CSS Margins

The CSS margin properties are used to create space around elements, outside of any defined borders.

Margins define the distance between an element's border and the surrounding elements.

With CSS, you have full control over the margins. CSS has properties for setting the margin for each individual side of an element (top, right, bottom, and left), and a shorthand property for setting all the margin properties in one declaration.

Margin - Individual Sides

CSS has properties for specifying the margin for each side of an element:

- margin-top - sets the top margin of an element
- margin-right - sets the right margin of an element
- margin-bottom - sets the bottom margin of an element
- margin-left - sets the left margin of an element

All the margin properties can have the following values:

- auto - the browser calculates the margin
- *length* - specifies a margin in px, pt, cm, etc.
- *%* - specifies a margin in % of the width of the containing element
- inherit - specifies that the margin should be inherited from the parent element

Example

Set different margins for all four sides of a <p> element:

```
p {
  margin-top: 100px;
  margin-bottom: 100px;
```

```
  margin-right: 150px;
  margin-left: 80px;
}
```

Margin - Shorthand Property

To shorten the code, it is possible to specify all the margin properties in one declaration.

The margin property is a shorthand property for the following individual margin properties:

- margin-top
- margin-right
- margin-bottom
- margin-left

Here is how it works:

If the margin property has four values:

- **margin: 25px 50px 75px 100px;**
    - top margin is 25px
    - right margin is 50px
    - bottom margin is 75px
    - left margin is 100px

Example

Use the margin shorthand property with four values:

```
p {
  margin: 25px 50px 75px 100px;
}
```

If the margin property has three values:

- margin: 25px 50px 75px;

    - top margin is 25px
    - right and left margins are 50px
    - bottom margin is 75px

Example

Use the margin shorthand property with three values:

```
p {
  margin: 25px 50px 75px;
}
```

If the margin property has two values:

- **margin: 25px 50px;**
    - top and bottom margins are 25px
    - right and left margins are 50px

Example

Use the margin shorthand property with two values:

```
p {
  margin: 25px 50px;
}
```

If the margin property has one value:

- **margin: 25px;**
    - all four margins are 25px

Example

Use the margin shorthand property with one value:

```
p {
  margin: 25px;
}
```

The auto Value

You can set the margin property to auto to horizontally center the element within its container.

The element will then take up the specified width, and the remaining space will be split equally between the left and right margins.

Example

Use margin: auto:

```
div {
  width: 300px;
  margin: auto;
  border: 1px solid red;
}
```

CSS Margin Collapse

Margin collapse is when two margins collapse into a single margin.

Top and bottom margins of elements are sometimes collapsed into a single margin that is equal to the largest of the two margins.

In the following example, the <h1> element has a bottom margin of 50px and the <h2> element has a top margin of 20px. So, the vertical margin between the <h1> and the <h2> would be a total of 70px (50px + 20px). But due to margin collapse, the actual margin ends up being 50px:

Example

Demonstration of margin collapse:

```
h1 {
  margin-bottom: 50px;
}

h2 {
  margin-top: 20px;
}
```

In the following example, each <p> element has a top margin of 30px and a bottom margin of 30px. So, the vertical margin between the <p> elements should have been 60px (30px + 30px). However, due to margin collapse, the actual margin ends up being 30px:

Example

Demonstration of margin collapse:

```
p {
  margin-top: 30px;
  margin-bottom: 30px;
}
```
