



FEWD Week 3 • Class 5: Advanced CSS





Review Time!

Objectives

- Precisely place elements through CSS positioning and transforms
- Use pseudo elements to add content through CSS
- Use pseudo classes to select elements in the DOM
- Use inputs on your web page

Positioning

Positioning in CSS

The position property specifies a method for positioning elements. The top, right, bottom, and left properties determine the position for the element (except elements with static position). There are five different position values:

- static
- relative
- fixed
- absolute
- sticky

Document Flow

Document flow is the arrangement of page elements.

Page elements *in the document flow* affect the elements around them by taking up space on the page.

Position: Static

Static positioning is the default. Static positioned elements are in the **normal flow of the document**.

Position: Relative

Relative positioned elements are positioned in the normal flow of the document, but can be offset by the top, right, bottom and left values. You can think of this as *relative to itself*.

```
div {  
  position: relative;  
  top: 20px; /* moves 20px down from its top */  
  left: 50px; /* moves 50px left of its leftmost edge */  
}
```




Position Relative

Position: Absolute

- Absolute positioned elements are removed from the normal flow of the document causing all of the other elements to reflow and fill the space of the absolute positioned element.
- Positioned based on their **nearest ancestor** with positioning specified other than static. If no ancestor has positioning, the element is positioned according to the **root**.



Position Absolute

Position: Fixed

- Fixed positioned elements are removed from the normal flow of the document causing all of the other elements to reflow and fill the space of the fixed positioned element.
- Positioned based on the viewport window.
- Always stay positioned even if the page is scrolled.



Position Fixed

Position: Sticky

- The element is positioned in the normal flow initially.
- It is offset relative to its flow root and containing block, including table-related elements, based on the values of top, right, bottom, and left.
- The offset does not affect the position of any other elements.



Position Sticky Demo

Transforms

The CSS `transform` property applies a 2D or 3D transformation to an element. This property allows you to rotate, scale, move, skew, and add perspective to elements.

```
div {  
  transform: translate(x, y); /* Accepts a unit of measure  
                               for x and y */  
}
```




Using CSS Transform

Pseudo Classes

Pseudo Classes

Pseudo classes are used to select elements when they are in a special **state**. For example, when an element is being hover over, or when it is the last or first child of its parent element.

Pseudo class names are preceded by 

Working with nth elements

"nth" Pseudo classes (e.g., nth-child) accept values like odd and even but can also take a formula.


The formula is $(an + b)$ and where a represents a cycle size, n is a counter (starts at 0), and b is an offset value.



Checkerboard

Pseudo Elements

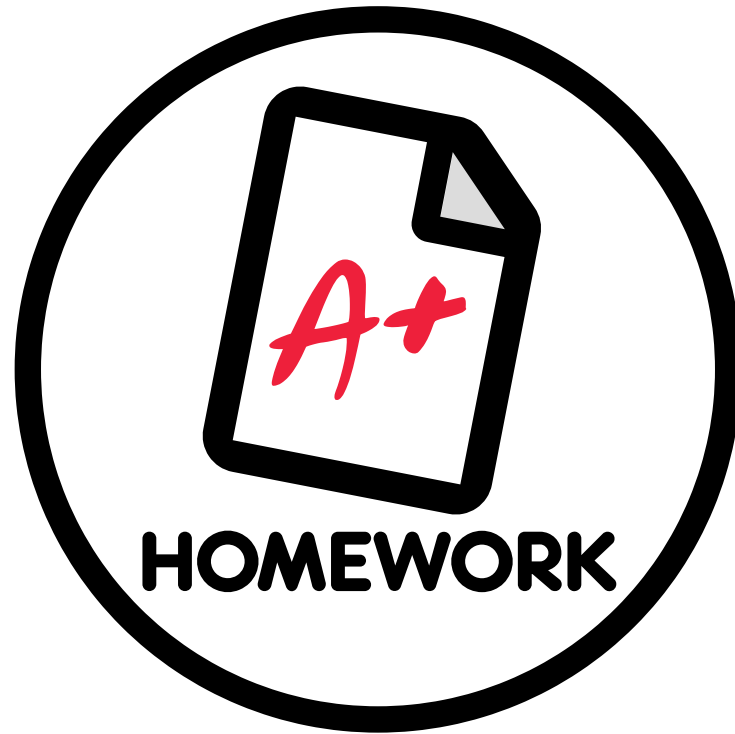
Pseudo Elements

Pseudo elements are parts of elements that can be styled through CSS. Pseudo element names are preceded by 

The two most useful pseudo elements are the `::before` and `::after` elements. These create actual elements that are **injected into the DOM through our CSS!**



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Startup Matchmaker Skeleton

Go Do Awesome Things!