CSS 3

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JSPIDERS

RAJAJINAGAR

History of CSS

Hakon Wium Lie

- **CSS** was first proposed by Hakon Wium Lie on October 10, 1994. At the time, Lie was working with Tim Berners-Lee.

- Style sheets have existed in one form or another since the beginnings of Standard Generalized Markup Language (SGML) in the 1980s.

- **CSS** was developed to provide style sheets for the web.

What is CSS?

- **CSS** stands for Cascading **Style Sheets.**

- CSS describes how HTML elements are to be displayed.

- CSS is the language for describing the presentation of Web pages, including colors, layout, and fonts.

- The Difference Between CSS and HTML.

  - ❖ **CSS** = Style: Cascading Style Sheets (CSS) dictate your website's **look and feel**.

  - ❖ **HTML** = Content: Hyper Text Markup Language (HTML) is the building-blocks of web pages.

Types of CSS/Ways to add CSS

- **There are three ways to add CSS to HTML**

  1. Inline CSS

  2. Internal CSS

  3. External CSS

Inline CSS.

- An **inline CSS** may be used to apply a **unique style** for a **single element**.

- To use **inline CSS**, add the **style attribute** to the relevant element.

- The **style attribute** can contain any **CSS property** and **value**.

  Eg: **<h1 style="color:aqua;">Jspiders</h1>**

Note: If we have **single** css property or css property is the **last** property then semicolon(;) is not mandatory

Internal CSS

- **Internal** CSS is defined within the <style> tag, inside the <head> section of an HTML page

```
<head>
        <style>
        p
        {
            color : red;
        }

        </style>
</head>
<body>


        <p>Jspiders</p>

        <p>Rajajinagar</p>

</body>
```
index.html

```
<head>
        <style>
        p
        {
        margin: 10px;
        }

        </style>
</head>
<body>


        <p>Jspiders</p>

        <p>Rajajinagar</p>

</body>
```
gallery.html

```
<head>
        <style>
        p
        {
            padding : 4px;
        }

        </style>
</head>
<body>


        <p>Jspiders</p>

        <p>Rajajinagar</p>

</body>
```
home.html

Note: Internal CSS is limited only to one HTML Page

External CSS

- External CSS is defined within the **\<link\>** tag, inside the **\<head\>** section of an HTML page

```
<head>

<link rel="stylesheet" href="style.css">


</head>
<body>

    <p>Jspiders</p>

    <p>Rajajinagar</p>

</body>
```
index.html

```
<head>

<link rel="stylesheet" href="style.css">


</head>
<body>

    <p>Jspiders</p>

    <p>Rajajinagar</p>

</body>
```
gallery.html

```
<head>

<link rel="stylesheet" href="style.css">


</head>
<body>

    <p>Jspiders</p>

    <p>Rajajinagar</p>

</body>
```
home.html

```
p
{
    color : red;
    margin:10px;
    padding:4px;

}
```
style.css

Note: External CSS can be used inside all the HTML Pages by using **\<link\>** tag

CSS Backgrounds and Gradients

SL NO	Property	Value
1	background-color	Color name ,color code
2	background-image	Image name , Image path , image address, linear-gradient(colors),radial-gradient(color)
3	background-repeat	repeat-x , repeat-y ,no-repeat
4	background-attachment	Scroll(default),fixed
5	background-position	left top, left center, left bottom, right top, right center, right bottom, center top, center center, center bottom
6	background-size	Width height,cover

CSS Selectors

- In CSS, selectors are patterns used to select the element(s) you want to style.

- Selector are used to select an Html element it is select by name, id, class etc.

  ❑ Element Selector

  ❑ Group Selector

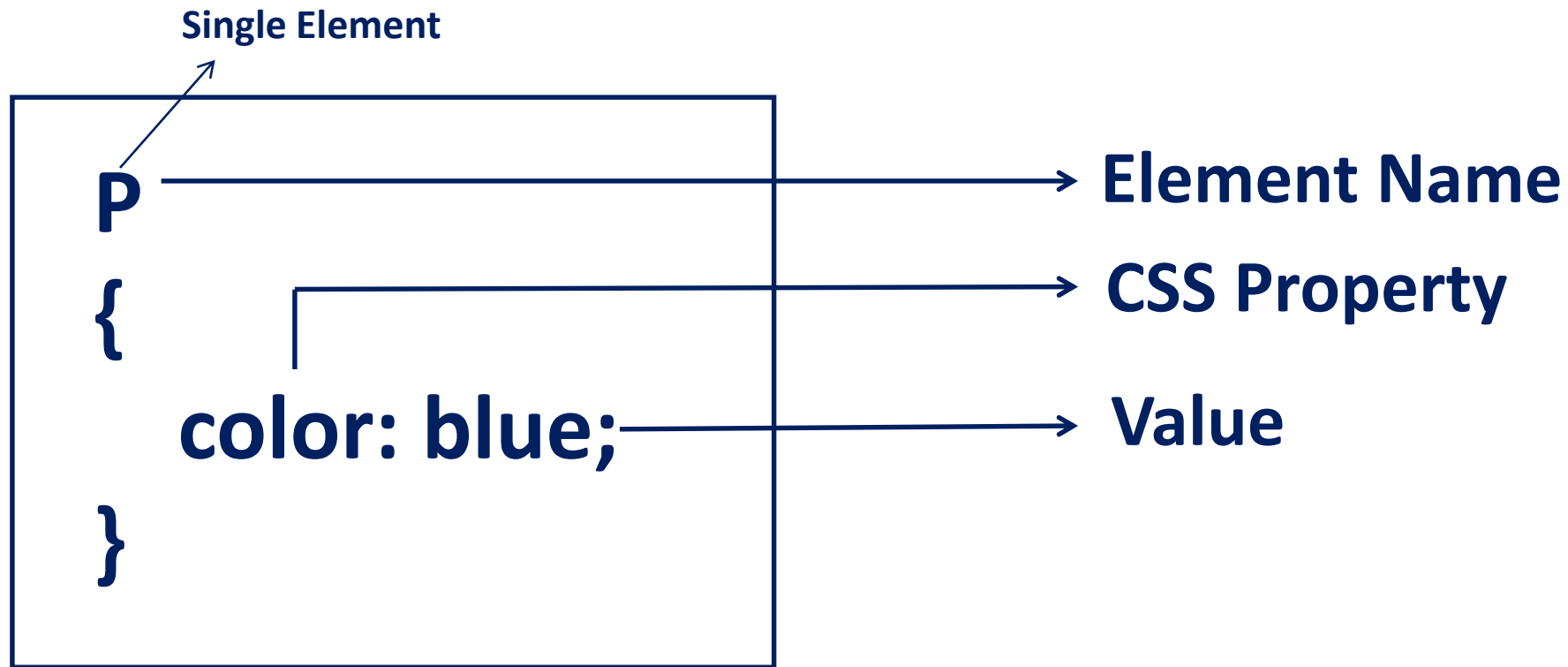 ❑ Class selector

  ❑ Id selector

  ❑ Universal Selector

Syntax of Selectors

Selector

H1

{ color: red;   font-size: 20px; }

property   value   property   value

Element Selector

- The **element selector** selects the HTML element by name.
- **Element selector** selects only one type of element.

Single Element

```
P
{

    color: blue;

}
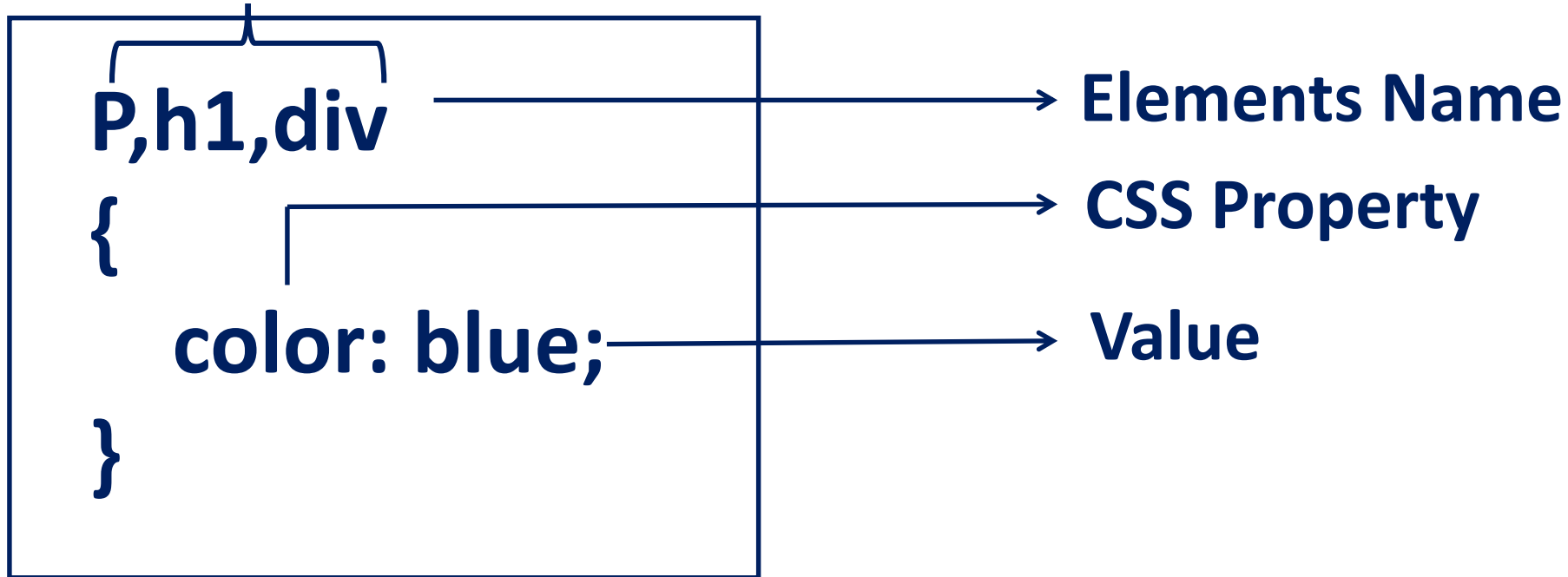```

Element Name

CSS Property

Value

# Group Selector

- **Group selector** is used to select all the elements

- **Group selector** is used to minimize the code.

- **Commas** are used to separate each element.

**Multiple Elements**

```
P,h1,div   → Elements Name
{   → CSS Property
    color: blue;   → Value
}
```

# Class Selctor

- The **class selector** selects HTML elements with a specific class attribute. It is used with a **dot** symbol.

- If you want to select **only one** specific HTML element then you should use the **element name** with class selector.

**Any number of Elements**

P.btn → Class

→ Class Name

→ Element Name

{

    color: blue; → CSS Property

→ Value

}
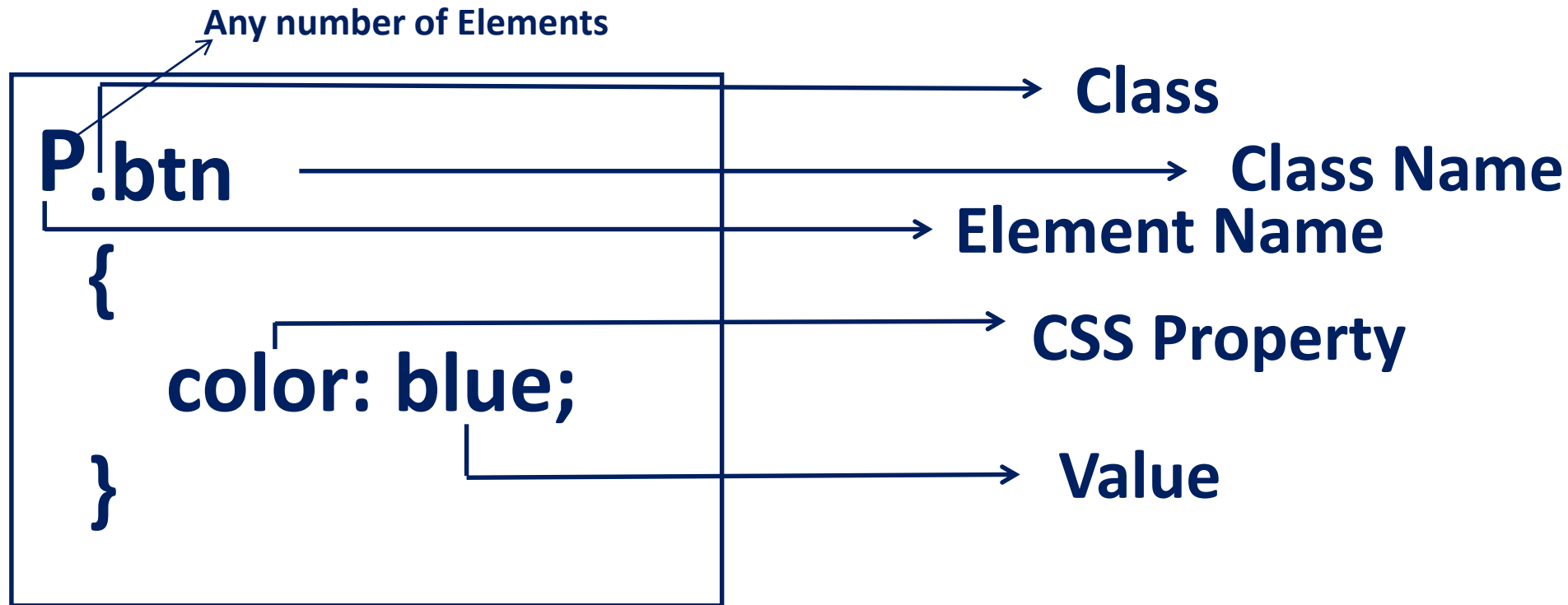
# Id Selector

- The **Id selector** selects HTML elements with a specific id attribute. It is used with a **#** symbol.

- If an HTML element is having both **class and Id selector** then **first preference** will be given to **Id selector**

**#btn** → **Id Name**

**{** → **Id**

**color: blue;** → **CSS Property**

→ **Value**

**}**

# Universal Selector
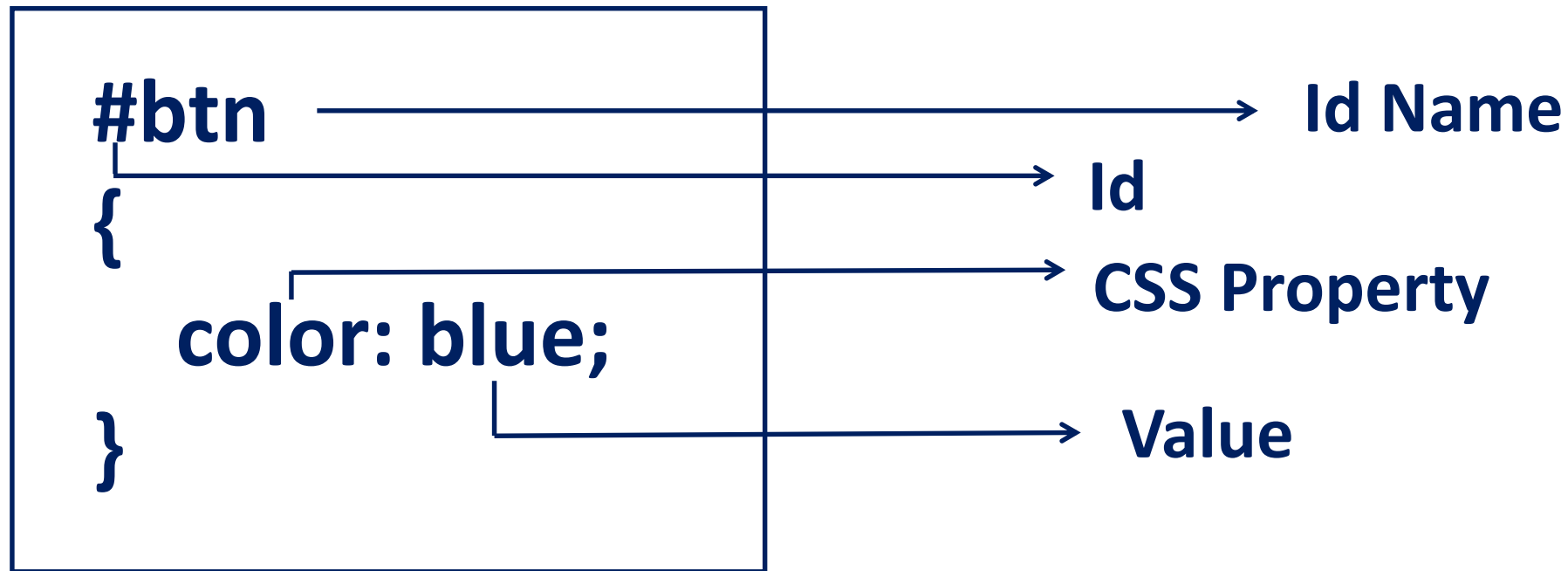
- The universal selector is used to select all the elements irrespective of tag names.

```
*
{
    color: blue;
}
```

CSS Property

Value
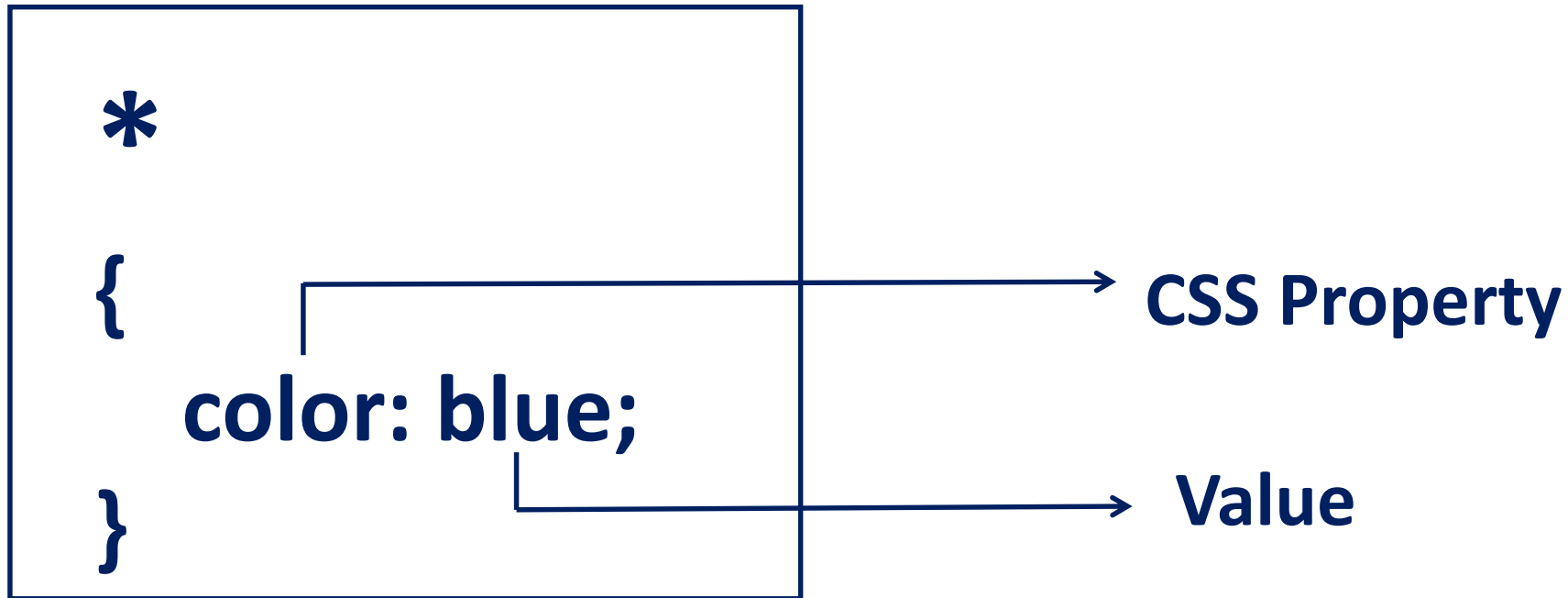
Box Model

- **Box model** is used for design and layout. The **CSS box model** is essentially a **box** that wraps around **every HTML element**. **It** consists of: margins, borders, padding, and the actual content.
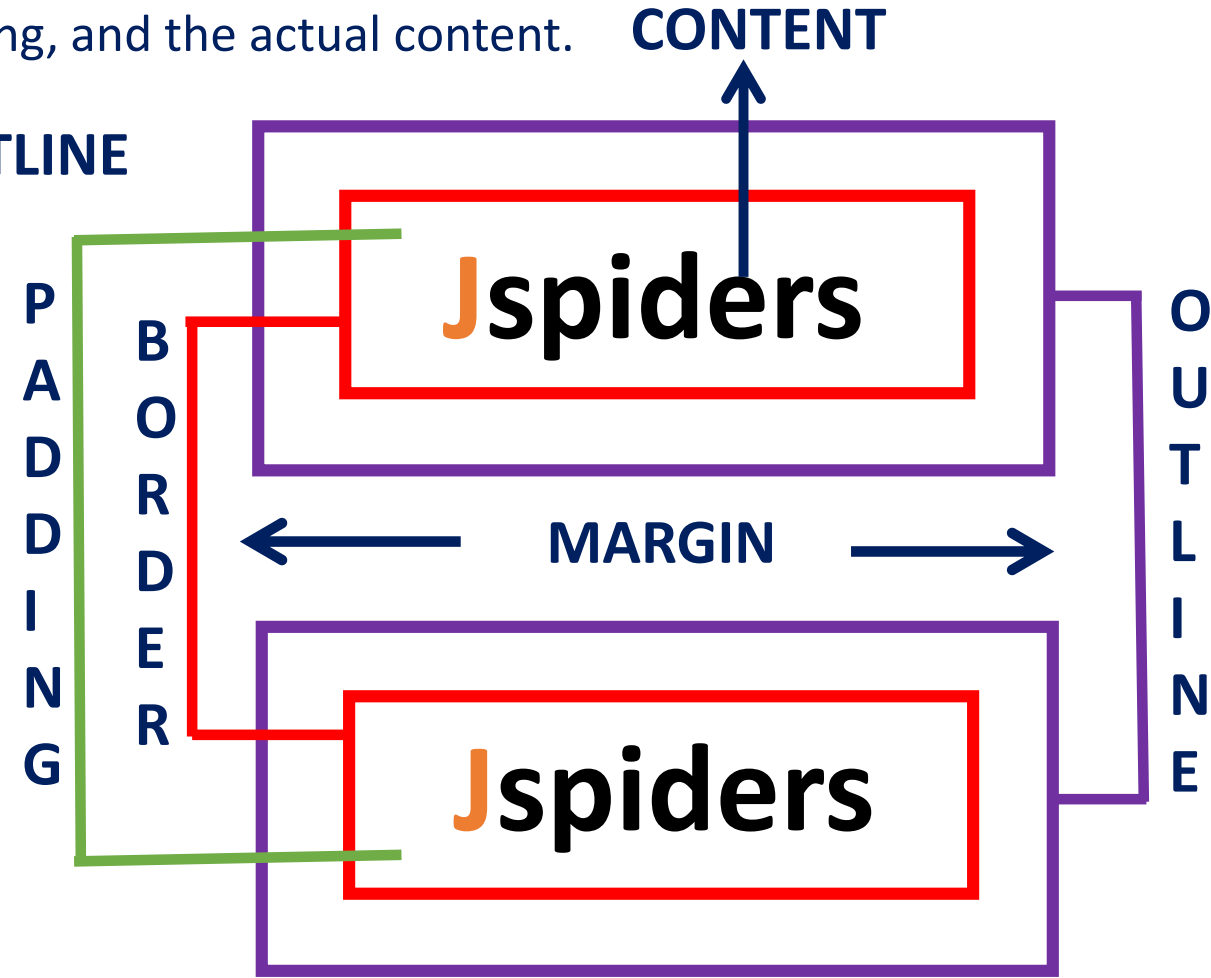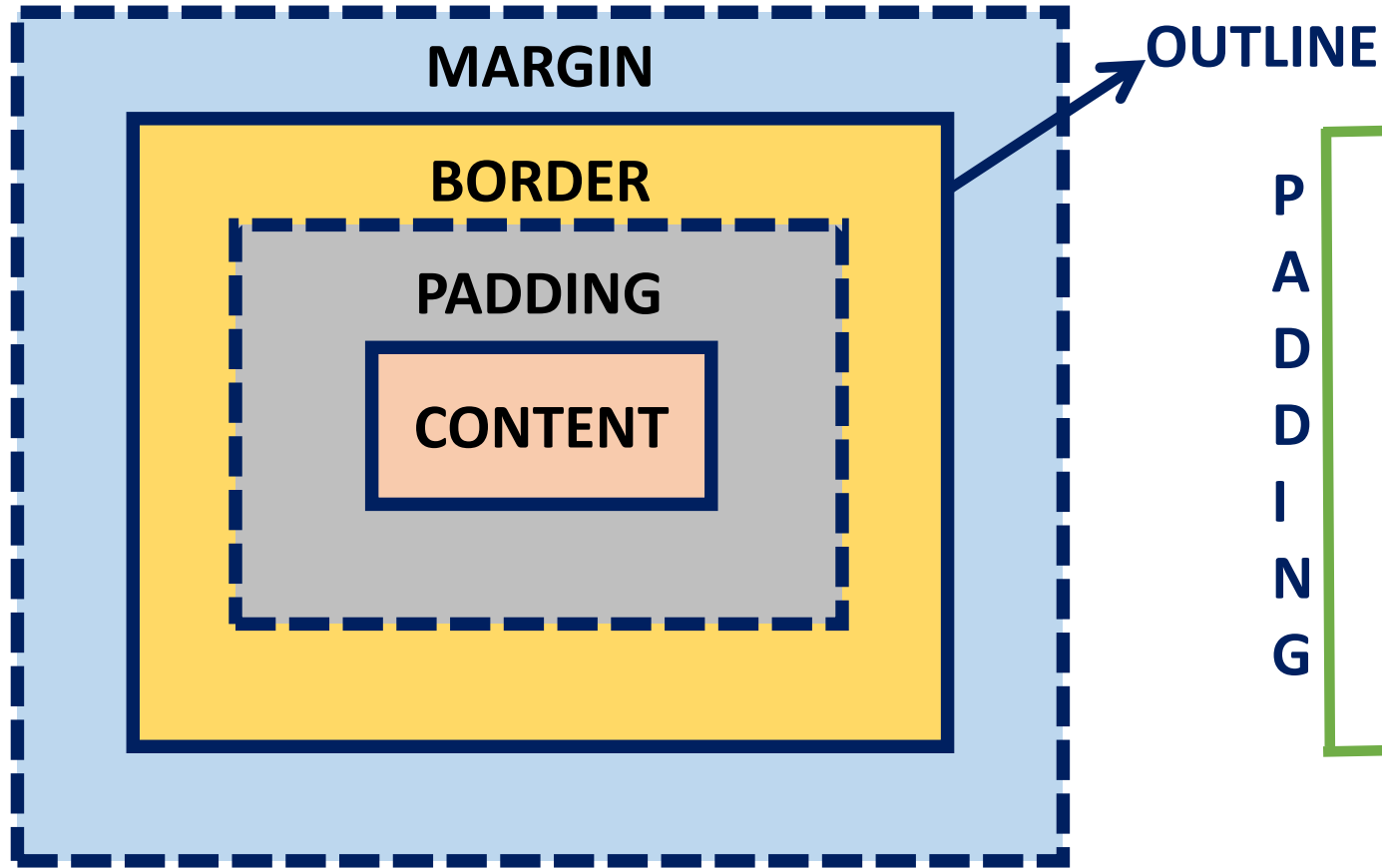
Border Property

- The **CSS border** properties allow you to specify the **style, width, and color** of an element's border

Width	Style	Color
px,%	solid,dotted,double,dashed, groove,inset,ridge,outset, **none**	color name/code

SL NO	Property	Value
1	border	width style color (2px solid red)
2	border -top	width style color (2px solid red)
3	border -bottom	width style color (2px solid red)
4	border -left	width style color (2px solid red)
5	border -right	width style color (2px solid red)
6	border -radius	TLC TRC BRC BLC

Outline Property

- The **CSS outline** properties allow you to specify the **style, width, and color** of an element's outline

- **Outline** is outer edge of HTML elements

Width	Style	Color
px,%	solid,dotted,double,dashed, groove,inset,ridge,outset, **none**	color name/code

SL NO	Property	Value
1	outline	width style color (2px solid red)
2	Outline-offset	px,%

Padding Property

- **Padding** is the space between border and content of the HTML Elements

SL NO	Property	Value
1	Padding-left	px,%
2	Padding-right	px,%
3	Padding-top	px,%
4	Padding-bottom	px,%
5	Padding	padding-top padding-right padding-bottom padding-left (px ,%)

Margin Properties

- **Margin** is the space between two **outlines** of the HTML Elements

SL NO	Property	Value
1	Margin-left	px,%
2	Margin-right	px,%
3	Margin-top	px,%
4	Margin-bottom	px,%
5	Margin	margin-top margin-right margin-bottom margin-left (px ,%)

Shadow Property

Text   Properties

- **CSS text** formatting **properties** is used to format **text** and style **text**

SL NO	Property	Value
1	Color	Color name,color codes
2	Text-align	Left(Default),right,center,justify
3	Text-indent	px,%
4	Text-decoration	Underline,overline,line-through,none
5	Text-transform	Uppercase,lowercase,capitalize
6	Text-shadow	H-value V-value Blur-Ratio Color . Ex: 2px 2px 2px red
7	Letter-spacing	px,%
8	Word-spacing	px,%
9	Line-height	px,%

Font Properties

- The **CSS font properties** define the **font** family, boldness, size, and the style of a text.

SL NO	Property	Value
1	Font-style	normal(default), italic
2	Font-size	px,%
3	Font-weight	Lighter(default),bolder
4	Font-family	Any family name ex:Times New Roman,Algerian
5	Font-varient	normal(default), small-caps

Pseudo Classes

- **Pseudo classes are used to change the current state of html elements**

syntax

selector : pseudo class Name

{

css properties : value ;

}

Ex:

P: hover

{

color : red ;

}

☐ Link

☐ Hover

☐ Active

☐ Visited

Position Property

- The `position` property specifies the type of positioning method used for an element.

SL NO	Property	Value
1	Position	Static(default), relative, fixed, sticky
2	Top	px,%
3	Bottom	px,%
4	Left	px,%
5	Right	px,%

Display Property

- The `display` property specifies the display behavior (the type of rendering box) of an element.

SL NO	Property	Value
1	Display	Inline , block ,inline-block , none

- **Display inline** is default for inline level elements.
- **Display block** is default for block level elements

Transform   Property

Border Property