

HTML & CSS

Tahaluf Training Center 2021



Outline

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Links

a:link a normal, unvisited link

a:visited - a link the user has visited

a:hover - a link when the user mouses over it

a:active - a link the moment it is clicked



CSS Float

The **float** property is used for positioning and formatting content e.g. let an image float left to the text in a container.



The **float** property can have one of the following values:

- **left** - The element floats to the left of its container.
- **right** - The element floats to the right of its container.
- **none** - The element does not float (will be displayed just where it occurs in the text).
- **inherit** - The element inherits the float value of its parent.



CSS Opacity

The **opacity** property can take a value from 0.0 - 1.0.
The lower value, the more transparent.



CSS position property

The CSS position property defines the position of an element in a document. This property works with the **left, right, top, bottom and z-index** properties to determine the final position of an element on a page.



CSS position property

There are five values the position property can take.
They are:

1. static
2. relative
3. absolute
4. fixed
5. sticky



CSS position property

Static:

This is the default value for elements. The element is positioned according to the normal flow of the document.

The left, right, top, bottom and z-index properties do not affect an element with **position: static**.



CSS position property

```
<html>
<body>
  <div class="parent-element">
    <div class="sibling-element"> I'm the other sibling
    element. </div>
    <div class="main-element"> All eyes on me. I am the
    main element. </div>
    <div class="sibling-element"> I'm the other
    sibling element. </div>
  </div>
</body>
</html>
```



CSS position property

Let's add **position: static** to the div with the class main-element and left, top values to it. We also add some styles to the other divs to differentiate them from the element in focus.



CSS position property

```
.main-element {  
    position: static;  
    left: 10px;  
    bottom: 10px;  
    background-color: yellow;  
    padding: 10px;  
}  
  
.sibling-element {  
    padding: 10px;  
    background-color: #f2f2f2;  
}
```



CSS position property

I'm the other sibling element

All eyes on me. I am the main element.

I'm the other sibling element



CSS position property

Did you notice that it there's no change? This confirms the fact that the left and bottom properties do not affect an element with **position: static**.



Relative

Elements with **position: relative** remain in the normal flow of the document. But, unlike static elements, the left, right, top, bottom and z-index properties affect the position of the element. An offset, based on the values of left, right, top and bottom properties, is applied to the element relative to itself.



CSS position property

```
.main-element {  
    position: relative;  
    left: 10px;  
    bottom: 10px;  
    background-color: yellow;  
    padding: 10px;  
}
```



CSS position property

I'm the other sibling element

All eyes on me. I am the main element.

I'm the other sibling element



CSS position property

Notice that the left and bottom properties now affect the position of the element. Also notice that the element remains in the normal flow of the document and the offset is applied relative to itself. Take note of this as we move on to other values.



Absolute

Elements with **position: absolute** are positioned relative to their parent elements. In this case, the element is removed from the normal document flow. The other elements will behave as if that element is not in the document. No space is created for the element in the page layout. The values of left, top, bottom and right determine the final position of the element.



CSS position property

One thing to note is that an element with **position: absolute** is positioned relative to its closest positioned ancestor. That means that the parent element has to have a position value other than **position: static**.



If the closest parent element is not positioned, it is positioned relative to the next parent element that is positioned. If there's no positioned ancestor element, it is positioned relative to the `<html>` element.



Let's get back to our example. In this case, we change the position of the main element to **position: absolute**. We will also give its parent element a relative position so that it does not get positioned relative to the `<html>` element.



CSS position property

```
.main-element {  
    position: absolute;  
    left: 10px;  
    bottom: 10px;  
    background-color: yellow;  
    padding: 10px;  
}  
  
.parent-element {  
    position: relative;  
    height: 100px;  
    padding: 10px;  
    background-color: #81adc8;  
}  
  
.sibling-element {  
    padding: 10px;  
    background-color: #f2f2f2;  
    border: 1px solid #81adc8;  
}
```



CSS position property

I'm the other sibling element

I'm the other sibling element

All eyes on me. I am the main element.



CSS position property

Notice that no space was created in the document for the element. The element is now positioned relative to the parent element. Take note of this as we move on to the next value.



Fixed

Fixed position elements are similar to absolutely positioned elements. They are also removed from the normal flow of the document. But unlike absolutely positioned element, they are always positioned relative to the `<html>` element.

One thing to note is that fixed elements are not affected by scrolling. They always stay in the same position on the screen.

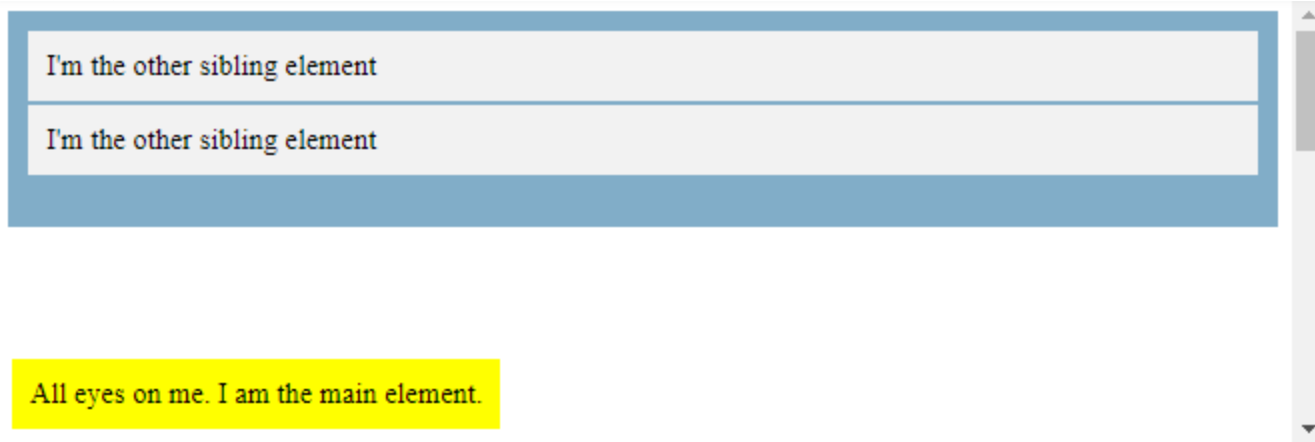


CSS position property

```
.main-element {  
    position: fixed;  
    left: 10px;  
    bottom: 10px;  
    background-color: yellow;  
    padding: 10px;  
}  
  
html {  
    height: 1000px;  
}
```



CSS position property



CSS position property

In this case, the element is positioned relative to the `<html>` element. Try scrolling to see that the element gets fixed on the screen.



CSS position property


Sticky

position: sticky is a mix of **position: relative** and **position: fixed**. It acts like a relatively positioned element until a certain scroll point and then it acts like a fixed element.



Exercise

Write Html and Css code to achieve this screen.



All eyes on me. I am the main element.



CSS position property

```
.main-element {  
    position: sticky;  
    top: 10px;  
    background-color: yellow;  
    padding: 10px;  
}  
  
.parent-element {  
    position: relative;  
    height: 800px;  
    padding: 50px 10px;  
    background-color: #81adc8;  
}
```



CSS position property

Scroll on the result tab to see the result. You see it acts as a relative element until it gets to a certain point on the screen, top: 10px and then it gets there just like a fixed element.



CSS Flexbox

The Flexible Box Layout Module, makes it easier to design flexible responsive layout structure without using float or positioning.



CSS Flexbox

```
<div class="flexContainer">  
  <div>1</div>  
  <div>2</div>  
  <div>3</div>  
</div>
```

```
.flexContainer {  
  display: flex;  
}
```



CSS Flexbox

```
.flexContainer {  
  display: flex;  
  flex-direction: column;  
}
```

```
.flexContainer {  
  display: flex;  
  flex-direction: row;  
}
```



CSS Flexbox

```
<div class="flexContainer">  
  <div>1</div>  
  <div>2</div>  
  <div>3</div>  
  <div>4</div>  
  <div>5</div>  
  <div>6</div>  
  <div>7</div>  
  <div>8</div>  
  <div>9</div>  
</div>
```



CSS Flexbox

```
.flexContainer {  
  display: flex;  
  flex-wrap: wrap;  
}
```

```
.flexContainer {  
  display: flex;  
  justify-content: center;  
}
```



CSS Flexbox

```
.flexContainer {  
  display: flex;  
  height: 200px;  
  align-items: center;  
}
```



CSS Animations

- ✓ An animation lets an element gradually change from one style to another.
- ✓ You can change as many CSS properties you want, as many times you want.
- ✓ To use CSS animation, you must first specify some **keyframes** for the animation.
- ✓ **Keyframes** hold what styles the element will have at certain times.



CSS Animations

```
<p><b>Animations</b>start.</p>
```

```
<div></div>
```



CSS Animations

```
div {  
    width: 100px;  
    height: 100px;  
    background-color: red;  
    animation-name: animation-color;  
    animation-duration: 4s;  
}  
  
@keyframes animation-color {  
    from {  
        background-color: red;  
    }  
  
    to {  
        background-color: yellow;  
    }  
}
```



CSS Animations

```
/* The animation code */
@keyframes example {
  0%    {background-color: red;}
  25%   {background-color: yellow;}
  50%   {background-color: blue;}
  100%  {background-color: green;}
}

/* The element to apply the
animation to */
div {
  width: 100px;
  height: 100px;
  background-color: red;
  animation-name: example;
  animation-duration: 4s;
}
```



CSS Animations

```
/* The animation code */
@keyframes example {
  0%   {background-color:red; left:0px; top:0px;}
  25%  {background-color:yellow; left:200px; top:0px;}
  50%  {background-color:blue; left:200px; top:200px;}
  75%  {background-color:green; left:0px; top:200px;}
  100% {background-color:red; left:0px; top:0px;}
}

/* The element to apply the animation to */
div {
  width: 100px;
  height: 100px;
  position: relative;
  background-color: red;
  animation-name: example;
  animation-duration: 4s;
}
```



CSS Animations

```
div {  
    animation-iteration-count: infinite;  
}
```



Day Four Task

On the E-Learning Portal

