3. CSS Introduction, CSS Property and Display Property

CSS Introduction

Cascading Styles Sheets (CSS) is a way to style and **present** HTML.

Whereas the HTML is the meaning or **content**, the style sheet is the **presentation** of that document.

Styles don't smell or taste anything like HTML, they have a format of **'property: value'** and most properties can be applied to most HTML tags.

Whereas HTML has tags, CSS has **selectors**.

Selectors are the names given to styles in internal and external style sheets.

A value is given to the property following a **colon** (NOT an "equals" sign). **Semi-colons** are used to separate the properties.

```
body {
    font-size: 14px;
    color: #000;
}
```

There are three ways to apply CSS to HTML: **Inline**, **internal**, and **external**.

Inline:
Inline styles are used **straight** into the **HTML tags** using the style attribute.

They look something like this:

```
<p style="color: red">text</p>
```

This will make that specific paragraph red.

Internal:
Embedded, or internal, styles are used for the **whole page**. Inside the **head element**, the style tags surround all of the styles for the page.

```
<!DOCTYPE html>
<html>

<head>
    <title>CSS</title>
    <style>
        p {
            color: red;
        }

        a {
            color: blue;
        }
    </style>
</head>
```

This will make all of the paragraphs in the page red and all of the link blue.

External:
External styles are used for the whole, **multiple-page** website. There is a separate CSS file, which will simply look something like:

```
p {
    color: red;
}

a {
    color: blue;
}
```

If this file is saved as **"style.css"** in the same directory as your HTML page then it can be **linked** to in the HTML like this:

```
<!DOCTYPE html>
<html>

<head>
    <title>CSS Example</title>
    <link rel="stylesheet" href="style.css">
</head>

</html>
```

Rules To Remember

It is **better** practice to use **external** stylesheet over inline and internal stylesheet.

CSS Property

A CSS "rule" always start with a **"selector"** that defines which HTML elements it **applies** to.

Selecting multiple elements
What if we want to add some styles to all our headings? We don't want to have redundant rules, since that would eventually become a nightmare to maintain:

```
h1,
h2,
h3,
h4,
h5,
h6 {
    font-family: "Helvetica", "Arial", sans-serif;
}
```

So, we just defined some basic styles for one of our web pages. It would be really convenient if we could reuse them on our other page, too. For this, all we need to do is add the same <link/> element to any other pages we want to style.

You can see list of all CSS properties from below URLs:
http://www.stylinwithcss.com/resources_css_properties.php
https://www.w3schools.com/cssref/

Try it yourself

Create a sample HTML file with doctype, HTML, HEAD, TITLE and BODY tags. Now add some paragraphs, div tags and heading tags and add inline, internal, and external CSS to it. You may try some CSS properties like background color, color, or font size etc.

Display Property

Every element on a web page is a **rectangular box**.

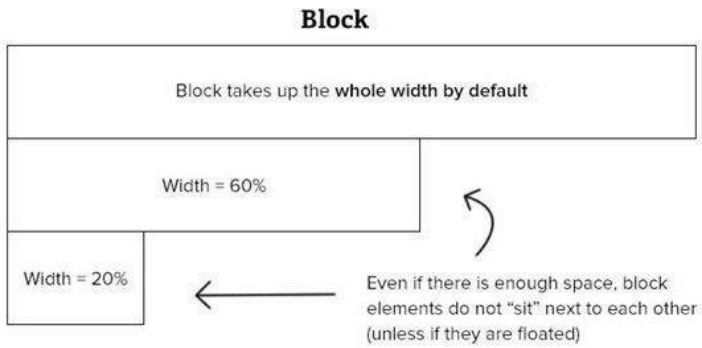
The display property in CSS determines just how that rectangular box **behaves**.

The display property **controls** the box's type **generated** by an element.

```
div {
    display: inline;
    display: inline-block;
    display: block;
    display: none;
}
```

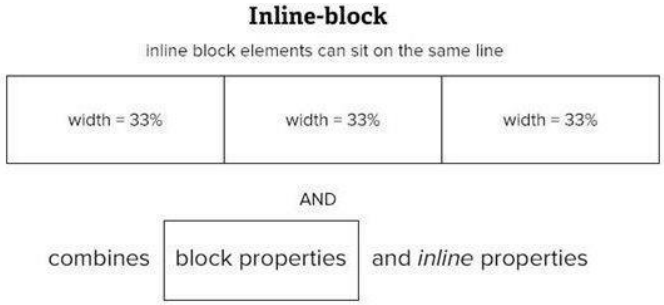
The CSS specification defines the **default display value** for all the elements, e.g., the ** ** element is rendered as **block**, while the **** element is **displayed inline**.

Block:
Many HTML elements are set to this **mode** of display by **browsers'** stylesheets. They include , <ul> and text blocks like <p>. Block level elements by default **take up as much space** as they can, and they cannot be **placed** on the **same horizontal** line with any other display modes, include other block elements.



Inline:
The inline mode **wraps** many HTML elements **tightly around** them and is the defaults for all elements that are not specified with any other display values. Elements can be **placed side by side** on the same line as inline elements. Think about the tag that bolds elements, the tag that creates italics and <a> tags that allow you to link to other web pages.

Inline-block:
This is one display value that **combines** the properties of both **block** elements and **inline** elements. You get the ability to set a height and width, and the element can **appear** on the **same horizontal** line as other elements.



None:
Display none hides the element from the website and it will **not** be **shown visually**. This is very **useful** for CSS **Dropdown** menus where additional options appear when you **hover** on navigation menus. The rationale is that elements are set to a display value of none initially, and the display value is **changed** to **block** on hover.

Rules To Remember

Changing the display type of an element only **changes** the **display behaviour** of an element, **NOT** the **type** of **element** it is. For example, an inline element set to display: block; is not allowed to have a block element nested inside of it.