

UNIT-2

CSS (Cascading Style Sheet)

Benifits

1. Avoid duplication
2. Maintenance is easy
3. Saves Time
4. Less page size
5. Creative look
6. Effective Performance
7. Ease of learning
8. Compatible to many devices

SYNTAX

<html>

<head>

<style type="text/css">

→ Element Selector

selector
h1 {
property
color: red;
value
}

TYPES OF SELECTOR →

1. ELEMENT →

2. ID → UNIQUE id <h3 id="A1"> H3</h3> #A1 { color: red;

'#' is used followed by ID name. Different id use diff. selector

3. CLASS → • B1 (use fullstop)

<h3 class="B1"></h3> (within head)

4. GROUP → h1, p, h3 { }

5. UNIVERSAL → * { } → for everything

CSS3 → more progress
CSS2 → less progress

__/__/__

TYPES OF CSS →

1. Inline CSS → `<style>` When we use this through this we style so inline. Repeattion is increased. Maintenance is tough. It ~~can~~ has highest priority. It can overrite internal & external CSS. We use style attribute here.
2. Internal CSS / Embedded CSS →
`<html>`
`<head>`
`<style type="text/css">`
`{`
`h1 {`
`color: red`
`}`

We use style tag here.

3. External CSS → A seprate CSS is made & it is linked to HTML. It reduce weight of code. It is fast. More competetive programming can be done.
`<rel>` is used (relation) & `<href>` is used
`<rel="stylesheet" href="style.css">`

Properties & Values.

1. CSS Font property →

a. Font Family (300 or more types)

`p {`

`font-family: Arial;`
`}`

→ family name

`p {`

`font-family: 'Times New Roman' Arial serif;`

↳ generic family

- _/_/_
- 1) Family - Name :-
 - 1) Helvetica, Arial, Open Sans, Garamond, Palatino.
 - 2) Generic :-
 - 1) Serif, Sans-serif, Cursive, Fantasy, Monospace

NOTE 1. If we specify Serif MAC browser will use 'Helvetica', Windows might use 'Arial', Android use 'Roboto'

b) CSS FONT SIZE →

```
p {  
  font-size: 70%;  
  font-size: 20px;  
  font-size: 15pt;  
}
```

Absolute Value → xx h small medium large xlarge xxlarge

c) CSS Font Size Adjust →

```
p {  
  color: blue;  
}
```

```
.a1 {  
  font: 18px Verdana Serif;  
}
```

```
.b1 {  
  font: 18px Helvetica Serif;  
  font-size-adjust: 0.78;  
}
```

d) CSS Font Stretch →

1. Ultracondensed
2. Extracondensed
3. Semi Condensed
4. Normal
5. Semi Expanded
6. Expanded
7. Extra Expanded
8. Ultra Expanded

```
p {  
  font-stretch: extra condensed;  
}
```

e) CSS Font Style

1. Normal
2. Italic
3. Oblique

```
p {  
  font-style: italic;  
}
```

f) CSS Font Variant → to insert small caps

CSS 2

CSS 3

- 1) Normal
- 2) small caps
- 3) inherit

- i) Font Variant Alternate
- ii) Font Variant Caps
- iii) Font Variant East Asian
- iv) Font Variant Ligatures
- v) Font Variant Numeric
- vi) Font Variant Position

```
p {  
  font-style: italic;  
  font-variant: small-caps;  
}
```


g) CSS Font Weight →

- Normal → same as 400
- Bold → same as 700
- Bolder/Lighter → relatively bolder/slighter than inherited value
- 100 → ~~thin~~
- 200 → extra light (ultra light)
- 300 → light
- 400 → Normal
- 500 → Medium
- 600 → Semi Bold (Demibold)
- 700 → Bold
- 800 → Extra Bold
- 900 → Black Heavy

```
p {
  font: italic smallcaps bold
        20px
        Georgia, Garamond,
        serif;
}
```

CSS Text property & values

1) Colour

```
p {
```

```
  colour: blue; or #ff0000, or #rgb(255,0,0);
}
```

2) CSS Text Align

```
p {
```

left, right, center
justify, top, bottom
start, end

```
  colour: blue;
  text-align: right;
}
```

justify all → for aligning the text in a beautiful manner.

3) Text Indent →

```
p {
```

length, %, each-line,
hanging

```
  text-indent: 20px;
}
```

- # CSS Letter spacing
- # CSS Word spacing
- # CSS Text Decoration
- # Text Transform → Uppercase / lowercase
- # CSS Direction → RTL, LTR
- # CSS Text Shadow →
- # CSS Height of Width → height, width → max of min
- # CSS Background property → back. img, color
- # CSS Background position →
- # CSS Border property → border width, style, color
- # CSS Border radius → ~~border width~~ / style
- */ # CSS Margin & padding → margin starts from border.
- # List Style Type → type / position / image
- # CSS Position → static, relative, absolute, sticky & fixed

TYPES OF SELECTORS.

1. PRIMARY
 - o Element
 - o Id
 - o Class
2. NESTED
 - o Descendant
 - o Adjacent Sibling
 - o Direct Child of Multiple Classes
3. PSEUDO
 - o Hover
 - o Visited
 - o Active
 - o Colon First line
 - o Double Colon Before & After →
 - o Structured Pseudo Classes
 - o Colon N^{th} of child
 - o N^{th} of child $(2N+1)$ → for odd position

CSS Letter spacing → This property increases/decreases space b/w characters in a text.
Default value → Normal

eg:

```
h1 {  
  letter-spacing: 3px;  
}
```

→ Values → Normal, length (Defines a length used as space), initial (sets to initial value), inherit (inherit from parent)

Word spacing → increase/decrease whitespace b/w words

eg:

```
p {  
  word-spacing: 30px;  
}
```

Default value → Normal.

Text-Decoration → This property specifies decoration added to text and is a short-hand property for:

- i) text-decoration line
- ii) text-decoration color
- iii) text-decoration style
- iv) text-decoration thickness

eg:

```
h1 {  
  text-decoration: overline/underline/line-through;  
}
```

Text - Transform: This property controls capitalisation of text

eg:

```
div.a {  
  text-transform: uppercase/lowercase;  
}
```

CSS Direction → specifies text direction within block level element

eg:

```
p {  
  direction: rtl;  
}
```

✓

```
p {  
  direction: rtl;  
}
```

 | LTR → Left To Right

CSS Text Shadows → adds shadows to text ...
eg
h1 {
text-shadow: 2px 2px #ff0000;
}

Values → h-shadow / v-shadow / blur-radius / color

CSS Background Property → It is a short-hand property for color, image, position, size, repeat, origin, clip...
eg
body {
background: lightblue url("img-tree.gif") no-repeat fixed center;
}

CSS Margin → sets margin for an element

- margin-top
- margin-bottom
- margin-right
- margin-left

→ margin ^{top} 10px ^{right} 5px ^{bottom} 15px ^{left} 20px;

eg
p {
margin: 10px; // All four margins.
}

CSS Padding → Space b/w element's content & its border

- padding-top
- padding-right
- padding-bottom
- padding-left

→ padding creates extra space within element whereas margin creates extra space around an element.