

Introduction to CSS

- CSS may be divided into 3 types: inline CSS, embedded CSS, External CSS.
 1. Inline CSS: when the styles are coded as an attribute of the element or tag in the HTML file. E.g. `<p style="color: darkred;">`
 2. Embedded CSS: when the styles are coded as a part of head tag in the HTML file. E.g. `<head> <style>p{color: pink;} </style> </head>`
 3. External CSS: A designated CSS file is maintained containing only the styles, with an extension .css and is called upon in the HTML file through "link" tag. E.g. `<link href="styles.css">`
- Cascading Style Sheets comprise of several property-value set of code to embed visually appealing styles to HTML coded web pages or websites.
- The Grammar to define property-value set is: *"property : value;"* the property name followed by a colon further followed by the value and ended by a semi-colon. E.g. `color : blue;`
- These property-value sets are then supplied to elements of the web page, we wish to style, called selectors in CSS. Grammar for the same is as follows: *"selector{ property: value; }"*
- A Selector is a piece of code that selects and brings element to be styled, to the CSS table. E.g. `p{color: red;}`
- Selectors may be of wide variety, common of which are given here:
 1. Element Name E.g. `p`, `h1`, `article`, `nav`, `div`, `input` etc.
 2. Element Class E.g. `.box`, `.container` etc.
 3. Element Id E.g. `#box`, `#container` etc.
 4. Universal Selector E.g. `*`. A Universal Selector selects all the elements or tags on a web page like `p`, `body`, `footer`, `header`, `span`, `a`, `img`, `div`, etc.
 5. Element Name followed by attribute-value pair E.g. `input[type="text"]`
 6. Element name/class/id followed by attribute-value prefix. E.g. `div[class^="box"]`, `.form-group[class^="box"]`, `#form-group[class^="box"]`
 7. Element name/class/id followed by attribute-value suffix. E.g. `div[class$="wrapper"]`, `.frame[class$="wrapper"]`, `#frame[class$="wrapper"]`
 8. Element name/class/id followed by attribute-value substring. E.g. `div[class*="wrapper"]`, `.frame[class*="wrapper"]`, `#frame[class*="wrapper"]`

9. homogenous/heterogenous combination of all the above mentioned selectors. E.g. `p.child{color: green;}, h2#top{color: cyan;}, div[class*="group"] input[type="text"] {font-size: 20px; border: 1px solid red;}`
- What if overriding styles are written for the same element by different selectors?: The specificity rule follows for different selectors which sets the priority for them.

The standard specificity rule is: inline style > id > class > element name

Specificity Rule when same method is style is written multiple times: The greater valued line of code will execute. E.g. on line 4 `p{color: green}` and on line 10 of same sheet `p{color: blue}`, paragraph will be of blue color.

Specificity when dealing with "!important" : It tends to pick the selector to which it is applied and place it on the top of hierarchy stack. E.g. `p{color: red !important}`