

Scalable Vector Graphics

In this exercise we will look at the SVG tag in HTML.

Exercises

1. Create a blank HTML file.

```
<!DOCTYPE html>
<html>
  <head>
    <style type="text/css"></style>
  </head>
  <body>
    <script type="text/javascript">
    </script>
  </body>
</html>
```

2. Insert SVG tags.

```
<!DOCTYPE html>
<html>
  <head>
    <style type="text/css"></style>
  </head>
  <body>
    <svg></svg>
    <script type="text/javascript">
    </script>
  </body>
</html>
```

3. Within the SVG tags, add a circle with a fill colour of your choice, centred at (100, 100), with radius 20.
4. Next, add a rectangle (colour of your choice) with width 100 and height 200, that has its top left corner at (10, 10).
5. Add your name in another colour, starting at (50, 50) and with font size 24. – e.g.

```
<text x="50" y="50" font-size="24" fill="green">Brian</text>
```

6. Have the circle drawn on top of the rectangle, rather than behind it.
7. Put a black border around the circle – use the stroke property to achieve this.

8. Use CSS to set the colours of the circle instead of using attributes to the SVG tags.

```
<style type="text/css">
  circle {
    fill: blue;
    stroke: black;
  }
</style>
...
<circle cx="100" cy="100" r="20" />
```

Advanced exercises

1. Draw PacMan on the screen using SVG. Draw a black stroke around the edge of the Pacman. Hint: use the path command to achieve this.
2. Use JavaScript to move the circle to be centered at (120,120) after one second.
3. Use JavaScript to change the colour of the circle to green after two seconds.

Notes

- [MDN SVG Tutorial](#)
- You can find numerous examples of manipulating SVG elements using JavaScript online. One example is [Using Javascript to control an SVG](#).