What is CSS?

CSS (**C**ascading **S**tyle **S**heets) is a style sheet language. It is used to selectively style HTML elements. The CSS needs to be applied to a HTML document to change the appearance by linking it to a HTML document.

Anatomy of a CSS ruleset

The whole structure as shown in the figure below is known as a ruleset (often referred to as just a rule)

There are four main individual parts of the ruleset:

- Selector: This is the HTML element name at the start of the ruleset. It defines the element(s) to be styled (in this example, < p > elements). To style a different element, change the selector.

- Declaration: This is a single rule like color: red;. It specifies which of the element's properties you want to style.

- Properties: These are the ways in which you can style an HTML element. (In this example, color is a property of the < p > elements.) In CSS, you choose which properties you want to affect in the rule.

- Property value: To the right of the property - after the colon - there is the propert value. This chooses one out of many possible appearances for a given propert. (For example, there are many color values in addition to red.)

There are also other important parts of the syntax:

- Each ruleset must be wrapped in curly braces ({})apart from the selector
- You must use a colon (:) to separate the property from its value(s)
- You must use a semicolon (;), to separate each declaration from the next one.

To modify multiple property values in one ruleset, use semicolons to separare them. You can also select multiple elements and apply a single ruleset to all of them by separating them by commas.

Different types of selectors

The most common types of selectors are as follows:
- Element selector(Tag/type selector): This selects all HTML elements of the specified type e.g. p selects < p >
- ID selector: Selects element on the page with the specified ID. Each ID value should be unique on a given HTML page. e.g #my-id selects < p id= "my-id"> or < a id= "my-id" >
- Class selector: Selects element(s) on the page with the specified class. Multiple instances of the same class can appear on the same page. eg .my-class selects < p class= "my-class"> and < a class= "my=class">
- Attribute selector: Selects elements on the page with the specified attribute. e.g. img[src] selects <img src= "myimage.png"> but not <img>
- Pseudo-class selector: Selects specified elements but only when in specified state.(For example, when a cursor hovers over a link) e.g a:hover selects <a>, but only when the mouse pointer is hovering over the link

Fonts and text

Different fonts and text that can be applied to a HTML document. There are 5 generic font-families, each of which has different variations as portrayed under CSS Fonts on the w3schools website. The font-size, font-style(normal, italics, oblique),font-weight, font-variant(mornal or small-caps), font-stretch(condensed, normal or expanded) are just a few examples of how font can be manipulated.

CSS: all about boxes

CSS is all about boxes from setting size, color, and position. HTML elements can also be thought of boxes sitting on top of ther boxes. Each box taking up space on the page has properties like the following (which can also be styled):

- padding, the space around the content/ paragraph text
- border, solid line just outside the padding
- margin, space around the outside of the border

Other properties of a box model that can be styled are:

- width of an element
- back-ground color, color behind an element's content and padding
- color, the color of an element's content (usually) text
- text-shadow , which sets a drop shadow on the text inside an element.
- display, which sets the display mode of an element. Example changing images(inline elements) to act as a block element like the