**CSS DECLARATIONS**

The main function of the CSS is to configure the properties among specific values. The property and its equivalent value is the declaration.

**Syntax of a CSS Declaration:**

**background-color:red**

\**background-color – property*

*\*:- The colon separates the two entities*

*\*red - value*

***NOTE:*** *There’s several properties of CSS. However, not all properties and values can be paired to each other. A specific property refers to a valid values. In this case, invalid value paired with the property will be neglected by the engine.*

* **Properties –** anidentifier
* **Allows authors**
* The author has the permission to specify the value of several properties which is a single property.
* E.g. background, font, margin, padding, border, border-left, border width, etc.
* **Vendor specific extensions (Also known as vendor prefixes)**
* Used only when rendering a specific browser such as Mozilla FireFox.
* Used for experimental non-standard CSS properties
* As the time goes by, vendors are in favor of user-controlled flags or preferences instead of vendor prefixes.
* E.g. –webkit-box-shadow, -moz-border-radius, -o-transition-property, -ms-, etc.
* **Custom properties, also known as CSS variables (experimental)**
* prefixed with --, representing a value that can be reused throughout the document using a custom property which also can be accssed by the var() functions.
* **Values**
* **Value types**
* CSS-wide keywords: initial, inherit, unset
* Property-specific keywords
* **Numbers**
* Integers or reals in (scientific) decimal notation
* **Dimensions**
* Length, angle, duration (time, frequency, resolution)
* Length-units
* Font-relative
* Viewport-percentage
* Absolute
* **Angle-units**
* For animation or transitions
* Pixels(px), mm, cm, in, pt, pc
* **Duration or time units**
* **Frequency units**

- hz, khz

* **Percentages**
* for specifying length or size related to the length/width of the parent’s container.
* Number with a % suffix
* **URL’s and URI’s**
* url() – absolute or relative
* denotes a pointer to a resource, such as an image/ a font.
* **Colors**
* the use of colors within the CSS is flexible by specifying the background color, the text color, and etc.
* **Functions**
* Used to specify the background images.

**CSS COMPONENTS**

* **Psychological Properties Of Colors**
* Functions – for modifying/adjusting colors
* Miscellaneous types

**CSS PROCESSORS, FRAMEWORKS, AND POLYFILLS**

* CSS Processors
* Using its advance features, it makes the CSS codes extensible, reusable, and maintainable. Also it increases users’ productivity and save time in developing a website.
* generates CSS using a custom language syntax that typically includes features that don’t exist in pure CSS

(e.g. Sass, Less, Stylus, etc.)

* CSS Frameworks
* Used to comply with the website in modern trends.
* provides predefined CSS functionality that can be reused, extended, or customized.

e.g. Bootstrap, Foundation, Materialize, Chrome, Firefox, Safari, etc.

* Polyfills

- Provided as a plugins/features that is expected to be provided by the browsers automatically.

e.g. Modernizr, Selectivizr, etc.