
Introduction to HTML

CSS

- Types

- Ruleset

- Selectors

- Colours

- Text formatting

- Text Decoration

- Text shadows

- Links

- Forms

Hosting

Task Assigned

```
<!DOCTYPE html>

<html>

<head>

<style>

.box{

border: 2px double gray;

height: 200px;

width: 200px;

background-color: orange;

position: relative;

top: 0px;

left: 0px;

transition-duration: 1s;

transition-delay: 1s;

transition: height 2s, width 1s left 1s;

}

.box:hover{
```

```
width: 400px;
height: 100px;
font-size: 120%;
}
.item{
list-style-type: none;
height: 20px;
width: 100px;
background:
linear-gradient(blue,yellow);
color: white;
padding: 5px;
transition-duration: .1s;
}
.item:hover{
font-size: larger;
padding: 10px;
background:
linear-gradient(brown, navy);
border-radius: 5px;
margin-left: 10px;
color: beige;
}
</style>
</head>
<body>
<ol>
<li class="item">CPU</li>
<li class="item">Monitor</li>
```

```

<li class="item">Keyboard</li>
<li class="item">Mouse</li>
<li class="item">Projector</li>
<li class="item">Speakers</li>
<li class="item">Camera</li>
<li class="item">Printer</li>
<li class="item">Scanner</li>
<li class="item">Mic</li>
</ol>
<div class="box">
hi
</div>
</body>
</html>

```

HTML

- It stands for HyperText Markup Language.
- It is standard markup language used to create web pages.

Features of HTML

- HTML is highly flexible and simple.
- HTML is supported on almost every web browser.
- HTML is user friendly.

Disadvantages of HTML

- It can create only static and plain web pages.
- We need to write a lot of code for making simple page.
- Security features of HTML are not good.

History of HTML

- | | | |
|--------|----------|-----------------------------|
| - 1989 | GML | Generalised Markup Language |
| - 1991 | SGML | Standard GML |
| - 1994 | HTML | |
| - 2008 | HTML 5 | |
| - 2016 | HTML 5.1 | |

HTML is completely enclosed in tags

what is tag ?

- Text placed between '<' and '>' is called as tag

Eg <html>

Tags are classified into two types

1. Paired tags
2. Non-Paired tags

1. Paired tags

- The tags that have both opening and closing tags are called as paired tags

Eg

```
<html>
...
...
...
</html>

<body>
...
...
...
</body>
```

Note:- The closing tags start with '/'

2. Non-Paired tags

- The tags that have only opening tag but no closing tag are called as non-paired tags
- These are also called as
 - i) Singular tags
 - ii) Self closed tag
 - iii) Empty tag
 - iv) Forcefully closed tag

Eg	 	or	 	Break tag(line break)
	<hr>	or	<hr/>	Horizontal rule (h. line)
		or		image tag

Structure of HTML

```
<html>
  <head>
    <title>...</title>
  </head>
  <body>

  </body>
</html>
```

Html Tables
Forms
List tags

CSS:-

- CSS stands for Cascading Stylesheet
- It is a stylesheet language used for describing the presentation of document in markup language like HTML
- CSS is a cornerstone technology for world wide web alongside HTML and Javascript.
- CSS is designed to enable separation of presentation and contents.
- All styles are stored in CSS files.
- CSS files must have extension as '.css' only.

Why CSS ?

- it allows much richer presentation appearance.
- It reduces workload by centralizing command for visual appearance instead of scattered ones.
- Same styles can be reused for multiple documents.

History:-

- First version of CSS was released in 1996.
- Second version of CSS was released in 1998, with improved table features.
- Third version of CSS was released in 2008 and currently in use with improved support for modules, it also supports modern browsers.
- Fourth version was released in 24th March 2017, which is faster than CSS3.

Types of CSS

- Inline CSS Highest Priority
 - can be applied to only that tag
- Internal CSS Medium Priority
 - Can be applied to only that document.
- External CSS Lowest Priority
 - can be applied globally

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet" href="style.css">
    <style>
      p{
        font-size: 50px;
        font-family: 'Courier New', Courier, monospace;
      }
    </style>
  </head>
  <body>
    <h1>Good Morning</h1>
    <h4 style="background-color: violet;">First CSS Session</h4>
    <p>CSS gives richer presentation</p>
```

```
        <p>One more p tag</p>
    </body>
</html>
```

style.css

```
h1
{
    color:red;
}

h4
{
    font-size: 50px;
}

body
{
    background-color: yellow;
}
```

CSS Syntax(rule-set)

- CSS Syntax is selector and declaration block.
- The selector points to the HTML element you want to style.
- each declaration includes CSS property and value pair.
- Properties and values are separated by colon (:)
- Each property and value separated by semicolon(;

Eg

```
h1
{
    color : red;
    font-size : 12px;
}
```

where

h1 is selector
color is property
red is value
font-size is property
12px is value

CSS Selectors

- CSS Selectors are used to select the contents you want to style
- Types
 - i) Element selector
 - ii) Id selector
 - iii) class selector
 - iv) Universal selector
 - v) Group selector

i) Element selector

- the element selector selects the html element by name

Syntax

```
element
{
    style1;
    style2;
    ...
}

p
{
    text-align : center;
    color : blue;
}
```

ii) Id selector

- it uses id attribute of html element
- to select a selector with specific id (#) is used.

Syntax

```
#id
{
    style1;
    style2;
    ...
}

#warning
{
    color : orange;
}
```

iii) Class selector

- the class selector selects html elements with specific class attribute.
- it is used with a "period" symbol (. DOT) followed by class name

Syntax

```
.class_name
{
    style1;
    style2;
    ...
}

.cool
{
    text-align : right;
    color : #002366;
}
```

- class selector for specific element
if you want to specify only one specific element should be affected then you should use element name with class name.

```
h1.cool
{
    ---
}
```

iv) Universal Selector

- The universal selector is used as wildcard selector.
- It selects all elements in page.
- It is denoted by '*' symbol

```
*
{
    style1;
    style2;
    ...
}
```

v) Group selector

- Group selector is used to select all elements with same style definition
- commas are used to separate selectors in grouping.

Eg

```
h2
{
    text-align : center;
    color : maroon;
}

h3
{
    text-align : center;
    color : maroon;
}

h4
{
    text-align : center;
    color : maroon;
}

h2, h3, h4
{
    text-align : center;
    color : maroon;
}
```


Colors:-

- Colors are specified using predefined color names or color values

Color values

RGB	-> Red	Green	Blue
RGBA	-> Red	Green	Blue Alpha
HSL	-> Hue	Saturation	Lightness
HSLA	-> Hue	Saturation	Lightness Alpha
HEX	-> Hexadecimal		

Alpha

- > Transperancy
- > 0 -> Transperant
- > 1 -> Not Transperant

```
<body>
  <h1 style="color:#00ff00">Observe This color</h1>
  <h1 style="color:hsl(0, 100%, 50%)">Observe This color</h1>
  <hr>
  <div style="background-color: black;">
    <h1 style="color:rgb(255,0,0)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,1)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0.8)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0.6)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0.4)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0.2)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0)">Observe my color</h1>
  </div>
  <div>
    <h1 style="color:rgb(255,0,0)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,1)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0.8)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0.6)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0.4)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0.2)">Observe my color</h1>
    <h1 style="color:rgba(255,0,0,0)">Observe my color</h1>
  </div>
</body>
```

CSS text formatting

color

- color property is used to set color of text.

text alignment

- 'text-align' property is used to set horizontal alignment of text
- values are left, right, center, justify

Eg text-align : center
 text-align : left / start
 : right /end

: justify

direction:-

- it is used to change direction of text
i.e. left to right (ltr)

OR

right to left (rtl)

unicode-bidi : bidi-override used to handle bidirections of text

vertical text

- writing-mode : vertical-lr
: vertical-rl

```
<h1 style="writing-mode:vertical-lr">Pranit Thakur</h1>  
<h1 style="writing-mode:vertical-rl">Pranit Thakur</h1>
```

Text Decoration

text-decoration is used to set or remove text-decoration

eg underline, overline, line-through

text-decoration : underline
: overline
: line-through
: none

```
<p style="color:blue; text-decoration:underline">Guess me</p>  
<p style="color:blueviolet;text-decoration:overline">I am overlined  
text</p>  
<p style="color:violet; text-decoration:line-through">I am  
deprecatd</p>  
<a href="#" style="color:black;text-decoration:none">Guess me</a>
```

Text shadow:-

- text-shadow property adds shadow effects to text.

text-shadow : xoffset yoffset blur/height color;

text-shadow : shadow1, shadow2, shadow3,...

```
<style>  
  .sd1 {  
    text-shadow: 10px 10px 0px gray;  
  }  
  
  .sd2 {  
    text-shadow: 0px 0px 2px gray;  
  }  
  
  .firy {  
    text-shadow: 0px 0px 2px red;  
    font-family: 'Lucida Calligraphy';  
  }  
</style>
```

```

/*
body{
  background-color: black;
}*/
.nospecs {
  color: rgba(255, 0, 0, 0);
  text-shadow: 0px 0px 4px red;
}

.sm {
  color: white;
  text-shadow: 0px 0px 2px violet,
    1px 1px 2px indigo,
    2px 2px 2px blue,
    3px 3px 2px green,
    4px 4px 2px yellow,
    5px 5px 2px orange,
    6px 6px 2px red;
}
</style>

```

Links

- Links can be styled with color, font-family, background, etc
- Links have following states
 - a : link -> a normal or unvisited link
 - a : visited -> visited by user
 - a : hover -> mouse pointer on link
 - a : active -> moment it is clicked

Eg

```

a:link
{
  color : pink;
}

a:visited
{
  color : green;
}

a:hover
{
  color : red;
}

a:active
{
  color : blue;
}

```

```

<style>
a {

```

```

        text-decoration: none;
        border: 1px solid gray;
        border-radius: 5px;
        background: radial-gradient(blue, orange);
        padding: 5px;
    }

    a:link {
        color: pink;
    }

    a:visited {
        color: green;
    }

    a:hover {
        color: red;
    }

    a:active {
        color: blue;
    }
</style>

```

CSS inputs

- forms
- forms can be styled with input elements

```

input
{
    color : red;
}

```

- to style specific input elements

```

input[type=text]
{
    color : blue;
}
input[type=password]
{
    width : 50%;
}
---
---
```

index.html

```

<!DOCTYPE html>
<html>
    <head>
        <link rel="stylesheet" href="style.css">
        <script src="script.js"></script>
    </head>
    <body>
        <form class="box">
            <h1>Login</h1>

```

```

        <input type="text" placeholder="Username" name = "uname" id =
"uname">
        <input type="password" placeholder="Password" name = "upwd" id =
"upwd">
        <input type="submit" value="Login">
    </form>
    <button onclick = "clickMe()">Click Me</button>
</body>
</html>

```

style.css

```

body {
    background: radial-gradient(circle, white, black);
    font-family: sans-serif;
}

h1 {
    text-transform: uppercase;
    font-weight: normal;
    color: white;
}

.box {
    background-color: black;
    width: 300px;
    margin: 50px auto;
    padding: 40px;
    border-radius: 20px;
    text-align: center;
}

input {
    margin: 20px auto;
    text-align: center;
    width: 200px;
    padding: 14px 10px;
    border-radius: 24px;
    background: none;
}

input[type="text"], input[type = "password"]{
    border: 2px solid skyblue;
    color : lightyellow;
}

input[type = "submit"]
{
    border: 2px solid burlywood;
    color:white;
    cursor: pointer;
}

```

Trial Hosting:-

1. Login to github.com
2. Create a repository
3. Copy url

4. Initialise Local repository
 - >git init
5. add files to repository
 - > git add .
6. check status
 - > git status
7. Commit
 - > git commit -m "initial commit"
8. Add remote repository
 - >git remote add origin <copied url>
9. push code to repository
 - >git push -u origin master
10. Select source
 - > settings
 - > pages
 - > source -> master branch

POC

Create informative website using HTML and CSS for

Group of hotels

Group of Institutions

Group of Hospitals

- Choose any one

Design minimum 10 + 1 home pages

Application should contain

1. Basic information
2. About, Contact, Portfolio pages
3. various departments and subdepartments
4. Back and home buttons
5. Common Headers and footers

Use various images, attractive backgrounds
scrolling text and images

For hint may refer

<https://www.apollohospitals.com/>

<https://www.tajhotels.com/>

<https://www.paruluniversity.ac.in/>

<https://www.oberoihotels.com/>

<https://sanjivani.org.in/>

<https://sahyadrihospital.com/>

