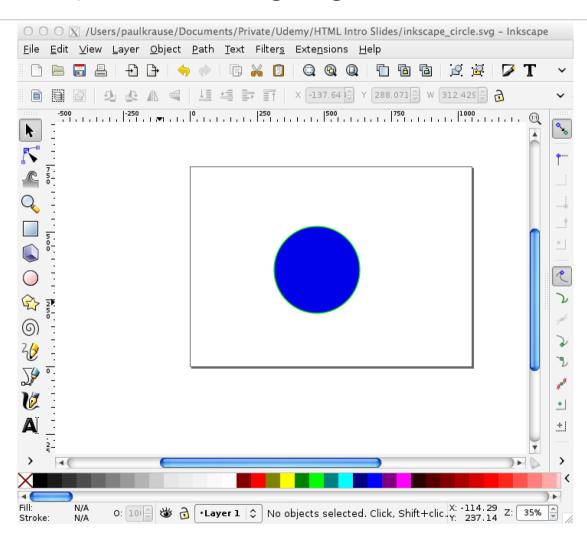
#### Animate the circle

```
<!DOCTYPE svg PUBLIC "-//W3C//DTD SVG 1.0//EN"</pre>
  "http://www.w3.org/TR/2001/REC-SVG-20010904/DTD/svg10.dtd">
<svg xmlns="http://www.w3.org/2000/svg" height="200" width="300" version="1.0">
 <title>Animated Circle</title>
 <desc>Circle with gradient fill that slowly collapses</desc>
   <defs>
      <radialGradient id="grad" cx="50%" cy="50%" r="60%" fx="50%" fy="50%">
        <stop offset="0%" style="stop-color:rgb(51,255,153);stop-opacity:0" />
        <stop offset="100%" style="stop-color:rgb(0,51,255);stop-opacity:1" />
      </radialGradient>
    </defs>
   <circle cx="150" cy="100" r="50" stroke="darkgreen" stroke-width="4" fill="url(#grad)">
      <animate attributeName="r" attributeType="XML" begin="0s" dur="6s" fill="freeze"</pre>
       from="50" to="0" />
    </circle>
</svg>
```

#### and import it into the HTML

### Including an svg file in a document

### Use Inkscape for drawing svg



#### But ...

```
inkscape:label="Layer 1"
   inkscape:groupmode="layer"
   id="layer1"
   transform="translate(0,-308.2677)">
  <path
     sodipodi:type="arc"
     style="fill:#0000e5; fill-rule:evenodd; stroke:#00f300; stroke-width:4; stroke-
     linecap:butt;stroke-linejoin:miter;stroke-opacity:1;stroke-miterlimit:4;stroke-
     dasharray:none;fill-opacity:1"
     id="path2985"
     sodipodi:cx="474.28571"
     sodipodi:cy="385.52304"
     sodipodi:rx="160"
     sodipodi:ry="161.42857"
     d="m 634.28571,385.52304 a 160,161.42857 0 1 1 -320,0 160,161.42857 0 1 1 320,0 z"
     transform="translate(0,308.2677)"_/>
</g>
```

#### What we have done

- Very high level introduction to svg
- First point of call for more info:

http://www.w3schools.com/svg/