How do width and height work?

In CSS, the width and height properties are used to control the dimensions of elements on a webpage.

These properties can be defined in different units such as pixels (px), percentages (%), viewport units (vw, vh), and more.

The width property specifies the width of an element. If you do not specify a width, then the default is set to auto. This means the element will take up the full width of its parent container.

The height property specifies the height of an element. Similarly, the height is auto by default, which means it will adjust to the content inside.

Here's an example using the width and height properties:

<head>

<style>

.box {

width: 100px;

height: 100px;

background-color: skyblue

}

</style>

</head>

<body>

<div class="box"></div>

</body>

In this example, we have a div element with class named box. This element will be occupying 100px in height and width, whereas the background color will be skyblue.

Pixels are a fixed-size unit of measurement in CSS, providing precise control over dimensions.

The min-width property specifies the minimum width an element can be. Even if the content inside is smaller, the element won’t shrink below this value.

The min-height specifies the minimum height an element can be. It ensures that the element does not become shorter than the set value.

Here is an example:

<head>

<style>

.box {

width: 50px;

min-width: 100px;

height: 50px;

min-height: 100px;

background-color: lightcoral;

}

</style>

</head>

<body>

<div class="box"></div>

</body>

The above example demonstrates how min-width and min-height work.

Even though the box has its width and height set to 50px, it will actually be 100px by 100px. This is because the min-width and min-height are set to 100px, which are larger than the specified width and height.

Remember, if min-width or min-height are larger than the width or height, they will override the smaller values. This ensures that elements don't become too small, which is important for maintaining a consistent and usable design.

The max-width specifies the maximum width an element can grow to, even if there is enough space for it to be wider.

The max-height specifies the maximum height an element can grow to, regardless of the content size.

Here is an example:

<head>

<style>

.box {

width: 200px;

max-width: 150px;

height: 200px;

max-height: 150px;

background-color: lightgreen;

}

</style>

</head>

<body>

<div class="box"></div>

</body>

The above example demonstrates how max-width and max-height override width and height. Even though the box is set to 200px by 200px, it will actually be 150px by 150px. This is because the max-width and max-height are set to 150px, which is smaller.

Remember, when max-width or max-height are smaller than width or height, they take precedence. This is important for controlling the maximum size of elements in your layouts.

CSS prioritizes min-width and min-height over width and height. max-width and max-height restrict dimensions if values exceed their limits.

For example, if you set width to 600px and max-width to 500px, the element will be limited to 500px wide. The max-width overrides the wider setting, keeping the element within the specified maximum size.

This ensures elements stay within desired size ranges, regardless of standard width and height values.