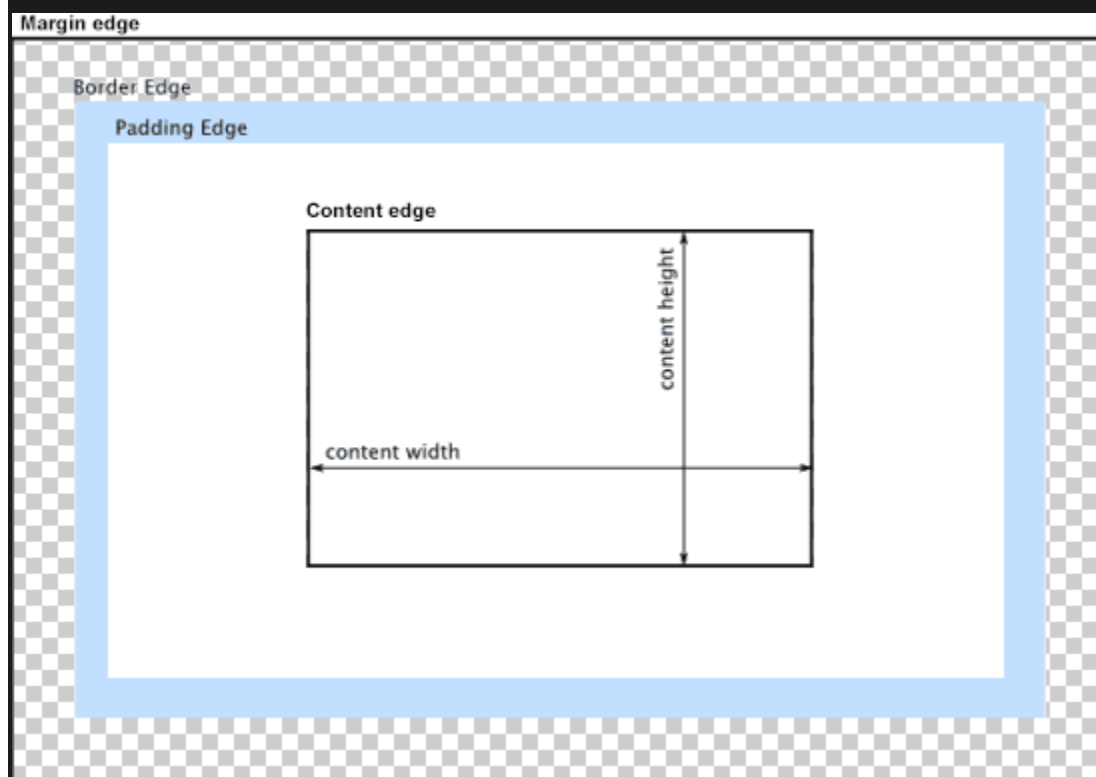**Lession2**

Introduction to the CSS basic box model

When laying out a document, the browser's rendering engine represents each element as a rectangular box according to the standard **CSS basic box model**. CSS determines the size, position, and properties (color, background, border size, etc.) of these boxes.

Every box is composed of four parts (or *areas*), defined by their respective edges: the *content edge*, *padding edge*, *border edge*, and *margin edge*.

Content area

The **content area**, bounded by the content edge, contains the "real" content of the element, such as text, an image, or a video player. Its dimensions are the *content width* (or *content-box width*) and the *content height* (or *content-box height*). It often has a background color or background image.

If the box-sizing property is set to content-box (default) and if the element is a block element, the content area's size can be explicitly defined with the width, min-width, max-width, height, min-height, and max-height properties.

Padding area

The **padding area**, bounded by the padding edge, extends the content area to include the element's padding. Its dimensions are the *padding-box width* and the *padding-box height*.

The thickness of the padding is determined by the padding-top, padding-right, padding-bottom, padding-left, and shorthand padding properties.

Border area

The **border area**, bounded by the border edge, extends the padding area to include the element's borders. Its dimensions are the *border-box width* and the *border-box height*.

The thickness of the borders are determined by the border-width and shorthand border properties. If the box-sizing property is set to border-box, the border area's size can be explicitly defined with the width, min-width, max-width, height, min-height, and max-height properties. When there is a background (background-color or background-image) set on a box, it extends to the outer edge of the border (i.e. extends underneath the border in z-ordering). This default behavior can be altered with the background-clip CSS property.

Margin area

The **margin area**, bounded by the margin edge, extends the border area to include an empty area used to separate the element from its neighbors. Its dimensions are the *margin box width* and the *margin box height*.

The size of the margin area is determined by the margin-top, margin-right, margin-bottom, margin-left, and shorthand margin properties. When margin collapsing occurs, the margin area is not clearly defined since margins are shared between boxes.

Finally, note that for non-replaced inline elements, the amount of space taken up (the contribution to the height of the line) is determined by the line-height property, even though the borders and padding are still displayed around the content.