

CSS

For all purpose

CSS Fundamentals (Basics & Selectors):

1- Introduction to CSS:

What is CSS and how it works.

Inline, Internal, and External CSS.

2- Selectors: Universal (*), Type, Class (.class), ID (#id). Grouping and descendant selectors. Pseudo-classes (:hover, :nth-child()).

3- CSS Properties Basics: Text properties:

color, font-family, font-size, text-align.

Background properties: background-color, background-image.

4- Box Model: Padding, Margin, Border.,

5- Units of Measurement: Absolute (px, cm, mm) vs Relative (em, rem, %, vh, vw).

WHATS CSS

CSS is the language we use to style an HTML document.

CSS describes how HTML elements are to be displayed on screen, paper, or in other media

CSS stands for Cascading Style Sheets

CSS saves a lot of work. It can control the layout of multiple web pages all at once

THERE ARE 3 METHODS TO ADD CSS TO THE WEBPAGE:

1. Inline: Directly to the element tag.
2. Internal (embedded): In the head section within <style> tag.
3. External: Separate file with extension .css and link it using <link> tag within the head section.

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

HOW DOES CSS WORKS:

- 1- When the browser loads the HTML, it convert it into DOM.
- 2- Linked recourses within HTML will be fetched (Videos, Images, CSS files, etc).
- 3- The browser will parse the CSS and based on the selector type it applies the style to the correct node on DOM (Render Trees).
- 4- The visual website appears on the screen.

CSS SELECTORS:

CSS selectors: We use the selectors to target a specific HTML element to style it.

- Universal (*): to select all elements.
- Type: targets an element.
- Class (.): targets a class with specific value.
- ID (#): targets an ID with specific value.

Specificity Examples

Selector	Specificity
Inline style (<code>style=""</code>)	1,0,0,0
<code>#id</code>	0,1,0,0
<code>.class</code> , <code>[attr]</code> , <code>:hover</code>	0,0,1,0
<code>div</code> , <code>h1</code>	0,0,0,1
<code>*</code> (Universal selector)	0,0,0,0

CSS SELECTORS:

- **Grouping Selectors:** We can group selectors by separating them with commas to avoid repetition.
- **Descendant Selectors:** We use it to target nested elements.
- **Pseudo-classes:** Special state of an element (Hover, Visited/Unvisited, checked, etc).
- **nth-child(An-B):** selects a child based on its position, n is all integers > 0.
example: even items nth-child(2n) and odd is nth-child(2n+1).

TEXT PROPERTIES:

- **color** to change the font color by color name/ Hex value #000000 or RGB value rgb(0,0,0) or HSL(hue , saturation, lightness) -> (0,100%,0)
- **font-family**: to change the font family.
- **font-size**.
- **text align**: left, right, center, justify (equal lines), initial (default), inherit (parent).

BACKGROUND PROPERTIES:

- **background-color**: color, transparent, initial or inherit.
background-color: lightblue;
- **background-image**: url("")

background-repeat: no-repeat;

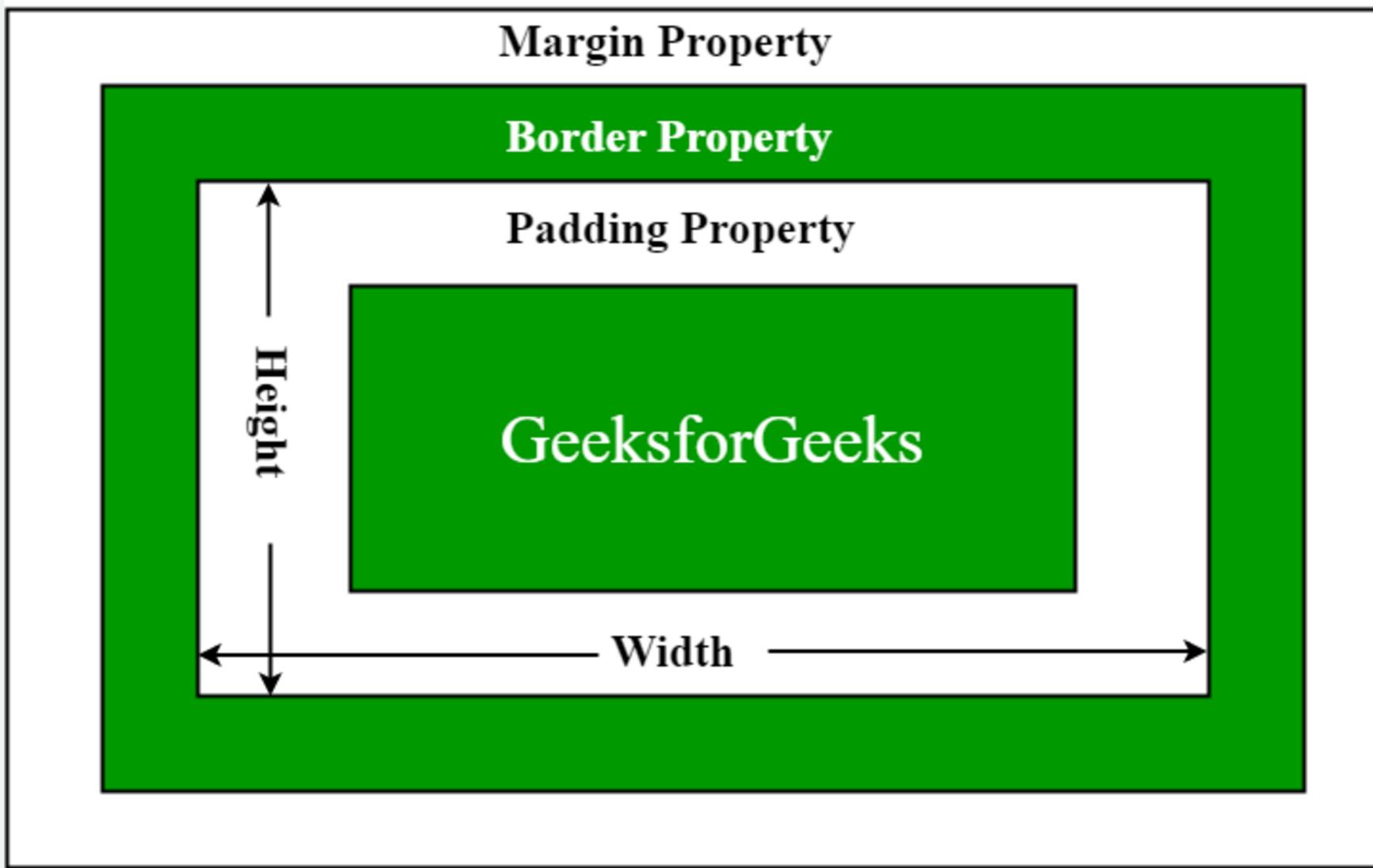
back ground attachment

- **background-attachment: fixed;**
- **background-attachment: scroll;**
- **background-attachment: local;**

BOX MODEL:

The CSS Box Model is a layout model that describes how different components of a web element (content, padding, border, and margin) are structured and positioned. Each web element generates a rectangular box that encompasses these components, and the Box Model allows developers to control the element's size and spacing effectively.

CSS Box-Model Property



BORDER:

The border-style property specifies what kind of border to display.

- **border-style: dotted;**
- **border-style: double;**
- **border-style: hidden;**
- **border-style: dotted dashed solid double;**

MARGIN:

Margins are used to create space around elements, outside of any defined borders.

- margin-top
- margin-right
- margin-bottom
- margin-left
- margin: 25px 50px 75px; this example show how to do margin from (top,right,bottom,left)

PADDING:

Padding is used to create space around an element's content, inside of any defined borders.

- **padding-top**
- **padding-right**
- **padding-bottom**
- **padding-left**
- **padding: 25px 50px 75px 100px;**

UNITS OF MEASUREMENT:

- Absolute These units have a fixed size regardless of the context, such as px (pixels)
 - px
 - cm
 - mm
- Relative Units: These units are relative to another value, such as the parent element's size or the viewport's dimensions, making them more flexible for responsive design.
 - em (font-size)
 - rem (root size)
 - % (parent element)
 - vh (1% of veiwpot hight)
 - vw (1% of veiwpot width).

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THANK YOU

ANY
QUESTION?