AVT 415-001 **/ 420**-001 **/ 619**-001   **Fall 2020**

Assignment 3:
Drawing & Animating the Web

HTML, CSS, and SVG provide a wide range of options for enhancing web pages with animations and illustrations. In this assignment we'll explore how they all work together.

20 points
- EXTRA CREDIT! for 415 Students: **5 points** - complete the SVG requirements for 420/619

DUE: Monday, November 9 by beginning of class

DELIVERABLES
- Create a pen on CodePen.io that features a web animation based on the requirements below.
- Post the link to your animation Pen here on the Assignment 3 Discussion Board.

415: Animate an HTML Element with CSS

- Use **CSS Animation** to animate HTML
  - can be an image, header, text, div, whatever
  - Maybe one HTML element or several
- Include:
  - At least **2 types** of CSS3 **transform**, may be **2D** or **3D**.
  - At least **2 types** of CSS3 **transitions**.
  - At least **2 types** of CSS3 **filters**.

420/619: Animate a SVG

All the requirements of 415 above, plus:

- Create an original SVG to animate instead of an HTML element.
- Your animated SVG should include
  - At *least* 4 keyframes in your animation *(but may use more)*
  - Change at *least* 2 values throughout the animation at each keyframe *(but may use more)*
  - May combine all the requirements from 415 in your SVG animation
- Choose how your animation occurs, such as on page load or on hover.

RESOURCES

Animation
- https://www.w3schools.com/css/css3_animations.asp
- https://www.w3schools.com/css/css3_transitions.asp
- https://www.w3schools.com/css/css3_2dtransforms.asp
- https://www.w3schools.com/css/css3_3dtransforms.asp
- https://www.w3schools.com/cssref/css3_pr_filter.asp
- **Mozilla CSS Animation Tips & Tricks:** https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Animations/Tips
- **Mozilla: Using CSS Animations:** https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Animations/Using_CSS_animations
- **Animate.css:** https://animate.style/

SVG
- **W3 Schools:** https://www.w3schools.com/graphics/svg_intro.asp
- **Mozilla SVG:** https://developer.mozilla.org/en-US/docs/Web/SVG
- **Mozilla SVG Tutorial:** https://developer.mozilla.org/en-US/docs/Web/SVG/Tutorial/Introduction
- **SVG Animation Tool Collection:** https://designwebkit.com/web-development/svg-animation-tool-collection/
- **InkScape:** https://inkscape.org/
- **SVGator:** https://www.svgator.com/

INSPIRATION

- **CodePen "animation":** https://codepen.io/search/pens?q=animation
- **CodePen "svg":** https://codepen.io/search/pens?q=svg
- **30 Awesome SVG Animations:** https://www.hongkiat.com/blog/svg-animations/
- **Animating SVG with CSS:** https://css-tricks.com/animating-svg-css/
- **Val Head's Animation & U X Resources:** https://valhead.com/ui-animation/