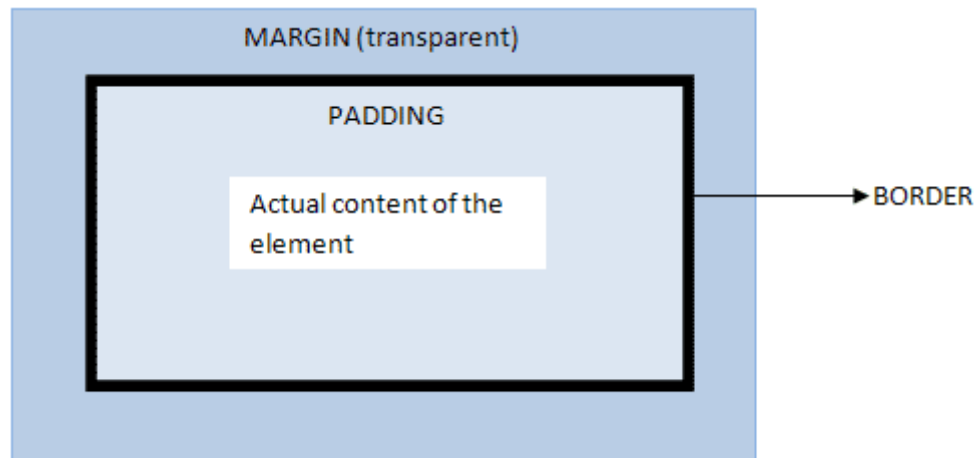


CSS Box Model

Before creating a web page layout using CSS positioning, the first thing you need to understand is the **CSS Box model**.



Any HTML element (paragraph, image, link, list, and etc.) can be represented as a box. Every box has a content area surrounded by padding, border and margins. These properties can be modified, using CSS.

Actual content can be any element (image, paragraph, etc.)

PADDING

The space between the content and its border is called **padding**. You can set individual padding for each side of the element.

Example:

```
p {  
padding-top:10px;  
padding-right:1em;  
padding-bottom:3pt;  
padding-left:10px;  
}
```

or you can set the same value for all four sides:

```
p{ padding:10px;}
```

MARGIN

The space outside the border is called **margin**. Margin separates the element from other element on the page.

You can set individual margins for each side:

```
p {  
margin-top:10px;  
margin-right:1em;  
margin-bottom:3pt;  
margin-left:10px;  
}
```

Or you can set the same value for all four sides:

```
p {  
margin:1em;  
}
```

BORDER

Every element on the web page has property **border**, although it is not visible in default.

You can set individual border to each side using **border-top**, **border-right**, **border-bottom**, and **border-left** properties. You can also control **border-style** (such as dotted, solid, dashed, inset, groove, double).

You can also set **border-color**, and **border-width**.

Example - Setting a border for one side

```
p {border-left: double 3px #FF0000}
```

or you can set the same border for all sides in one definition:

```
p {border:1px dotted #0000FF}
```

WIDTH and HEIGHT

Any block element can have **width** and **height** property.

Specifying width and height:

```
#box {width:200px; height:150px;}
```

Very important to understand that values for width, padding, border, and margin are added to the width of the actual content. That is, if you set the width for a paragraph to 200px, padding to

10 pixel and margin to 15 pixel, the total width of the element box will be: 200px + 20px (left padding and right padding) + 30 (left margin and right margin). Total width is 250px. When you are trying to position element you have to keep track of how much space that element is really going to take up.

You can specify width in different units of length: pixels (px) inches (in) centimeters, percentage or *auto*. **Auto** is the value that browser will figure out for the width of the element. (Usually, browser gives all the available space for the width of the element)

You cannot set width and height for an inline element

INLINE BOXES

Inline boxes are inline HTML elements, such as ****, **<a>**, or ****. You cannot set width and height property for inline elements. You can only set width and height for block-level elements.

FLOAT PROPERTY

As you remember, we used **float** property to float image on your *index.html* page. **Float** property can move an element to the right or left side of the parent element so that the subsequent content wraps around them.

Float property has two possible values: **left** and **right**. It is always a good idea to declare a width with a floated element; otherwise, the result may be unpredictable.

You can use float property to position elements for web page layouts: headers, footer, content columns, and smaller details, such as images, interface boxes, and logos.

CLEAR PROPERTY

Clear property is used to prevent the subsequent content from wrapping around a floated element.

The clear property can have one the following values:

- *none* - subsequent content can appear on either side
- *left* - content can not appear on the left (i.e. keeps the left side "clear")
- *right* - content can not appear on the right (i.e. keeps the right side "clear")
- *both* - floating elements can not appear on the left or right (i.e. keep both sides "clear")