intro

goals

raster and vector

why vector

vector limitations

what is svg

how are they written

basics

svg tag

viewbox, units, width, height - think of viewbox like a camera

rect

circle

line

polygon

exercise

text

fonts and font sizes

always use a program to convert text to filled path for consistency across platforms

alignment

tspan - no auto wrapping

exercise

basics part II

stroke vs fill

color - hex or name

opacity, stroke width

stroke is always at center of line

stroke-fill order is not customizable in a cross-platform way

stroke line cap line join

stroke dash array and dash offset

exercise

intermediate

paths

syntax - space vs comma

move to, line to, arc to, etc

relative vs absolute

exercise

intermediate part II

groups - fill and stroke properties cascade downward

transform - right to left, around origin by default

transform-origin (unreliable)

exercise

advanced

defs

markers/arrows

gradients

combined opacity

exercise

extras

metadata - title, desc

classes, ids, groups are used as layers in inkscape and others

overflow

preserve aspect ratio

advanced stuff - clips, masks, animations, filters, link to other svgs, embed raster images, embed html elements

conclusion

it's a big spec, dont worry if you see something you dont understand

always test your images on multiple devices, browsers, platforms

let's discuss and deconstruct my svgs (manubot logo, hetmech, biobombe)

let's deconstruct your svgs