

HTML

HTML (Hypertext Markup Language) is a standard markup language used to create web pages. It is used to structure and format content on the web, including text, images, and other multimedia elements. HTML consists of a series of elements that are represented by tags, which are used to define the structure and content of a webpage.

HTML is an essential part of the web development process and is used to create the structure and content of websites. It is a fundamental skill for web developers and is used to create the majority of websites on the internet.

HTML COMPONENTS

- `<html>` tag: This tag acts as a container for every other element in the document except the `<!DOCTYPE html>` tag.
- `<head>` tag: Includes all the document's metadata.
- `<title>` tag: Defines the title of the document which is displayed in the browser's title bar.
- `<body>` tag: Acts as a container for the document's content that gets displayed on the browser.

This is how it all comes together:

`<!DOCTYPE html>` specifies that we are working with an HTML5

document.

The following tags contribute extra information to the HTML document:

- `<meta>` tag: This tag can be used to define additional information about the webpage.
- `<link>` tag: Used to link the document to an external resource.
- `<style>` tag: Used for defining styles for the document.
- `<script>` tag: Used to write code snippets (usually JavaScript) or to link the document to an external script.
- The `href` attribute specifies the URL that the link will take the user to when clicked.
- The `download` attribute specifies that the target or resource clicked is a downloadable file.
- The `target` attribute specifies where the linked document or resource should be opened. This could be in the same window or a new window.

LISTS IN HTML

- The `` tag defines an ordered list.
- The `` tag defines an unordered list.
- The `` tag is used to create items in the list.

```
<a href="https://www.thecodehelp.in/" target="_blank"> Code Help </a>
```

```
<!-- Unordered List -->
```

```
<ul>
```

```
  <li> Course 1</li>
```

```
<li> Course 2 </li>

<li> Course 3</li>

</ul>

<!-- Ordered List -->

<ol>

    <li> Course 1 </li>

    <li> Course 2 </li>

    <li> Course 3 </li>

</ol>
```

FORMS IN HTML

The `<form>` element is used to create a form in HTML. Forms are used to gather user input.

Some attributes associated with the `<form>` element include:

- The `action` attribute specifies where the form data should be sent when the form is submitted.
- The `target` attribute specifies where to display the form's response.
- The `autocomplete` attribute can have a value of `on` or `off` and determines whether the browser should automatically fill in the form.
- The `novalidate` attribute specifies that the form should not be validated.
- The `method` attribute specifies the HTTP method to use when sending form data.

- The name attribute specifies the name of the form.
- The required attribute specifies that an input element cannot be left blank.
- The autofocus attribute gives focus to the input elements when the page loads.
- The disabled attribute disables an input element, preventing the user from interacting with it.
- The placeholder attribute is used to provide a hint to the user about what information is required for the input element.

Other input elements that can be used in forms include:

- <textarea>: allows users to enter multiple lines of text as input.
- <select>: provides a list of options for users to choose from.
- <option>: creates a single option within a <select> element.
- <input>: provides an input field for users to enter data. The type attribute specifies the type of data that can be entered.
- <button>: creates a button that can be clicked to perform an action.

```
<form action="/Submit_URL/" method="post">
```

```
  <label for="FirstName"> First Name: </label>
```

```
  <input type="text"
```

```
    name="FirstName"
```

placeholder="First Name"

required >

<label for="LastName"> Last Name: </label>

<input type="text"

name="LastName"

placeholder="Last Name"

required >

<label for="add"> Address: </label>

<textarea name="add"></textarea>

<label for="age"> Age: </label>

<select id="age">

<option value="11-20">11-20</option>

<option value="21-30">21-30</option>

<option value="31-40">31-40</option>

<option value="41-50">41-50</option>

</select>

<input type="submit" value="Submit">

</form>

TABLES IN HTML

The <table> tag defines a HTML table.

- <thead>: defines the header information for each column in the table.

- <tbody>: defines the body or content of the table.
- <tfoot>: defines the footer information of the table. <tr>: represents a row in the table.
- <td>: represents a single cell in the table.
- <th>: represents the heading for a column of values in the table.

```
<table>
<thead>
  <tr>
    <th> Name </th>
    <th> CGPA </th>
  </tr>
</thead>
<tbody>
  <tr>
    <td> Koushik Sadhu </td>
    <td> 9.66 </td>
  </tr>
  <tr>
    <td> Pranay Gupta </td>
    <td> 9.72 </td>
  </tr>
</tbody>
<tfoot>
```

```
<tr>

    <td> Nidhi Gupta </td>

    <td> 10 </td>

</tr>

</tfoot>

</table>
```

Tags introduced in HTML5

TAGS IN HTML

The following tags were introduced in HTML5:

- <header> tag: defines the header section of a webpage.
- <footer> tag: defines the footer section of a webpage.
- <main> tag: defines the main content section of a webpage.
- <article> tag: defines a standalone section of content, such as an article.
- <nav> tag: used to contain navigation links.
- <meter> tag: used to measure data within a given range.
- <progress> tag: used as a progress bar to indicate the completion of a task.
- <dialog> tag: used to create a dialog box.
- <audio> tag: used to embed an audio file on a webpage.
- <video> tag: used to embed a video on a webpage.
- <section> tag: defines a section within a webpage.
- <aside> tag: often used for content placed in a sidebar.
- <time> tag: used for formatting dates and times.
- <figure> tag: used for figures such as charts.

- <figcaption> tag: provides a description for a <figure>.

<header>

<h1> Welcome to CodeHelp! </h1>

</header>

<nav>

About Us

Courses

Contact

</nav>

<article>

<h1> About CodeHelp </h1>

<p> This is all about CodeHelp. </p>

<aside>

<p> Book your seat now. </p>

</aside>

</article>

<progress min="0" max="100" value="10"> </progress>

<footer> Copyright © 2023 CodeHelp. All Rights Reserved. </footer>

STRUCTURE OF A HTML DOCUMENT

While constructing your HTML document, you can use certain tags to establish its structure. The <h1> to <h5> tags signify

different heading levels, with <h1> being the highest level and

<h5> being the lowest level.

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<link rel="stylesheet" href="style.css" />

<title>Code Help HTML Cheat Sheet</title>

<style>

{

font-size: 40px;

}

</style>

<script>

alert ('message');

</script>

</head>

<h1> Heading 1 </h1>

<h2> Heading 2 </h2>

<h3> Heading 3 </h3>

<h4> Heading 4 </h4>

<h5> Heading 5 </h5>

CHARACTER AND SYMBOLS

In HTML documents, some symbols may not be directly available

on the keyboard. However, there are several ways to include these symbols in a document. These include using the symbol's entity name, decimal value, or hexadecimal value.

- Copyright Symbol: ©
- Dollar Symbol: $
- Ampersand Symbol: &
- Greater than Symbol: >
- Less than Symbol: <

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
    <title> Code Help HTML Cheat Sheet </title>
```

```
</head>
```

```
    <body>
```

```
    <p> Copyright Symbol: &copy; </p>
```

```
    <p> Dollar Symbol: &dollar; </p>
```

```
    <p> Ampersand Symbol: &amp; </p>
```

```
    <p> Greater than Symbol: &gt; </p>
```

```
    <p> Less than Symbol: &lt; </p>
```

```
</body>
```

```
</html>
```