UNIT-6

Introduction to CSS

Syllabus:—

→ CSS Basics - CSS: Selecting by id
                  - CSS: Selecting by class

→ practice problems.

→ font family property

→ css font-size property

→ css font styles and shorthand.

→ More css text properties.

→ practice problems.

— o —

TOPIC
=> CSS Basics:-

Cascading style sheets (CSS) describe how documents are presented on Screens, in print, or perhaps how they are pronounced.

-> Cascading style sheets (CSS) provide easy and effective alternatives to specify various attributes for the HTML Tags. using CSS, you can specify a number of style properties for a given HTML element. Each property has a name and a value, separated by a colon (:).

-> Each property declaration is separated by a Semi-colon (;).

Example:-

First let's Consider an example of HTML document which makes use of <font> tag and associated attributes to specify text color and font size.

-> you can use CSS in three ways in your HTML document.

-> External style sheet
-> Internal style sheet
-> Inline style sheet.

→ External style sheet :-

Define style sheet rules in a separate. CSS file and then include that file in your HTML document using HTML < link > tag.

Example :-

```
<html>
<head>
< link rel = "style sheet" href = "styles.css">
</head>
< body>
<h1> This is a heading </h1>
<p> This is a paragraph </p>
</body>
</html>
```

→ another link program

external style.sheet

```
body {
background color: blue;
}
h1 { color: blue; }
P { color: red; }
```
— o —

Output

This is a heading → blue

This is a paragraph → red.

If you need to use your style sheet to various pages, then its always recommended to define a common style sheet in a separate file. A Cascading style sheet file will have extension as .css.

→ Internal style sheet :-

If you want to apply style sheet rules to a single document only, then you can include those rules in header Section of the HTML document using < Style > tag.

→ Rules defined in internal style sheet overrides the rules defined in an external CSS file.

Example :-

```
<html>
< head >
< style >
body { background_color: powderblue;}
hi    { color: blue;}
p     { color: red;}
</style>
</head>
<body>
<h1> This is a heading </h1>
<p> This is a paragraph </p>
</body>
</html>
```

output

```
This is a heading → blue color

This is a paragraph. → red color
```

→ **Inline style sheet :-**

    you can apply style sheet rules directly to any Html element using style attribute of the relevent tag. This should be done only when you are interested to make a particular change in any HTML element only.

→ Rules defined inline with the element overrides the rules defined in an external css file as well as the rules defined in < style > element.

Example :-

```
<html>
< head>
<title> css inline Sheet</title>
</head>
< body>
<h1 style = "color : yellow;" > This is an inline
                                style sheet </h1>


</body>
</html>
```

output

```
┌─────────────────────────────────────────┐
│                                          │
│   This is an inline style sheet.         │
│                                          │
│                                          │
└─────────────────────────────────────────┘
```
yellow color

→ CSS: Selecting by Id:-

```
<html>
<body>
<script>
function display Result ()
{
    document. get Element BYID ("myHeader") .InnerHTML=   ← Call by ID

                        "Information Technology!";


}
</script>
<h1 id = "myHeader"> IT! </h1>
<button onclick = "display Result ()"> change text
                                                    <button>

</body>
</html>
```
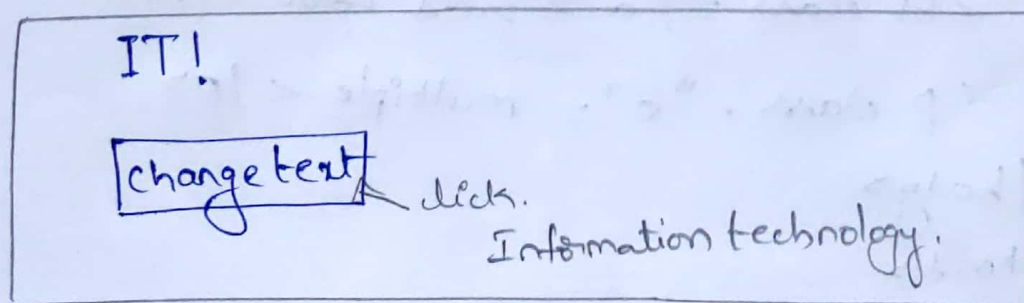
Out put

```
IT!

[change text]  click.
              Information technology.
```

Topic
→ CSS : Selecting by class : —

```
< html >
< head >
< title > HTML Internal css </ title >
< style >
```

extention.   .a {
classname   color : red ;
class a cell   }

classname .b {
                color : green ;
                }

.c {
    background - color : blue ;
    }

```
</ style >
</ head >
< body >
    < p class = "a" > This is red </ p >     → Text
    < p class = "b" > This is green </ p >
    < h1 class = "a" > red color </ h1 >
    < p class = "c" > multiple </ p >         → Text
</ body >
</ html >
```

output
This is red → red color paragraph
This is green — green
Red color → heading

multiple → bycolor

→ Font family property :-

④

```
<html>

  <head>

    <style>

      h1 {

            font-family : Calibri ,
          }

      h2 {
            font-family : Sans-Sereif;
          }

      p {

           font-family : Helvetica;
         }

    </style>

  </head>

  <body>

    <h1> This is heading font Style </h1>
    <h2> This is heading font style </h2>
    <p> This is paragraph font style </p>

  </body>

</html>
```

→ To apply font { Times new roman
Arial
monospace
serif
vetica.

Output

This is heading font Style. → Calibri
This is heading font style. → sans. serlif.
This is paragraph font style. → Helvetica.

→ CSS Font : Size property :- (em) para-meter ④-①

Being able to manage the text size is important in web design. However, you should not use font size adjustments to make paragraphs look like headings, & headings look like paragraphs.

→ Always use the proper HTML tags, like <h1> - <h6> for headings and <p> for paragraphs.

→ The font-size value Can be an absolute, or relative size;

Absolute Size :

→ Sets the text to a specified size.

→ Does not allow a user to change the text size in all browsers (bad for accessibility reasons)

→ Absolute size is careful when the physical size of the output is known.

Relative Size :

→ Sets the size relative to Surrounding element

→ Allows a user to change the text size in browsers.

Note:- if you do not specify a font size, the default size for normal text, like paragraphs, is 16px (16px = 1em).

example.

Example:-

```
< html>
< head>
< style>
h₁ {
     font-size : 80%; }

body {
     font - size : 60px; }

p {
     font-size : 4em; }

</style>
</head>
< body>
     hai this is IT class. <br>
<h₁> font size displaying the pixels</h₁>
<p> this is from unit 6 </p>
</body>
</html>
```

output

```
┌─────────────────────────────────────────┐
│                             →60px         │
│  hai this is IT class.                    │
│                                           │
│  font size displaying in pixels. →80%.    │
│                              →(4em)        │
│  this is from unit 6 ←  big letters printed.│
└─────────────────────────────────────────┘
```

→ CSS font styles and short hand :-

the font - style property is mostly used to Specify italic text.

→ normal - the text is shown normally
→ Italic - the text is shown in italics.
→ oblique - The text is "leaning" (oblique is very similar to italic, but less supported).

Example :→ font styles :-

```
<html>
<head>
<style>
h1 {
    font - style : oblique; }
h2 {
    font - style : italic;
}
p {
    font - style : normal; }
</style>
</head>
<body>
<h1> this is heading style </h1>
<h2> this is another heading style </h2>
<p> This is paragraph style </p>
</body> </html>.
```

output

> oblique
> ┌─────────────────────────────────────┐
> │ this is heading style ?   │
> │   │
> │ this is another heading style - Italic │
> │   │
> │ this is paragraph style. → normal   │
> └─────────────────────────────────────┘

Short hand :-

```
<html>
<head>
  <title> Short hand properties </title>
  <style>

    P.a {
          font: 15px arial, san-serif;
        }

    P.b {
          font: italic bold 12px Georgia,
                                   serif;
        }

  </style>
</head>
<body>

  <h1> The font property </h1>

  <p class="a"> This is a paragraph. The font
  size is set to 15 pixels, and the font family
  is Arial. </p>

  <p class="b"> This is a paragraph. The font
  is set to italic and bold, the font size is
  set to 12 pixels, the line height is set to
  30 pixels, and the font family is
                       Georgia </p>

</body>

</html>.
```

calling class

output

The font property. heading

(8. a) output

This is a paragraph. the font size is set to 15 pixels, and the font family is Arial.

(8.b) output

This is a paragraph. The font is set to italic and bold. The font size is set to 12 pixels, the line height is set to 30 pixels, and the font family is georgia.

— o —

More CSS text properties :—

⑦

This chapter teaches you how to manipulate text using CSS properties. You can set following text properties of an element.

→ The **color** property is used to set the color of a text.

→ The **direction** property is used to set the text direction.

→ The **letter-spacing** property is used to add or substract space between the let that make up a word.

→ The **word-spacing** property is used to add or substract space between the words of a sentence.

→ The **text-indent** property is used to indent the text of a paragraph.

→ The **text-align** property is used to align the text of a document.

→ The **text-decoration** property is used to underline, overline, and strike through text.

→ The **text-transform** property is used to Capitalize text or convert text to upperCase or lowerCase letters.

→ The **white-space** property is used to control the flow and formatting of text.

→ The **text-shadow** property is used to set the text shadow around a text.

⇒ CSS Text properties:—

⇒ Example:—

```
<html>
<head>
<style>
```

h4 {   → All h4 heading using.
    color: red }

• blinking {   → blinking display
    animation: blinking Text 0.8s ⁽ˢᵉᶜ⁾ infinite;
                                        ↓
    }   time

@ keyframes blinking Text {

0-1. { color : #000; }

49%. { color: red ; }

50%. { color: blue; }

99%. { color: transparent;}

100% { color: yellow; }
}

    </style>
</head>

<body>

text property①
<h4> Text color property </h4>
<p style = "color: blue;"> This is 6ᵗʰ unit. </p>
```

① `<h4> Text Direction property </h4>`

② `<p style = "direction : rtl;"> this text will be redered from right to left. <br> </p>`

③ `<h4> Letter-Spacing property </h4>`
`<p style = "letter-spacing : 10px;">`
`Spacing between charecters </p>`

④ `<h4> Text-indent property </h4>`
paragraph start
`<p style = "text-indent : 1cm;">`
This text will have first line indented by 1cm and This line will remain at its actual position this is done by CSS text-indent property.
`</p>`

⑤ `<h4> Text-Align property </h4>`
`<p style = "text-align : right;"> this will be right aligned`
`</p>`
`<p style = "text-align : center;"> this will be center aligned. </p>`
`<p style = "text-align : left;"> this will be left aligned </p>`

⑥ `<h4> Text decoration property </h4>`
`<p style = "text-decoration : underline;"> this will be underline </p>`
`<p style = "text-decoration : line-through;"> this will be striked through`
`</p>`
`<p style = "text-decoration : overline;"> this will have a overline`
`</p>`

```
<h4> Text Transform property </h4>
<p style = "text-transform: capitalize;"> this will be
                            Capitalized </p>

<p style = "text-transform: uppercase;"> This will be
                            In upper Case </p>

<p style= "text-transform : lowerCase;"> THIS WILL
                BE LOWERCASE </P>
```

⑦

```
<h4> Text white-space property </h4>
<p style = "white-space; pre;">
  This text has a line break and the
white-space pre Setting tells the browser to honor
it just like the HTML pre tag. </P>
```

⑧

```
<h4> Text shadow </h4>
<p style = "text-shadow: 4px 4px 8px black;">
  if your browser Supports the CSS text-shadow
  property, this text will have a blue shadow</p>
```

⑨

```
<h4> marquee Tag </h4>
<marquee>. This will move the text from right to
                left</marquee> <br>
<span class="blinking"> Am I blinking? </span>
</body> </html>
```

⑩

Out Put

Text Color property → blue color

This is 6th unit.

Text Direction property

This Text will be rendered from right to left.

Letter spacing property

S p a c i n g b e t w e e n c h a r a c t e r s.

Word Spacing property

Space   between   words.

Paragrapha space
displaying.

Text - indent property.

This text will have first line, indented by I cm and this line will remain at its actual position this is done by CSS text - indent property.

Text Align property. → left, (or) center (or) right

This will be right aligned

This will be center aligned

This will be left aligned

Text Decoration property. →

This will be underline

~~This will be striked through~~

This will have a over line.

Text Transform property

Small, caps, starting letter caps.

This will Be Capitalized
THIS WILL BE IN UPPER CASE
this will be lowerCase.

Text white-space property

→pre space displayed

Space
Space
displayed

This text has a line break and the white-pre setting tells the browser to honor it Just like the HTML pre tag.

Text shadow.

If your browser supports the css text-shadow property, this text will have a blue shadow.

Marqueee Tag → moving

This will move the text from right to left.

blinking

Am I blinking.