

STEAMcoded.org

## Coding a Flower in SVG on a 800 by 800 grid

Copy the code from: http://steamcoded.org/lessons/grid800x800.svg.txt and save the file as Flower.svg and open the file in a browser.

In the editor, add the SVG elements (per instructions below) where indicated in the SVG code, i.e. inside the second grouping (<g> element). **Important:** Save the file and refresh the browser after each step.

- 1: Create an outer grouping <g> element, style: stroke:black;stroke-width:4px;
- 2: Create the first inner grouping <g> element as a child element of the outer grouping created in step 1, style: fill:rgb(239,28,37);
- 3: Draw an ellipse at (400,235), x-radius: 65, y-radius: 215 as a child of the inner grouping created in step 2, then create similar ellipses rotated every 36 degrees about point (400,400), which is the center of the grid.
- 4: Create a second inner grouping <g> element as a child element of the outer grouping created in step 1, style: fill:rgb(249,148,30);
- 5: Draw an ellipse at (400,320), x-radius: 80, y-radius: 180 as a child of the inner grouping created in step 4, then create similar ellipses rotated every 36 degrees about the center of the grid.
- 6: Draw a circle around the center of the grid with a radius of 200, style: fill:yellow;
- 7: Create a third inner grouping <g> element as a child element of the outer grouping created in step 1, style: fill:black;stroke:none;
- 8: Draw a circle at (400,225), radius: 10 as a child of the inner grouping created in step 7, then create similar circles rotated every 30 degrees about the center of the grid.
- 9: Create a fourth inner grouping <g> element as a child element of the outer grouping created in step 1, style: fill:rgb(58,181,75);
- 10: Draw an ellipse at (400,325), x-radius: 35, y-radius: 75 as a child of the inner grouping created in step 9 and rotate it 36 degrees about the center of the grid. then create similar ellipses rotated an additional 72 degrees about the center of the grid.
- 11: Draw a circle around the center of the grid with a radius of 60, style: fill:rgb(0,174,242);

When complete, change the style attribute of the first element from "display:initial" to "display:none" which hides the grid. Then change the style style attribute of the second element from "opacity:0.5" to "opacity:1"