## Module 3) HTML

## Are the HTML tags and elements the same thing?

* HTML tag is just opening or closing entity
* For example:
* <p> and </p> are called HTML tags
* HTML element encompasses opening tag, closing tag, content (optional for content-less tags)
* Ex:
* <p>This is the content</p> : This complete thing is called a HTML element

## What are tags and attributes in HTML?

* HTML Attributes
* All HTML elements can have attributes
* Attributes provide additional information about elements
* Attributes are always specified in the star tags
* Attributes usually come in name/value pairs like: **name="value"**

EX:

## The width and height Attributes

* The <img> tag should also contain the width and height attributes, which specify the width and height of the image (in pixels):

## HIML Tags:

* HTML Pragraphs Are Defined With <b> Tags .
* <b>:start tag
* </b>:end tag
* It Defines <b> bold</b> text.
* It Define bold text.

## What are void elements in HTML? With Example

* A void element is an element in HTML that cannot  have any child nodes (i.e., nested elements or text nodes).
* Void elements only have a start tag; end tags must not be specified for void elements.
* In HTML, a void element must not have an end tag.
* For example: <input type="text"></input, > is invalid HTML.

## What are HTML Entities? With Example.

* Some characters are reserved in HTML.
* If you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags.
* Character entities are used to display reserved characters in HTML.
* A character entity looks like this:
* &*entity\_name*;
* OR
* &#*entity\_number*;
* To display a less than sign (<) we must write: &it; or &#60;
* Advantage of using an entity name: An entity name is easy to remember.
* Disadvantage of using an entity name : Browsers may not support all entity names ,but the support for entity number is good.

## What are different types of lists in HTML? With Example

* HTML Lists allow web developers to group a set of related items in lists.
* There Are Many Types Of List:

## An unordered HTML List:

* Item
* Item
* Item
* Item

## An ordered HTML List :

1.First item

2.Second item

3.Third item

## 6.What is the ‘class’ attribute in HTML? With Example.

* The HTML class attribute is used to specify a class for an HTML element.
* Multiple HTML elements can share the same class.
* The class attribute is often used to point to a class name in a style sheet. It can also be used by a JavaScript to access and manipulate elements with the specific class name.

### **Example**

<!DOCTYPE html>  
<html>  
<head>  
<style>  
.city {  
  background-color: tomoto;  
  color: white;  
  border: 2px solid black;  
  margin: 20px;  
  padding: 20px;  
}  
</style>  
</head>  
<body>  
  
<div class="city">  
  <h2>London</h2>  
  <p>London is the capital of England.</p>  
</div>  
  
<div class="city">  
  <h2>Paris</h2>  
  <p>Paris is the capital of France.</p>  
</div>  
  
<div class="city">  
  <h2>Tokyo</h2>  
  <p>Tokyo is the capital of Japan.</p>  
</div>  
  
</body>  
</html>

Output:

**London**

London is the capital of England.

**Paris**

Paris is the capital of France.

**Tokyo**

Tokyo is the capital of Japan.

## What is the difference between the ‘id’ attribute and the ‘class’ attribute of HTML elements? With Example

## 

* **HTML id Attribute:**
* The id attribute is a unique identifier that is used to specify the document. It is used by CSS and JavaScript to perform a certain task for a unique element. In CSS, the id attribute is written using the # symbol followed by id.
* Syntax:
* <element id=id name”>
* In css stylesheet:
* #id name {
* //css property
* }

## Example:

<!DOCTYPE html>

<html>

<head>

<title>

HTML id attribute

</title>

<style>

#geeks{

color: green;

font-size: 25px;

}

</style>

</head>

<body style="text-align: center">

<h1>Geeks for Geeks</h1>

<p id="geeks">Welcome to Geeks for Geeks</p>

<p>A Computer Science portal for geeks</p>

</body>

</html>

## Output:

## Geeks for Geeks

## Welcome to geeks for geeks

## A computer science portal for geeks

* **HTML class Attribute:**
* The class attribute is used to specify one or more class names for an HTML element. The class attribute can be used on any HTML element. The class name can be used by CSS and JavaScript to perform certain tasks for elements with the specified class name. The class name in CSS stylesheet using **“.”** symbol.

## Syntax:

<element calss=”class\_name”>

In css stylesheet:

.class{

// css property

}

## Example:

<!DOCTYPE html>

<html>

<head>

<style>

.geeks{

color: green;

font-size: 25px;

}

</style>

</head>

<body style="text-align: center;">

<h1>Geeks for Geeks</h1>

<p> Welcome to Geeks for Geeks</p>

<p class="geeks">

A Computer Science portal for geeks

</p>

</body>

</html>

## Output:

## Geeks for Geeks

Welcome for Geeks for Geeks

## A computer science portal for Geeks

## What are the various formatting tags in HTML?

* Formatting elements were designed to display special types of text:
* **<b>- Bold text**
* **<strong>- Important text**
* **<i>- Italic text**
* **The HTML <b>element defines bold text, without any extra importance .**
* **The HTML<storng> element defines text with strong importance .**
* **The contant inside is typically displayed in bold.**

## ****Example :****

**<b> This text is bold </b>**

## How is Cell Padding different from Cell Spacing? With Example

* Both Cellspacing and Cellpadding are the attributes that one can use in table formatting.
* They basically set those whitespaces in any given table cell. Thus, they form a significant part of a web document.
* Although both of them are attributes, there is a major difference between Cellpadding and Cellspacing in their functionality.
* We majorly use the Cellpadding for fixing the width present between a cell edge and the content that it contains.
* Conversely, we use Cellspacing for setting spaces between individual cells.

## Example:

## You can merge two or more table cells in a column using the **colspan attribute** in a <td> HTML tag (table data). To merge two or more row cells, use the rowspan attribute.

<!DOCTYPE html>

<html>

<head>

    <style>

        table,

        th,

        td {

            border: 1px solid black;

            border-collapse: collapse;

            padding: 6px;

        }

    </style>

</head>

<body style="text-align:center">

    <h1 style="color:green;">

        GeeksforGeeks

    </h1>

    <h2>How to merge table cells in HTML?</h2>

    <table align="center">

        <tr>

            <th>Name</th>

            <th>Age</th>

        </tr>

        <tr>

            <td>Akku</td>

            <!-- This cell will take up

                space on two rows -->

            <td rowspan="2">44</td>

        </tr>

        <tr>

            <td>fahad</td>

        </tr>

    </table>

</body>

</html>

## Output:

## 

## 10.How can we club two or more rows or columns into a single row or column in an HTML table? With Example.

* You can merge two or more table cells in a column using the **colspan** attribute in a <td> html tag (table data). To merge two or more row cells, use the **rowspan** attribute.

## How to use colspan attribute

* In the code below is a table with three rows and three colums. If we wanted to combine the first two cells in the first column, we could use the colspan="2" attribute in the first <td> tag. The number represents how many cells to use (merge) for the <td> tag.

## Example HTML table

<table>

<tr>

<td colspan="2">&nbsp;</td>

<td>&nbsp;</td>

</tr>

<tr>

<td>&nbsp;</td>

<td>&nbsp;</td>

<td>&nbsp;</td>

</tr>

<tr>

<td>&nbsp;</td>

<td>&nbsp;</td>

<td>&nbsp;</td>

</tr>

</table>

## Output:

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

## How to use rowspan attribute

* In the code below is a table with three rows and three columns. If we wanted to combine the first two cells in the first column into one cell, we could use the rowspan="2" attribute in the first <td> tag. The number represents how many cells to use for the <td> tag.

## Example HTML table:

<table>

<tr>

<td rowspan="2">&nbsp;</td>

<td>&nbsp;</td>

<td>&nbsp;</td>

</tr>

<tr>

<td>&nbsp;</td>

<td>&nbsp;</td>

</tr>

<tr>

<td>&nbsp;</td>

<td>&nbsp;</td>

<td>&nbsp;</td>

</tr>

</table>

## Output:

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

## What is the difference between a block-level element and an inline element?

* The inline and block elements of HTML are one of the important areas where web developers often get confused because they were unable to know which are inline and block elements which may cause clumsiness in a webpage in case he assumes some element to be a block but it is an inline element which causes next element comes next to it.
* So let us see the differences between the inline and block elements in HTML and the different frequently used inline and block HTML elements

## ****Block elements:****

* They consume the entire width available irrespective of their sufficiency. They always start in a new line and have top and bottom margins. It does not contain any other elements next to it.

## ****Inline elements:****

* Inline elements occupy only enough width that is sufficient to it and allows other elements next to it which are inline. Inline elements don’t start from a new line and don’t have top and bottom margins as block elements have.

## 12.How to create a Hyperlink in HTML? With Example

## It has the following syntax: <a href="url">**link** text</a> The most important attribute of the <a> element is the href attribute, which indicates the **link**'s destination. The **link** text is the part that will be visible to the reader.

* HTML links are hyperlinks.
* You can click on a link and jump to another document.

## HTML Links – Syntax

## The HTML <a> tag defines a hyperlink. It has the following syntax:

## <a href="*url*">*link text*</a>

* The most important attribute of the <a> element is the href attribute, which indicates the link's destination.
* The link text is the part that will be visible to the reader.

## Link to an Email Address

* Use mailto: inside the href attribute to create a link that opens the user's email program (to let them send a new email):

## Example:

<!DOCTYPE html>

<html>

<body>

<h2>Link to an Email Address</h2>

<p>To create a link that opens in the user's email program (to let them send a new email), use mailto: inside the href attribute:</p>

<p><a href="mailto:someone@example.com">Send email</a></p>

</body>

</html>

## Output:

## Link to an Email Address

* To create a link that opens in the user's email program (to let them send a new email), use mailto: inside the href attribute:
* Send email:

## 13.What is the use of an iframe tag? With Example.