<!-- !   Box Model   -->

Definition:

- The CSS box model represents the structure of an element in terms of its content, padding, border, and margin.

Components of the Box Model:

1. **Content**:

   - The actual content of the element, such as text, images, or other media.
      - Example: `width` and `height` properties define the size of the content area.

2. **Padding**:

   - The space between the content and the border.
      - Example: `padding: 20px;` (applies padding equally to all sides).

3. **Border**:

   - A line surrounding the padding (if any) and the content.
   - Can be styled with different widths, colors, and styles.
      - Example: `border: 1px solid black;` (sets a 1px solid black border).

4. **Margin**:

   - The space outside the border, separating the element from adjacent elements.
      - Example: `margin: 10px;` (applies margin equally to all sides).

Box Model Properties:

1. **Width and Height**:
   - Define the size of the content area.
   - Example: `width: 100px; height: 50px;`.

2. **Padding**:
   - Can be set individually for each side: `padding-top`, `padding-right`, `padding-bottom`, `padding-left`.
   - Example: `padding: 10px 20px 30px 40px;` (top, right, bottom, left).

3. **Border**:
   - Can be set individually for each side: `border-top`, `border-right`, `border-bottom`, `border-left`.
     - Example: `border: 2px dashed red;` (applies to all sides).
     - Detailed properties: `border-width`, `border-style`, `border-color`.

4. **Margin**:
   - Can be set individually for each side: `margin-top`, `margin-right`, `margin-bottom`, `margin-left`.
     - Example: `margin: 5px 10px;` (top/bottom, right/left).

Box-Sizing Property:

- **`box-sizing`**:

   - Defines how the total width and height of an element are calculated.
   - `content-box` (default): width and height include only the content.
   - `border-box`: width and height include content, padding, and border.
   - Example: `box-sizing: border-box;`.