CSS Animations

Add animations with CSS 😋

# References:

* [MDN Reference](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_animations/Using_CSS_animations)
* [The Complete CSS Animations Tutorial [With Examples] | LambdaTest](https://www.lambdatest.com/blog/css-animations-tutorial/) (ignore top part about responsive testing)
* [Hello, animation!](https://css-animations.io/) (interactive tutorial

# Tutorial set up:

1. Create a new folder in class exercises called ‘css-animations’
2. Add an index.html file and populate it with base html
3. Create a folder named ‘css’ and add a style.css file to it
4. Link to your CSS file in the head of your index.html
   1. Start typing ‘link’ and hit return. If you hover over ‘link’ VSC will display a popup to MDN documentation.
5. Add [CSS resets](https://docs.google.com/document/d/18UndKkYyQu71qumhzqpmiEWRRp0IqNAGukgrEk24yaw/edit?usp=sharing) to the top of your file. It is good practice!
   1. ^ This file is in the class google drive under Tutorials>Sample Code

# Your first CSS animations!

1. Go to <https://css-animations.io/> and read over the first page.
2. Add their CSS to your file. It should look like this.

CSS



@keyframes stretching {

0% {

width: 100px;

}

100% {

width: 200px;

}

}

.button {

animation-name: stretching;

animation-duration: 1s;

}



1. In your HTML, add an <a> and give it the class “button”
   1. *Note: You should use the <button> element for an in-page action (like submitting form) and <a> anchors/links are for navigating to a new page.*
2. WHY IS NOTHING HAPPENING?
   1. Firstly... You can’t change the width of an <a> tag ***unless*** it is set to display: block or inline-block
   2. Secondly, width doesn’t change the text itself, just the width of its container. Add a background-color to see the effect
   3. So you need to add the display: inline-block; & background-color properties to the CSS for your button class
3. Try making the animation time longer.
4. Can you make it extend to the full width of the page?
5. (optional) Add another CSS property to the animation
   1. For example,  [line-spacing](https://developer.mozilla.org/en-US/docs/Web/CSS/letter-spacing) to make the text get longer / shorter

**…Back to interactive tutorial - this will help with some syntax…**

1. In the [tutorial](https://css-animations.io/), click “task” at the bottom right of the first page to see a rotation animation
   1. *Note this uses a* [*transform property*](https://developer.mozilla.org/en-US/docs/Web/CSS/transform) *for rotation, instead of a default CSS property*
2. Click the forward arrow to continue on the tutorial
   1. For the next one, don’t forget to include transform before the rotation! Your line should look like:
      1. transform: rotate(90deg);
3. Continue to next exercise, END THE TUTORIAL WHEN YOU GET TO COMPLEX ANIMATIONS

**… Go back to your exercise code in VSC …**

1. Right now your animation just plays once…. Go to the [MDN documentation](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_animations/Using_CSS_animations) for CSS animations. Click on “iteration-count” and “animation-direction” to learn more about those properties and add them to your code! Can you make your animation loop endlessly?
2. (Optional) Want to move your button down on the page? Place it inside a <div> (or <header> or <main> semantic HTML element) and add margins to it!
3. By default the animation “eases” in and out of the keyframes. Add the [animation-timing-function](https://developer.mozilla.org/en-US/docs/Web/CSS/animation-timing-function) element to try other timing
4. Change your animation to [shorthand](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_animations/Using_CSS_animations#using_the_animation_shorthand)
5. There are other transform properties besides rotation
   1. Test them out [here](https://developer.mozilla.org/en-US/docs/Web/CSS/transform)
   2. Try adding one to your animation
6. Lastly, create an animation that changes the color of the background. If you want to get fancy, animate a [CSS Gradient](https://cssgradient.io/)

**Cool tricks - Marquee:**

* Follow [this tutorial t](https://medium.com/@stheodorejohn/creating-a-simple-marquee-effect-with-css-animation-bbd52bb0dbf8)o add a scrolling marquee to your website. The beloved <marquee> element is deprecated, this is the new way!
* This [codepen h](https://codepen.io/klingat/pen/MWbqdQw)as a marquee with no spaces

**Tips:**

* You can only have one animation per HTML element
* Pay attention to display block v inline-block v inline