

HTML, CSS & JS

-MONIKA KETEPALLY



Hyper Text MarkUP Language

- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML provides skeleton for web pages
- HTML latest version is HTML 5

Example

```
<!DOCTYPE html>  
<html>  
  <head>  
    <title>Page Title</title>  
  </head>  
  <body>  
    <h1>My First Heading</h1>  
    <p>My first paragraph.</p>  
  </body>  
</html>
```

Few most used tags:

- The `<!DOCTYPE>` declaration represents the document type, and helps browsers to display web pages correctly.
- Title to HTML page is given by : `<title>`.
- HTML headings are defined with the `<h1>` to `<h6>` tags.
- `<h1>` defines the most important heading. `<h6>` defines the least important heading.
- HTML paragraphs are defined with the `<p>` tag.
- HTML links are defined with the `<a>` tag.
- HTML images are defined with the `` tag.
- To make text bold, write content inside `` tag.
- To make text italic, write content inside `<i>` tag.

Continuation...

- Line space : `
` tag is used.
- HTML lists are created using ``, `` and `` where ul and ol are to mention start and end of lists, li is for mentions list item.
- HTML header is set using `<header>` tag.
- HTML footer is set using `<footer>` tag.
- HTML form is created using `<form>` tag.
- `<input>`, `<label>`, `<textarea>`, `<button>`, `<output>`, `<option>` tags are used in HTML form.
- To create tables in HTML: `<table>`, `<tr>`, `<th>` tags are used.
- There are many other tags such as `<div>`, `<label>`, ``, `<audio>`, `<vedio>`, `<canvas>` etc, for various purposes.

The HTML element is everything from the start tag to the end tag:

- `<tagname>`Content goes here...`</tagname>`
- It has a start tag `<html>` and an end tag `</html>`
- All HTML elements can have attributes
- Attributes provide additional information about elements
- Attributes are always specified in the start tag
- Attributes usually come in name/value pairs like:
name="value"

CSS

CSS stands for Cascading Style Sheets.

CSS saves a lot of work. It can control the layout of multiple web pages all at once.

With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices sizes, and much more!

CSS can be added to HTML documents in 3 ways:

- Inline - by using the `style` attribute inside HTML elements
- Internal - by using a `<style>` element in the `<head>` section
- External - by using a `<link>` element to link to an external CSS file

The most common way to add CSS, is to keep the styles in external CSS files

Example

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

This CSS code sets HTML code to red color and aligns text to center if it finds `<p>` tag in HTML.

- `p.dotted {border-style: dotted;}`

This CSS code draws a dotted border for HTML code where tag is `<p>`.

Most commonly used attributes are:

color	overflow (visible, hidden, scroll, auto)
font-size	position (static, relative, fixed)
text-align	float (right, left)
class	box-shadow
background-color	min-width
background-image	padding-left(similarly right, bottom, top)
background-repeat	margin-left(similarly right, bottom, top)
height	border-style (dotted, dashed, solid, double)
width	line-height
div	id
container	border-box
box-sizing	

JavaScript

- JavaScript is an object-based scripting language which is lightweight and cross-platform.
- Javascript language is mostly used for Client-side validation and Server-side development also.
- Javascript in HTML is used for applying functionalities and giving outputs.
- Javascript helps in changing the content of a web page dynamically according to the functionality written in it.
- Javascript has many inbuilt functions with which, the creation of a web page becomes easier and realistic.
- Javascript is used to develop games, mobile applications, web pages.

JavaScript can be added to your HTML file in two ways:

- Internal JS: We can add JavaScript directly to our HTML file by writing the code inside the `<script>` tag. The `<script>` tag can either be placed inside the `<head>` or the `<body>` tag according to the requirement.
- External JS: We can write JavaScript code in `other file` having an extension `.js` and then link this file inside the `<head>` tag of the HTML file in which we want to add this code.

Syntax of a function in Javascript

```
function functionName(Parameter1, Parameter2, ..){  
    // Function body  
}
```

Example function

```
function calcAddition(number1, number2) {  
    return number1 + number2;  
}
```

This function adds 2 numbers passed as parameters to function and return the final result.

Resources

HTML

1. <https://www.w3schools.com/html/>
2. <https://digital.com/tools/html-cheatsheet/>

CSS

1. <https://www.w3schools.com/css/>
2. <https://www.onblastblog.com/css3-cheat-sheet/>

Js

1. <https://javascript.info/first-steps>
2. https://www.w3schools.com/js/js_intro.asp

Assess yourself

1. <https://www.w3schools.com/quiztest/quiztest.asp?qtest=HTML>
2. <https://www.w3schools.com/quiztest/quiztest.asp?qtest=CSS>
3. <https://www.w3schools.com/quiztest/quiztest.asp?qtest=JS>
4. <https://www.sanfoundry.com/html-questions-answers-mcqs/>
5. Create a user registration page with name, age, e-mail, password, captcha using HTML, CSS, JS.

Try building simple web pages such as login page and home page of facebook/ amazon.

THANK YOU