# SVG Fill on Scroll (Stroke filling)

Intro to SVGs. Why use SVGs.

Steps:

*Get excited, this is what we are gonna build! Insert live link and image*

*HTML and CSS*

1. Get an SVG with path attribute. (show our SVG image here)

2. Wrap SVG in div, let's say "svgDiv".
3. Wrap svgDiv in another div, let's say parent div

and give it some height to get a vertical scroll.

4. Set stroke, fill, stroke-width and id on the svg.
5. Set the position attribute on svgDiv to fixed, so that

It always stays on the center of screen.

*JavaScript*

1. Get length of the svg (show snippet part).

```
// Get the id of the <path> element and the length of <path>
var path = document.getElementById("myPath");
var length = path.getTotalLength();
```

2. Assign *strokeDashArray* and *strokeDashOffset* to svg through code. The most important part as it is responsible for the filling of stroke in SVG.

```
// The start position of the drawing
path.style.strokeDasharray = length;
// Hide the path by offsetting dash. Remove this line to show the path before scroll draw
path.style.strokeDashoffset = length;
```

3. Add event listener to window scroll, and find the scrollpercentage (done through JS code snippet), set the offset equal to

offset = pathLength – scrollpercentage

4. Gradually the offset decreases from pathlength to 0, giving a fill effect.

(code snippet)

```
// Find scroll percentage on scroll (using cross-browser properties), and offset dash same amount as
// percentage scrolled
window.addEventListener("scroll", fillOnScroll);

function fillOnScroll() {

    // This long calculation is just needed to find out the percentage of the webpage that has been scrolled.
    // You don't need to worry about it much. Can be used as is all the time.
    var scrollpercent = (document.body.scrollTop + document.documentElement.scrollTop) /
        (document.documentElement.scrollHeight - document.documentElement.clientHeight);

    // Sets draw to (the progress of scroll multiplied by the length) to find exact offset.
    var draw = length * scrollpercent;

    // In downward scroll, simply decreases the strokeDashOffset gradually towards zero.
    // Reverse the drawing (when scrolling upwards)
    path.style.strokeDashoffset = length - draw;

    // Fancy stuff to show fireworks when svg completes stroke filling (strokeDashOffset = 0)
    if (path.style.strokeDashoffset <= 0) {
        if (!document.getElementById("fireworks").classList.value.includes("pyro")) {
            document.getElementById("fireworks").classList.add("pyro")
        }
    } else {
        if (document.getElementById("fireworks").classList.value.includes("pyro")) {
            document.getElementById("fireworks").classList.remove("pyro")
        }
    }
    //
```

Congrats! You have hopefully learnt how to fill svg on scroll.