

# CSS

## Chapter #0

What is CSS:-

CSS stands for Cascading Style Sheets.  
It is a stylesheet language used to describe the presentation (look and layout) of a document written in HTML.

Key point:-

CSS is a styling language it means that it is the beauty of web-pages-

Without CSS web-pages are just simple and old fashion - But CSS provide them a new beautiful life.

CSS is the beauty of HTML webpages

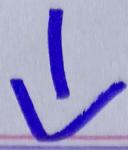
## Types / adding CSS in HTML:-

There are three types or three ways to add CSS in our HTML webpage -

- Inline
- Internal
- External

eg:-

```
<html>
  <head>
    <title> CSS Notes </title>
    <link rel="stylesheet" href="name.css">
    <style>
      CSS → Internal
    </style>
  </head>
  <body style="css"> → Inline
  </body>
</html>
```



In external file "name" is the name of CSS file and ".css" is the extension of CSS file.

Syntax of CSS is:

Selector {

    property: value;  
    property: value;

}

# Chapter #1

## Selectors in CSS

Some of the most important  
selectors in CSS are given below.

### 1 → Universal Selector (+)

The universal selector (+) is used  
to select all elements on the page.

If I am honest it  
is 99% used for removing  
default margin and padding from  
the page.

Syntax:

margin: 0;  
padding: 0;

CODING

### 2 → Element Selector:

The element selector is used to

targets all the elements of a specific type.

**Syntax:**

p {

    color: blue;

}

Here the p indicates the paragraphs of the whole HTML page - and the property color is used to make the text color blue -

**3 → Class Selector (.)::**

This selector targets the all elements or tags inside a specific class.

**Syntax:**

.class\_name {

    property : value;

}

**4 → ID Selector (#)::**

This selector is used to target all the elements inside a specific

~~class~~ Id.

Syntax::

```
#class_name {  
    property: value;  
}
```

5 → Group Selector::

Group selector

is used to apply same style to multiple selectors.

Syntax::

```
selector, selector, selector {  
    property: value;  
}
```

6 → Descendant Selector::

This selector is used to target an element inside other element.

```
div p {  
    property : value;
```

3

This selector is gonna apply  
that specific CSS property on the  
paragraph inside the div.

## 7 → Child Selector (CJ):

The child  
selector selects only the direct  
child elements of a specified  
element - not grand children or  
deeper nested elements.

### Syntax:

```
parent > child {  
    styles }
```

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## Chapter # 2

### CSS Colors and Units

CSS provide different color formats and units of measurement to style elements.

#### CSS Colors:-

CSS colors are given below

Named Colors

Hexadecimal Colors

RGB Colors

RGBA Colors (with opacity)

HSL Colors.

eg:-

Color: red;

Color: #00ff00<sup>zero not 0</sup>

rgb(0,0,255);

rgba(255,0,0,0.5);

color: hsl(120,100%,25%);

Well colors are well defined  
in video

### CSS units:-

CSS units are  
given below-

#### 1→ Pixels (px)-

It is a fixed size unit  
in CSS.

#### 2→ Percentage (%) -

This unit is used to give  
size to the childrens from their  
parents.

#### 3→ Em(cm) :-

em is a relative unit  
of measurement used for fonts,  
spacing, and layout. It is relative  
to font-size of the parent  
element.

## Free point:-

1em = 16px

## 4 → Rem(rm):-

Rem unit relative to root (`<html>`) font size.

## 5 - Viewport Width/Height:-

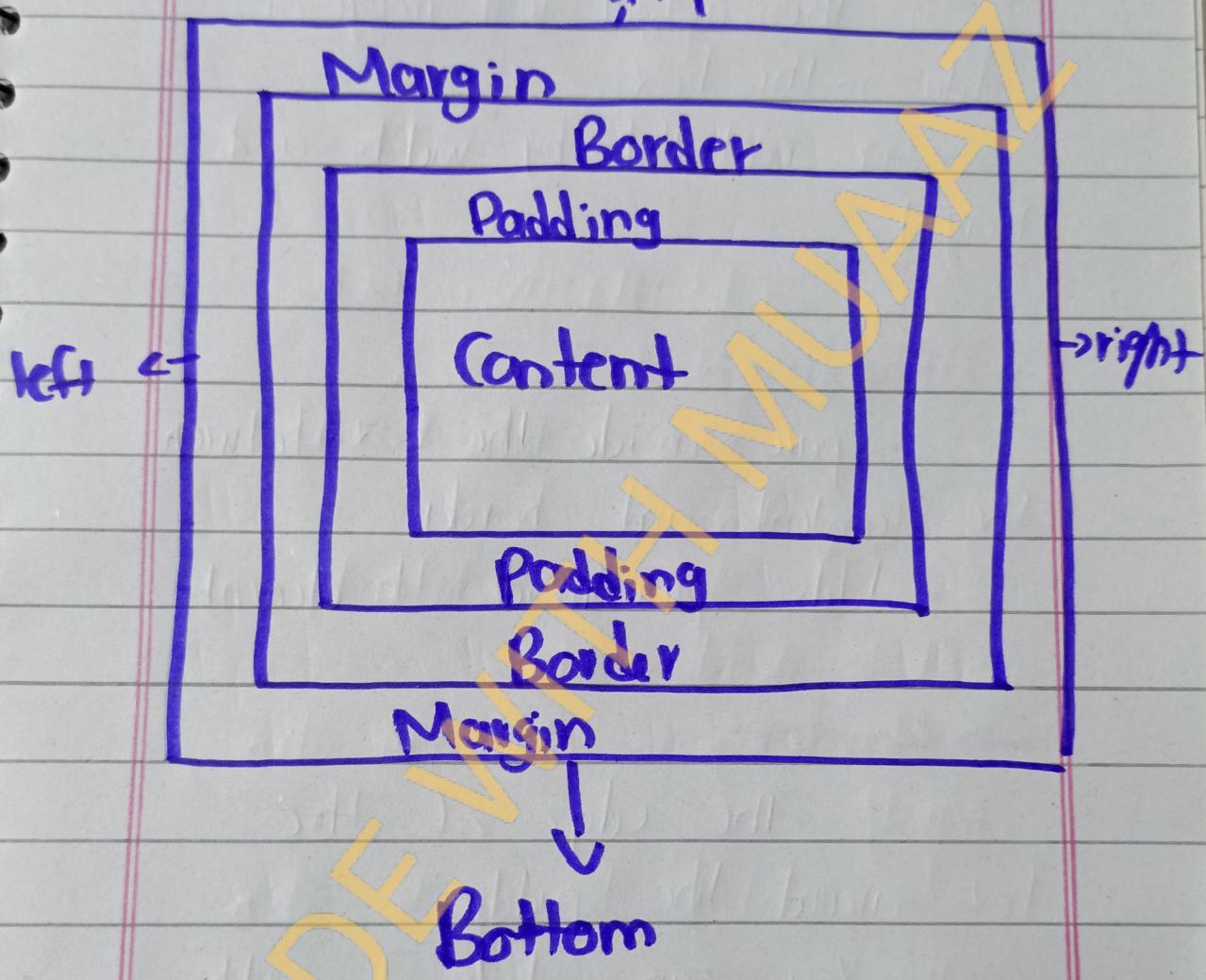
These units are used to give responsive size to the element that depend on the size of width and height of the screen.

vh → height

vw → width

## Chapter #3

### Box Model in CSS



The CSS Box Model describe how every HTML element is structured and how space is added around it.

Each element is treated like

a box made up of four layers.

### → Content:-

- The actual text, image or data in the box.
- Size controlled by width and height.

### → Padding:-

- Space inside the box, between the content and border.
- Adds space inside the element.

### → Border:-

- The edge of the box around the padding.
- You can style it with width, color, and type.

### → Margin:-

Spare outside the box, between the element and other around it.

# Chapter # 4

## CSS Layout Techniques

Layout Techniques in CSS help you to control how the elements are arranged on a webpage like in rows, columns, or free form styles.

Some CSS layout Techniques are given below.

### I → display Property:-

The display property defines how an element behaves in the layout.

#### Common values:-

- **block** - Takes full width ( e.g. <div> )
- **inline** - flow within text ( e.g. <span> )
- **inline-block** - Like line but allows width/height
- **none** - Hide all the element completely -

## 2- Position property:-

The position property controls where an element appears on the page.

### Common values:

- **static** - (default) - Normal flow-
- **relative** - Moves relative to its original position-
- **absolute** - A position relative to nearest positioned ancestor-
- **fixed** - Stays in place even when scrolling
- **sticky** - Sticks to a position when scrolling

## 3- float and clear:

It is used for wrapping elements - (older method)

• **float** - Moves element left or right.

• **clear** - stops elements from wrapping around floated items.

## 4- z-index in CSS (layer indexing)::

The z-index property in CSS is used to control the stack order (layering) of overlapping HTML elements.

### Key Points:

- Elements with a higher z-index value appear on top of elements with lower values.
- It only works on elements that have a position set to relative, absolute, fixed or sticky.

### Default Behavior:

- Without z-index, elements stack in the order they appear in the HTML.

- 2-index values can be:
  - positive numbers (above others)
  - 0 (normal)
  - negative numbers (behind others)

## 5- overflow:

Handles content  
that goes outside the box.

## values:

- visible (default)-
- hidden
- scroll
- auto