Margin and Padding in CSS

Margin and **Padding** are two of the most commonly used properties in CSS to control **spacing** around elements. They are part of the CSS **Box Model** and play a crucial role in layout and visual structure.

Padding vs Margin

Property	Affects	Where the space appears
`padding`	Inside the element	Between the content and the border
`margin`	Outside the element	Between the element and others

Padding

Apply space inside the border, around the content.

```css
.box {
  padding: 20px;
}
```

This adds 20px space inside all four sides of the `.box`.

Individual sides

```css
padding-top: 10px;
padding-right: 15px;
```

```
padding-bottom: 10px;

padding-left: 15px;
```

Shorthand

```
padding: 10px 15px 10px 15px;  /* top right bottom left */

padding: 10px 15px;            /* top-bottom | right-left */

padding: 10px;                 /* all sides */
```

Margin

Adds space outside the border of an element.

```
.card {

  margin: 30px;

}
```

This separates the `.card` from nearby elements.

Individual sides

```
margin-top: 20px;

margin-right: 0;

margin-bottom: 20px;

margin-left: auto;
```

Shorthand

```css
margin: 20px 40px 20px 40px;  /* top right bottom left */

margin: 20px 40px;            /* top-bottom | right-left */

margin: 0 auto;               /* top-bottom: 0, left-right: auto (used for
centering) */
```

Auto Margin (Horizontal Centering)

```css
.container {
  width: 500px;
  margin: 0 auto;
}
```

This centers the container **horizontally** if a fixed width is set.

Margin Collapse

When two vertical margins meet (e.g., margin-bottom of one element and margin-top of the next), the **larger one wins**, not their sum.

```css
h1 {
  margin-bottom: 30px;
}


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

The space between them will be **30px**, not 50px.

Summary

- **Padding** pushes content **inward**.
- **Margin** pushes the element **outward**.
- Use shorthand to simplify your CSS.
- Be aware of **margin collapsing** in vertical spacing.