

SCALABLE VECTOR GRAPHICS (SVG)

BEFORE D3

HTML

CSS

DOM

Javascript

SVG

LAB 2

HTML
CSS
DOM
Javascript
SVG

WHY USE SVG?

- **Resolution Independent**



WHY USE SVG?

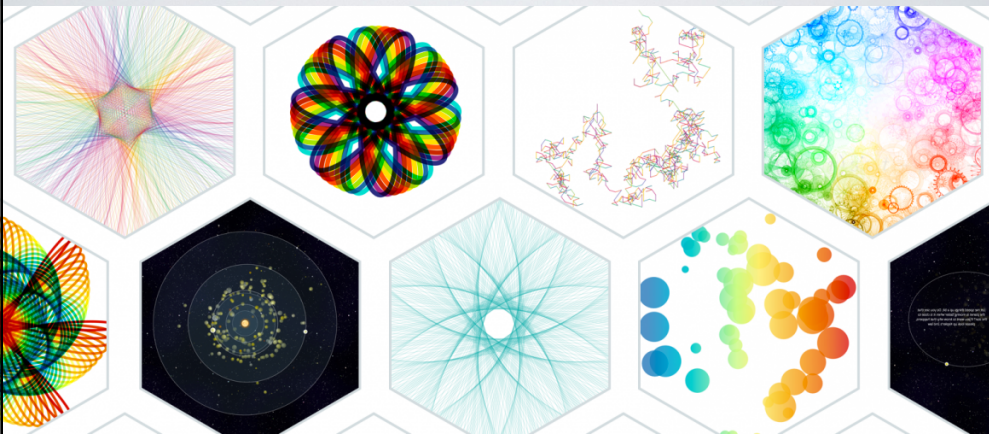
- **Reduces HTTP Request Time (meaning, your page will load faster!)**
 - SVG is a subtype of HTML - therefore it loads with the rest of the page
 - Images require additional requests from the client
- **Styling**
 - Because SVG is an HTML/DOM element we can style them with CSS - this is very helpful when styling similar marks in visualizations

WHY USE SVG?

- **Scripting**
 - Most importantly for us, we can run JavaScript to modify, add, animate, etc. any of the SVG elements in the DOM
- **Interaction**
 - SVG elements support a lot of the interaction events that other HTML elements support (e.g. click, hover, etc.)

WHY USE SVG? Georgia Tech Visualization Lab

- **Infinite possibilities, limited only by your imagination**



<https://www.visualcinnamon.com>
(last link in Additional Reading for Lab 2)

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LAB PROCEDURE Georgia Tech Visualization Lab

Before Class

- Read second half of Chapter 3 - *Interactive Data Visualization for the Web* by Scott Murray
- ★ Read: *Understanding SVG Coordinate Systems and Transformations (Parts 1 + 2)* by Sara Soueidan
- *Git pull* example code (<https://github.gatech.edu/CS-4460/Labs.git>)

In-Class

- Open Lab 2 instruction page (<https://github.gatech.edu/CS-4460/Labs/wiki>)
- Work through activities

After Class

- If you run out of time, finish all lab activities
- **Lab Solutions will be posted Monday nights**

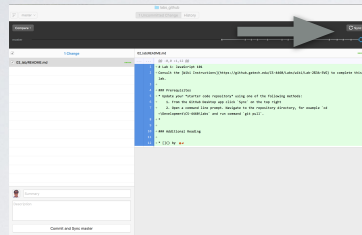
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Options to Git Pull

<https://github.gatech.edu/CS-4460/Labs.git>

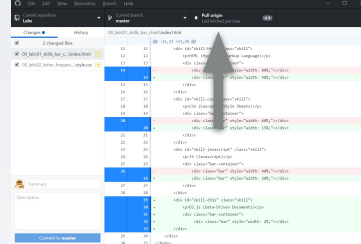
Mac

Select the "Sync" button on Mac.



Windows

Select the "Pull origin" button on Windows.



Open a new Terminal (Mac) or Command Prompt (Windows)
 Navigate to directory you want to clone to, for example:
`cd ~\Documents\CS-4460\`
`git pull`