**CSS Basic**

**CSS selectors are used to "find" (or select) HTML elements based on their element name, id, class, attribute, and more.**

1. id - #idValue {}

2. class - .className {}

3. tag - any tag like a{}

**What style will be used when there is more than one style specified for an HTML element**?

- html element with more than one style

consider the body tag with inline style and external style ?

so the inline style will override the external style.

because inline style has the highest priority

--Three Ways to Insert CSS--

1. External style sheet

2. Internal style sheet

3. Inline style

Priority of style

1. Inline style (inside an HTML element)

2. External and internal style sheets (in the head section)

3. Browser default

**#CSS Background Properties**

1. background-color

2. background-image

3. background-repeat

4. background-attachment

5. background-position

body {

background-image: url("gradient\_bg.png");

background-repeat: repeat-x;

}

body {

background-image: url("img\_tree.png");

background-repeat: no-repeat;

background-position: right top;

}

body {

background-image: url("img\_tree.png");

background-repeat: no-repeat;

background-position: right top;

background-attachment: fixed;

}

Background - Shorthand property

body {

background: #ffffff url("img\_tree.png") no-repeat right top;

}

**#CSS border properties**

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

1 . border-style

p.dotted {border-style: dotted;}

p.dashed {border-style: dashed;}

p.solid {border-style: solid;}

p.double {border-style: double;}

p.groove {border-style: groove;}

p.ridge {border-style: ridge;}

p.inset {border-style: inset;}

p.outset {border-style: outset;}

p.none {border-style: none;}

p.hidden {border-style: hidden;}

p.mix {border-style: dotted dashed solid double;}

2. border-width - thin, medium, or thick.

p.one {

border-style: solid;

border-width: 5px;

}

3. border-color

- The border-color property can have from one to four values (for the top border, right border, bottom border, and the left border).

p.one {

border-style: solid;

border-color: red;

}

p {

border: 5px solid red; // border-width border-style (required) border-color

}

**#CSS Margins**

- The CSS margin properties are used to create space around elements, outside of any defined borders.

p {

margin-top: 100px;

margin-bottom: 100px;

margin-right: 150px;

margin-left: 80px;

}

p {

margin: 25px 50px 75px 100px;

}

- auto ,inheirt

p.ex1 {

margin: auto;

margin-left: inherit;

**}**

**#CSS Padding**

- The CSS padding properties are used to generate space around an element's content, inside of any defined borders.

div {

padding-top: 50px;

padding-right: 30px;

padding-bottom: 50px;

padding-left: 80px;

}

div {

padding: 25px 50px 75px 100px;

}

**#CSS Height and Width**

height - Sets the height of an element

max-height - Sets the maximum height of an element

max-width - Sets the maximum width of an element

min-height - Sets the minimum height of an element

min-width - Sets the minimum width of an element

width - Sets the width of an element

**# The CSS Box Model**

1. Content - The content of the box, where text and images appear

2. Padding - Clears an area around the content. The padding is transparent

3. Border - A border that goes around the padding and content

4. Margin - Clears an area outside the border. The margin is transparent

**# CSS Outline**

1. outline-style

2. outline-color

3. outline-width

4. outline-offset

5. outline

p.ex4 {

border: 1px solid black;

outline-style: solid;

outline-color: red;

outline-width: 4px;

}

Outline - Shorthand property outline-

p.ex2 {outline: dotted red;}

p.ex3 {outline: 5px solid yellow;} //width outline-style (required) outline-color

p.ex4 {outline: thick ridge pink;}

//The outline-offset property adds space between an outline and the edge/border of an element.

The space between an element and its outline is transparent.

p {

margin: 30px;

border: 1px solid black;

outline: 1px solid red;

outline-offset: 15px;

}

**#All CSS Text Properties**

color Sets the color of text

direction Specifies the text direction/writing direction

letter-spacing Increases or decreases the space between characters in a text

line-height Sets the line height

text-align Specifies the horizontal alignment of text

text-decoration Specifies the decoration added to text

text-indent Specifies the indentation of the first line in a text-block

text-shadow Specifies the shadow effect added to text

text-transform Controls the capitalization of text

text-overflow Specifies how overflowed content that is not displayed should be signaled to the user

unicode-bidi Used together with the direction property to set or return whether the text should be overridden to support multiple languages in the same document

vertical-align Sets the vertical alignment of an element

white-space Specifies how white-space inside an element is handled

word-spacing Increases or decreases the space between words in a text

**#CSS Fonts**

**-font-family:**

- Generic family

1. Serif -Times New Roman ,Georgia

2. Sans-serif - Arial ,Verdana

3. Monospace - Courier New Lucida Console

- font family

p {

font-family: "Times New Roman", Times, serif;

}

**-font-style**

normal - The text is shown normally

italic - The text is shown in italics

oblique - The text is "leaning" (oblique is very similar to italic, but less supported)

p {

font-style: normal;

}

**-font-size**

-If you do not specify a font size, the default size for normal text, like paragraphs, is 16px (16px=1em).

p {

font-size: 0.875em;

}

//Responsive Font Size ..vw- viewport width

<h1 style="font-size:10vw;">Responsive Text</h1>

**-font-weight**

p {

font-weight: normal;

}

p {

font-weight: lighter;

}

p {

font-weight: bold;

}

p {

font-weight: 900;

**- font-variant**

p.normal {

font-variant: normal;

}

p.small {

font-variant: small-caps;

}

**#CSS Icons**

- Font Awesome Icons - <i class="fa fa-cloud"></i>

- Bootstrap Icons - <i class="glyphicon glyphicon-cloud"></i>

- Google Icons - <i class="material-icons">cloud</i>

**#CSS Links**

- The four links states are:

a:link - a normal, unvisited link

a:visited - a link the user has visited

a:hover - a link when the user mouses over it

a:active - a link the moment it is clicked

**- text-decoration**

-The text-decoration property is mostly used to remove underlines from links:

a:visited {

text-decoration: none;

}

a:hover {

text-decoration: underline;

}

**#CSS Lists**

- <ol>

- <ul>

1. list-style-type

The list-style-type property specifies the type of list item marker

ul {

list-style-type: circle; //square ,upper-roman ,lower-alpha

}

2. list-style-image

The list-style-image property specifies an image as the list item marker:

ul {

list-style-image: url('sqpurple.gif');

}

3. list-style-position

ul{

list-style-position: outside;

}

ul {

list-style-position: inside;

}

//shorthand property - list-style-type , list-style-position ,list-style-image

ul {

list-style: square inside url("sqpurple.gif");

}

**#CSS Tables**

table, th, td {

border: 1px solid black;

}

border-collapse

-The border-collapse property sets whether the table borders should be collapsed into a single border:

table {

border-collapse: collapse;

}

table, th, td {

border: 1px solid black;

}

Responsive Table

<div style="overflow-x:auto;">

#**CSS Layout - The display Property**

- The display property is the most important CSS property for controlling layout.

- The default display value for most elements is block or inline.

//hide element

h1 {

display: none; //Element not take the space

}

h1{

visibility: hidden; //Element take the space

}

**#CSS Layout - The position Property**

- The position property specifies the type of positioning method used for an element (static, relative, fixed, absolute or sticky).

**#CSS Overflow**

- The overflow property specifies whether to clip content or to add scrollbars when the content of an element is too big to fit in a specified area.

- The overflow property has the following values:

visible - Default. The overflow is not clipped. It renders outside the element's box

hidden - The overflow is clipped, and the rest of the content will be invisible

scroll - The overflow is clipped, but a scrollbar is added to see the rest of the content

auto - If overflow is clipped, a scrollbar should be added to see the rest of the content

overflow-x specifies what to do with the left/right edges of the content.

overflow-y specifies what to do with the top/bottom edges of the content.

**#float property**

- The float property is used for positioning and formatting content

The float property can have one of the following values:

left - The element floats to the left of its container

right- The element floats to the right of its container

none - The element does not float (will be displayed just where it occurs in the text). This is default

inherit - The element inherits the float value of its parent

**#CSS Combinators**

- A combinator is something that explains the relationship between the selectors.

four different combinators in CSS:

descendant selector (space)

child selector (>)

adjacent sibling selector (+)

general sibling selector (~)

**#CSS Pseudo-classes**

- A pseudo-class is used to define a special state of an element.

All CSS Pseudo Classes

:active a:active Selects the active link

:checked input:checked Selects every checked <input> element

:disabled input:disabled Selects every disabled <input> element

:empty p:empty Selects every <p> element that has no children

:enabled input:enabled Selects every enabled <input> element

:first-child p:first-child Selects every <p> elements that is the first child of its parent

:first-of-type p:first-of-type Selects every <p> element that is the first <p> element of its parent

:focus input:focus Selects the <input> element that has focus

:hover a:hover Selects links on mouse over

:in-range input:in-range Selects <input> elements with a value within a specified range

:invalid input:invalid Selects all <input> elements with an invalid value

:lang(language) p:lang(it) Selects every <p> element with a lang attribute value starting with "it"

:last-child p:last-child Selects every <p> elements that is the last child of its parent

:last-of-type p:last-of-type Selects every <p> element that is the last <p> element of its parent

:link a:link Selects all unvisited links

:not(selector) :not(p) Selects every element that is not a <p> element

:nth-child(n) p:nth-child(2) Selects every <p> element that is the second child of its parent

:nth-last-child(n) p:nth-last-child(2) Selects every <p> element that is the second child of its parent, counting from the last child

:nth-last-of-type(n) p:nth-last-of-type(2) Selects every <p> element that is the second <p> element of its parent, counting from the last child

:nth-of-type(n) p:nth-of-type(2) Selects every <p> element that is the second <p> element of its parent

:only-of-type p:only-of-type Selects every <p> element that is the only <p> element of its parent

:only-child p:only-child Selects every <p> element that is the only child of its parent

:optional input:optional Selects <input> elements with no "required" attribute

:out-of-range input:out-of-range Selects <input> elements with a value outside a specified range

:read-only input:read-only Selects <input> elements with a "readonly" attribute specified

:read-write input:read-write Selects <input> elements with no "readonly" attribute

:required input:required Selects <input> elements with a "required" attribute specified

:root root Selects the document's root element

:target #news:target Selects the current active #news element (clicked on a URL containing that anchor name)

:valid input:valid Selects all <input> elements with a valid value

:visited a:visited Selects all visited links

All CSS Pseudo Elements

::after p::after Insert content after every <p> element

::before p::before Insert content before every <p> element

::first-letter p::first-letter Selects the first letter of every <p> element

::first-line p::first-line Selects the first line of every <p> element

::selection p::selection Selects the portion of an element that is selected by a user

**#CSS Opacity / Transparency**

- The opacity property specifies the opacity/transparency of an element.

- he opacity property can take a value from 0.0 - 1.0.

**#CSS Navigation Bar = List of Links**

- Vertical Navigation Bar

- Horizontal Navigation Bar

**#CSS Dropdowns**

**#Image Sprites**

-An image sprite is a collection of images put into a single image.