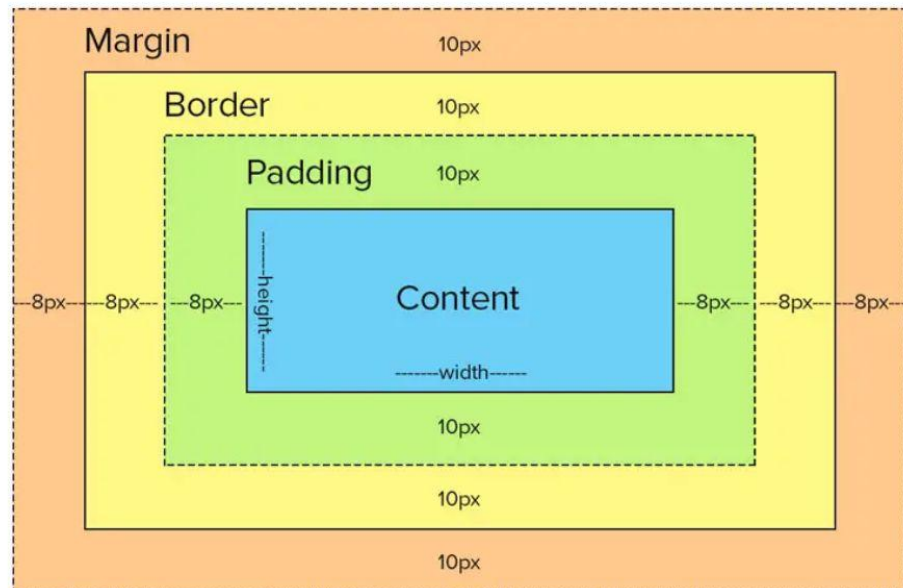


## Box Model and its effects

### CSS BOX MODEL



#### 1. Content:

The content area is where the actual content of the element, such as text, images, or other media, is displayed.

It's defined by the width and height properties.

The size of the content area does not include padding, border, or margin.

#### 2. Padding:

Padding is the space between the content area and the border of the element.

It's specified using the padding property and can have different values for each side (top, right, bottom, left).

Padding helps create space around the content, improving readability and aesthetics.

It can be set in various units such as pixels, ems, or percentages.

#### 3. Border:

The border surrounds the padding and content of the element.

It's defined by properties such as border-width, border-style, and border-color.

Borders can be solid, dashed, dotted, double, etc., and can have different thicknesses and colors.

Borders provide visual distinction between elements and help define their boundaries.

#### **4. Margin:**

Margin is the space outside the border of an element.

It creates a gap between the element and its neighboring elements.

The margin property controls the margin space, and like padding, it can have different values for each side.

Margins are transparent areas that do not have a background color or content.

They help create spacing between elements and control the layout of the webpage.

#### **Interaction and Calculation:**

The total width and height of an element are calculated by adding the content width and height to the padding, border, and margin.

For example, total width = width + padding-left + padding-right + border-left + border-right + margin-left + margin-right.

The same calculation applies to the height of the element.

The box-sizing property allows developers to control how the total dimensions of an element are calculated. The default value is content-box, where only the content dimensions are considered. Setting it to border-box includes padding and border in the calculation.