**CSS**- stands for cascading stylesheet. In demand, your weapon to beautify your website.

There are three ways to add-

* Internal- using style tag, same page
* Inline- using the style attribute in the element
* External- using stylesheet (.css) and linking it to HTML using the link tag

Inline gets the highest priority. Between internal and external it depends on the flow of your document whichever comes later.

**CSS Selector-** selectan element to stylesuch as body, div, h1, p , img, a

Syntax- body{ background-color:red;}

* Class- give styling to multiple elements use .classname
* Id- unique styling use #idname
* \*- universal selector- used to reset the CSS or to apply styling to all element
* Multiple selectors use comma in between h1,h2,h3,div{ css here}
* Div+p=paragraph just after div
* Div>p- paragraph(s) inside div
* Div li p= paragraph inside the li of div
* Pseudo selector- a:link, a:visited, a:hover,a:active it could we used with other element like div:hover.
* First child- div:first-child{}
* ::before and ::after inserts something before/after the content of each selected element, useful in setting background.

**Color**- text color

**Color** **values**- rgb, hexcode, colorname, and hsl (with rgb and hsl we can also use a for alpha value)

**Background**

* Background-color:red;
* Background-image:url(test.png);
* Background-repeat- no-repeat, repeat-x, repeat-y and default is a repeat in and y
* Background size- cover (fits and no empty space), contain(fits and images is fully visible), auto(original size of image), width(set width) and you can also set height
* Background-position – left, top, right, bottom, centre
* Background-attachment (scrollable or non-scrollable)- fixed and default is scroll
* Background- origin- border-box, padding-box(default), content box same values for Background-clip
* Shorthand - background: url(test.jpg) right bottom no-repeat
* You can also put multiple images using comma ‘,’ as a separator

**Box**-**Model-** Margin**-**border-padding-content

You cant set margin and padding for top, right, bottom left or auto, same for padding

* **Border**- border-width, border-style, border-color
* **Border-radius-** rounds the edges , 50 % for circle
* **Margin collapse**- the margin between two elements is collapsed to the bigger margin use no collapse
* **Box-sizing**: border-box – includes content +padding+border
* **Box-sizing**-:content-box – includes only content height and width
* **Display**- inline, block, inline-block, flex, none(to hide)
* Visibilibility-hidden is also used to hide but it prevents the space.

**Text & Font**

* Text-align- center, left, right
* Text-decoration- none, underline, overline, line-through
* Text-transform- uppercase or lowercase
* Text-shadow- horizontal, vertical color ex- 2px,2px red;
* Other properties- line-height, letter-spacing, word-spacing etc…
* Font- websafe and google font – always remember to add fallback family
* Other properties- Font-size, Font-style, font-variant, font-weight etc…

**Size** –

* px depend on the screen for 1000\*800 screen 1px = 800/1000
* Em- relative to parent size
* Rem- relative to the root font size
* Vh- relative to 1% of the viewport height
* Vw- relative to 1% of the viewport width
* Remember in flex vh may refer to the horizontal axis
* %- relative to the parent element
* Min-/max-height/width- used to apply certain height and width when the content is less than required, such as stopping footer to move to the centre when the body has less content.

**Position**- static(default as the document flow),

* relative (same as static but now you can set top/left/bottom/right /z-index),
* absolute – removed from the flow and positioned according to its parent or first non-static ancestor, you can set top/left/bottom/right /z-index),
* fixed- relative to the browser window fixed at one position, you can set top/left/bottom/right /z-index),
* sticky- same as fixed but based on user scroll position, you can set top/left/bottom/right /z-index),

**Flexbox**-Display-flex

Container-properties-

* Flex direction-row, row-reverse, column, column-reverse
* flex-wrap—wrap, wrap-reverse deafault is no-wrap
* Justify-content along main axis
* Align-items- align cross axis
* Align-content

Flex-items or children properties

Order, Align-self, Flex-grow, flex-shrink