

Assignment 5: CSS Animation Magic

10/12/2023

6/10 PointsOffline Score:
6/10 View FeedbackAnonymous Grading: **no**


Details

You will transform a website template into a **fascinating design without any text or images!**

Your HTML will consist of **at least 10 <div> elements**, with unique id names, that will be forced into interactive shapes and colors with CSS.

`<div id="something"></div>` — you can leave them empty

`<div id="something2">!!</div>` — you may insert non-alphanumerics

`<div id="something3">©</div>` — you may insert **special symbols** 

(https://www.w3schools.com/html/html_symbols.asp)

(Yes, some of these look like images — even color images — but they are UTF-8/Unicode letterforms)

You will combine CSS **box properties** (in particular, width/height), **background colors** and **absolute positioning** to create this design.

Some tricks to consider:

- **border-radius:**  (https://www.w3schools.com/cssref/css3_pr_border-radius.php)
- **Simple geometric shapes with CSS**  (https://www.w3schools.com/howto/howto_css_shapes.asp)
- **Complex shapes with CSS**  (<https://css-tricks.com/the-shapes-of-css/>)

z-index:  (https://www.w3schools.com/cssref/pr_pos_z-index.php) — this will allow you to control the stacking order of overlapped, *positioned* elements

Interactivity with CSS

The `:hover` pseudo-class was originally meant for `a { }` selectors, but you can apply it to any selector you choose.

```
div#super55 {
```

```
background: blue;
}
div#super55:hover {
background: red;
}
```

This would create an abrupt change from blue to red when hovering, but you can use the [transition](https://www.w3schools.com/css/css3_transitions.asp)  (https://www.w3schools.com/css/css3_transitions.asp) property to make smooth and timed changes!

```
div#super55 {
background: blue;
transition: all 2s;
}
div#super55:hover {
background: red;
}
```

What the transition property does is to request the browser to look at **all** properties that will be changed in the :hover state, and cause that change to happen gradually over **2 seconds' time**.

Below is an example where 2 different properties are singled out, and changed at different rates:

```
div#super55 {
background: blue;
transition: background 2s, font-size 500ms;
}
div#super55:hover {
background: red;
font-size: 3em;
}
```

The background would take 2 seconds to transition, but the font-size would happen in just 500ms (1/2 second).

You can change the position of elements this way, but the results can be clumsy. It's best to apply CSS **transform** [↗\(https://www.w3schools.com/cssref/css3_pr_transform.php\)](https://www.w3schools.com/cssref/css3_pr_transform.php) properties in the :hover state.

```
div#super55 {  
    background: blue;  
    transition: all 2s;  
}  
  
div#super55:hover {  
    background: red;  
    transform: translate(50px,50px);  
}
```

This would not only change the background, but the <div> shape would shift its position 50px along the x-axis and 50px along the y-axis (a diagonal motion).

There are many other fun values for *transform*: rotate(), scale(), skew() !!!

@keyframe animations [↗\(https://www.w3schools.com/css/css3_animations.asp\)](https://www.w3schools.com/css/css3_animations.asp) (which Youra showed us) are another option, if you are curious.

You are unable to submit to this assignment as your enrollment in this course has been concluded.