

Box Sizing

Box Sizing property allow us to include the padding and border in an element's total width and height.

Without the CSS box-sizing Property

The width and height is calculated using following:

width + padding + border = actual width of an element

height + padding + border = actual height of an element

This means: When you set the width/height of an element, the element often appears bigger than you have set (because the element's border and padding are added to the element's specified width/height).

Ex

```
<!DOCTYPE html>
<html>
<head>
<style>
.div1 {
  width: 300px;
  height: 100px;
  border: 1px solid blue;
}

.div2 {
  width: 300px;
  height: 100px;
  padding: 50px;
  border: 1px solid red;
}
</style>
</head>
<body>

<h1>Without box-sizing</h1>

<div class="div1">This div is smaller (width is 300px and height is 100px).</div>
<br>
<div class="div2">This div is bigger (width is also 300px and height is 100px).</div>

</body>
</html>
```

Without box-sizing

This div is smaller (width is 300px and height is 100px).

This div is bigger (width is also 300px and height is 100px).

With the CSS box-sizing Property

- The box-sizing property allows us to include the padding and border in an element's total width and height.
- If you set `box-sizing: border-box;` on an element, padding and border are included in the width and height:

Property	Description
box-sizing	Defines how the width and height of an element are calculated: should they include padding and borders, or not

```
<!DOCTYPE html>
<html>
<head>
<style>
.div1 {
  width: 300px;
  height: 100px;
  border: 1px solid blue;
  box-sizing: border-box;
}

.div2 {
  width: 300px;
  height: 100px;
  padding: 50px;
  border: 1px solid red;
  box-sizing: border-box;
}
</style>
</head>
<body>

<h1>With box-sizing</h1>

<div class="div1">Both divs are the same size now!</div>
<br>
<div class="div2">Hooray!</div>

</body>
</html>
```

With box-sizing

Both divs are the same size now!

Hooray!