



HTML and HTML5

Kratik Nayak
Developer
knayak@qwinix.io

Suchithra Thammaiah
Developer
sthammaiah@qwinix.io

Ajay Menon
Developer
ammuralidhar@qwinix.io

What is HTML?

- Hypertext Markup Language or HTML is the most commonly used language on Web. It is used to create structure of a Web Page.
- It is a markup language, because it contains markup tags.
- HTML documents are described by HTML tags.

Basic HTML schema (structure)

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



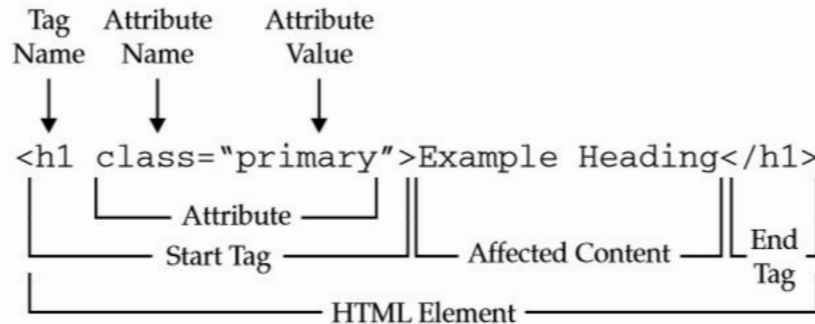
What is Doctype?

- The `<!DOCTYPE>` declaration represents the document type, and helps the browser to display a web page correctly.
- It tells the browser which version of HTML you are using.
- The doctype declaration is not case sensitive. All cases are acceptable:
 - `<!DOCTYPE html>`
 - `<!doctype HTML>`

HTML Basic Tags

- Every Thing in HTML is written in tags.
- HTML tags are keywords (tag names) surrounded by angle brackets:
 - `<tagname>` content goes here... `</tagname>`
- Mostly Tags are PAIR TAGS . Like HTML,HEAD,BODY, TITLE, ETC.

A graphical overview of the HTML markup syntax shown so far is presented here:



HTML Tag

- . The HTML <HTML> Tag is the only Element containing complete HTML Document.
- . Two Direct Child of an HTML Element are;
 - Head Tag
 - Body Tag

```
<html>  
  <head>  
    <title>My Title</title>  
  </head>  
  
  <body>  
  
  </body>  
</html>
```

HEAD Tag

- . HTML Head tag is the first child of HTML Element.
- . It Contains all header elements.
 - Title Tag, Meta Tags, Link Tags, Script Tags

```
<head>  
<title> Title of the webpage </title>  
<meta name="keywords" content="Keywords of your website" />  
<meta name="description" content=" Description of your website" />  
<link href="style.css" rel="stylesheet" />  
<script >  
  Script Goes Here  
</script>  
</head>
```

TITLE Tag

- . TITLE is the first child of HEAD Tag. Title tag is must on every webpage of a website.
- . It enhance visibility of a webpage on search engines.
- . Maximum limit of characters inside title tag is 70.
 - `<title> Title of the webpage </title>`

BODY Tag

- . HTML Body Tag is used to define the body of our HTML Document.
- . The Body Tag contains all visible contents of a webpage like paragraph, headings, tables, lists, images, videos etc.

```
<body>
```

Complete Website Structure will be created here

```
</body>
```

Tag Overlap versus Nesting

` Don't cross the streams! `



Tags must not overlap

```
<ol>
  <li>First level
    <ol>
      <li>Second level</li>
    </ol>
  </li>
</ol>
```

Tags
may
nest
however

What is HTML Attributes?

- . HTML elements can have **attributes**
- . Attributes provide **additional information** about an element
- . Attributes are always specified in **the start tag**
- . Attributes come in name/value pairs like: **name="value"**

Ex: **class, id, style, bgcolor**

- `<body bgcolor = "#999000"> </body>`
- `<h1 align = "left">TEXT Aligned Left</h1>`

HTML Headings

. HTML includes 6 tags to write headings. Heading Tags are used to write heading on a webpage.

`<h1> Heading 1 </h1>`

`<h2> Heading 2 </h2>`

`<h3> Heading 3 </h3>`

`<h4> Heading 4 </h4>`

`<h5> Heading 5 </h5>`

`<h6> Heading 6 </h6>`

Tags to write text in HTML

Para Tag

- Para Tag is most commonly used tag to write a paragraph in HTML.

➤ `<p align="left">This Paragraph is aligned left</p>`

PRE Tag

- All HTML Textual Tags ignore white space and line break.
- PRE Tag is the only tag which follow the exact format in which you are writing.

➤ `<pre> PRE Tag with white spacing more than one </pre>`

Tags to write text in HTML

Font Tag

· Font Tag is used to add color and size to the text inside font tag

➤ `` Default FONT Tag ``

➤ `` Font Tag with color red ``

➤ `` Font Tag with size 1 ``

HTML images

- . Images enhance the look and feel of a website. We use images as a logo, banner, icons, symbols, product etc.
- . In HTML, images are defined with the `` tag.
- . The `` tag is empty, it contains attributes only, and does not have a closing tag.
- . The 'src' attribute specifies the URL (web address) / location of the image
- . The 'alt' attribute provides an alternate text for an image

```

```

HTML List

Three types of list in HTML:

1. Unordered List

- The **ul** tag is used to define unordered lists.
- An unordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items will be marked with bullets (small black circles) by default:

```
<ul>  
  <li>List 1</li>  
  <li>List 2</li>  
  <li>List 3</li>  
</ul>
```

Output:

- . List 1
- . List 2
- . List 3

2. Ordered List

- An ordered list starts with the `` tag. Each list item starts with the `` tag.
- The list items will be marked with numbers by default

```
<ol>  
<li>India</li>  
<li>Duabi</li>  
<li>Denver</li>  
</ol>
```

Output:

```
1 India  
2 Dubai  
3 Denver
```

3. Description List

- A description list is a list of terms, with a description of each term.
- The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term:

```
<dl>  
  <dt>Coffee</dt>  
  <dd>Black hot drink</dd>  
  <dt>Milk</dt>  
  <dd>White cold drink</dd>  
</dl>
```

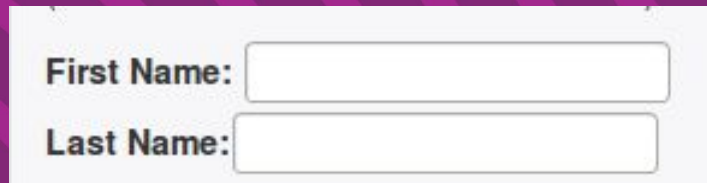
Output:

```
Coffee  
  Black hot drink  
Milk  
  White cold drink
```

HTML Forms

- The HTML `<form>` element defines a form that is used to collect user input:
- An HTML form contains form elements.
- Form elements are different types of input elements, like text fields, checkboxes, radio buttons, submit buttons, and more.

```
<form>  
  <label>First Name:</label> <input type="text" /></br>  
  <label>Last Name:</label> <input type="text" />  
</form>
```



First Name:

Last Name:

Radio Buttons

- Radio buttons let a user select ONE of a limited number of choices:

```
<form>  
  <input type="radio" name="gender" > Male<br>  
  <input type="radio" name="gender" checked> Female<br>  
</form>
```

☐ Male ☒ Female

Check Boxes

- Checkboxes let a user select ZERO or MORE options of a limited number of choices.

```
<form>  
  <input type="checkbox" value="bike"/>Bike<br/>  
  <input type="checkbox" value="car"/>Car  
</form>
```

☐ **Bike**

☐ **Car**

Select Tag

- Select tag is used to fetch a single field among listed options

```
<form>  
  <label>Current City:</label>  
  <select>  
    <option>--Select City--</option>  
    <option>New Delhi</option>  
    <option>Kolkata</option>  
    <option>Mumbai</option>  
    <option>Chennai</option>  
  </select>  
</form>
```

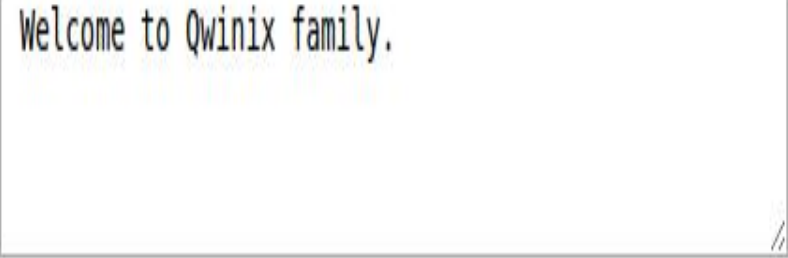


Current City: --Select City--

Text area Tag

- Text area is used to write multiple line. Like query, address, comments, etc.

```
<form>  
  <textarea rows = "4" cols = "50">  
  
    Welcome to Qwinix family.  
  
  </textarea>  
</form>
```



Welcome to Qwinix family.

Submit

```
<form>  
  <input type = "submit"/>  
</form>
```



Submit

HTML Tables

. Tables are defined with the `<table>` tag.

. A table is divided into rows (with the `<tr>` tag), and each row is divided into data cells (with the `<td>` tag).

Name	Age
Kaushal	21
Shubh	20

```
<table border="1">  
  <tr>  
    <th>Name</th>  
    <th>Age</th>  
  </tr>  
  <tr>  
    <td>Kaushal</td>  
    <td>21</td>  
  <tr>  
    <td>Shubh</td>  
    <td>20</td>  
  <tr>  
</table>
```


Marquee Tag

- HTML Marquee tag is used to write scrolling text from left to right, right to left, bottom to top and top to bottom.


```
<marquee direction="left"> This is a marquee </marquee>
```



Anchor Tag

- . Anchor Tag in HTML is used to create Hyperlink.
- . It can be a Internal Link or External Link.

```
<a href="http://www.facebook.com/">Join us on Facebook </a>
```



Join us on Facebook

HTML5 Introduction

`<!DOCTYPE html>`

- HTML5 does everything from animation to apps, music to movies, and can also be used to build incredibly complicated applications that run in your browser.
- It's also cross-platform, which means it doesn't care whether you're using a tablet or a smart phone, a netbook, notebook, ultrabook or a Smart TV if your browser supports HTML5, it should work flawlessly.

HTML5 New Features

New Semantic Tags: <header>, <nav>, <section>, <article> etc

Audio and Video: <audio> & <video>

SVG: <svg> Tag for vector based drawings, shapes, pie and bar graphs, maps etc.

Canvas: <canvas> tag for 2-d drawings using javascript.

CSS-3: New properties for better styles, transition and animations.

Geolocation: To Detect user physical location.

Web SQL: To store upto 5mb data on front end.

Drag n drop: New Events in javascript.

THANK YOU



HQ | North America
9155 E Nichols Ave, Suite 300
Centennial, CO 80112

www.qwinix.io | +91 821 241 3535

f facebook.com/qwinix

t [@Qwinix](https://twitter.com/Qwinix)

in [Qwinix Technologies](https://www.linkedin.com/company/qwinix)

