

COMP 4021

Web x.0

Web 1.0	Web 2.0
Read only	read and write
static	dynamic
desktop based	ubiquitous
min use of JS	use a lot of JS

jQuery

```
$( 'abc' )  
.html()  
.text()  
.attr( 'href' )  
.show()  
.hide()  
.toggle(500)
```

CSS

```
a:link, a:hover, a:visited
```

SVG

```
<svg  
  xmlns="http://www.w3.org/2000/svg"  
  xmlns:xlink="http://www.w3.org/1999/xlink"  
  width="400"  
  height="300"  
>  
  <text x="10" y="300" style="font-size:60px;fill:red">  
    This is SVG text  
  </text>  
  <line x1="0" y1="0" x2="300" y2="200" style="stroke:black"/>  
  <rect width="700" height="100" x="0" y="200" style="fill:blue"/>  
  <circle cx="150" cy="150" r="100" style="fill:green"/>  
  <ellipse cx="80" cy="120" rx="60" ry="100" style="fill:lime"/>  
  <polygon
```

```

        points="150,40 40,110 40,180, 150,250 260,180 260,110"
        style="fill:lightskyblue;stroke:black"
    />
    <g id="my_group_name">
        <image xlink:href="hong_kong.jpg" x="10" y="10" />
    </g>
    <path d="M100,25 L200,25 L250,125 L50,125 Z"
        style="fill:pink;stroke:black"/>
</svg>

```

```

<defs>
    <linearGradient id="my_gradient", x1="0%" y1="0%" x2="100%" y2="100%">
        <stop offset="0" stop-color="white"/>
        <stop offset="1" stop-color="black"/>
    </linearGradient>
</defs>
<... fill="url(#my_gradient)" .../>

```

Paths:

- M: Move to
- L: Draw a straight line to
- H: Draw a horizontal line to
- V: Draw a vertical line to
- C: Draw a curve to (uses a cubic Bezier curve)
- S: Draw a smooth curve to
- Q: Quadratic Bezier curve
- T: Draw a smooth quadratic Bezier curve to
- A: Draw an arc to
- Z: Finish/ go back to the beginning

borrow attribute from svg to html tag

e.g. Borrow `xlink` to `href`

```
<img xlink:href="blablabla" />
```

`g` tag

Used to group up multiple svg elements so that the group can be manipulated with JS

Can use `style` tag just like in html

Animations:

1.

```
<rect x="50" y="50" width="100" height="100"
stroke="black" stroke-width="5" fill="white">
  <animate attributeName="r" values="200;50;200" dur="1s" repeatCount="indefinite"
/>
</rect>
```
2.

```
$('#me').animate({ top: 100 }, 2000, 'linear')
```
3.

```
@keyframes move-rect {
  from { transform: translateX(0px); }
  to   { transform: translateX(400px); rotate(0deg); }
}
rect {
  animation: move-rect 2s;
}
```

CSS animation events: 'animationstart', 'animationend', 'transitionrun', 'transitionstart', 'transitionend'

Responsive

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
@media screen and (max-width: 800px) {
  body { font-size: 14px; }
}
```

```
<picture>
  <source media="(max-width: 400px)"
srcset="gibson_300w.jpg">
  <source media="(max-width: 600px)"
srcset="gibson_500w.jpg">
  <source media="(max-width: 800px)"
srcset="gibson_750w.jpg">
  
</picture>
```