[HTML & CSS Handbook]

WiseQuarter Education

What is HTML?

- HTML stands for **H**yper **T**ext **M**arkup **L**anguage
- 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 elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

A Simple HTML Document Example:

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

- The **<!DOCTYPE html>** declaration defines that this document is an HTML5 document. It must only appear once, at the top of the page (before any HTML tags).
- The **<html>** element is the root element of an HTML page
- The **<head>** element contains meta information about the HTML page
- The **<title>** element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The **<body>** element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The **<h1>** element defines a large heading
- The ** ** element defines a paragraph

What is an HTML Element?

An HTML element is defined by a start tag, some content, and an end tag:

<tagname> Content of the element goes here… </tagname>

Example:
<h1>My First Heading</h1
* My first paragraph. *

Note: Some HTML elements have no content (like the **
** element). These elements are called empty elements. Empty elements do not have an end tag!

Start tag	Element content	End tag
<h1>	My First Heading	</h1>
	My first paragraph.	
 	none	*none*

HTML Documents

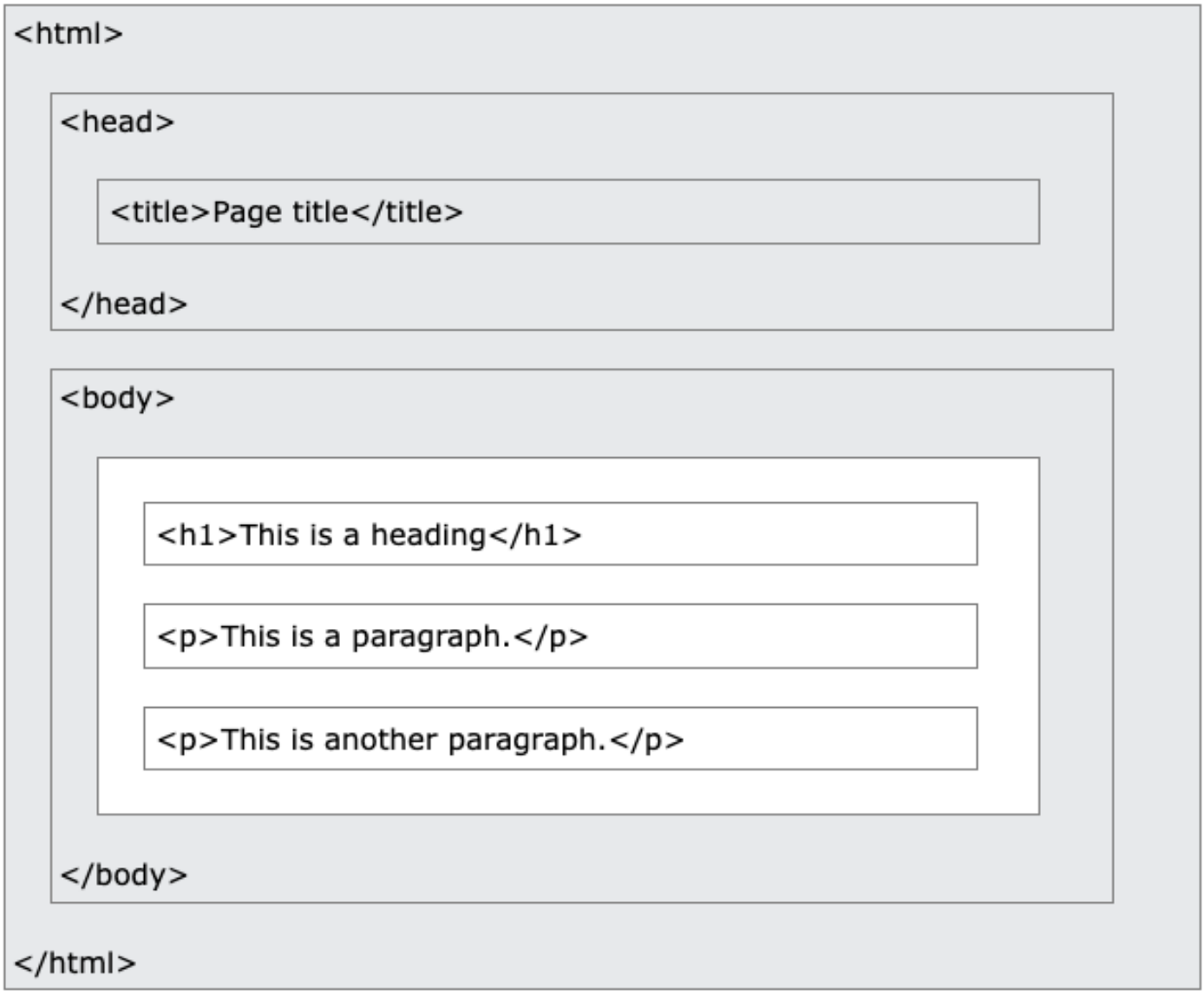
➔All HTML documents must start with a document type declaration: <!DOCTYPE html>.
➔The HTML document itself begins with **<html>** and ends with **</html>.**
➔The visible part of the HTML document is between **<body>** and **</body>.**

```
<!DOCTYPE html>
<html>
    <head>
        <!-- that will apear on browser tab-->
         <title  >Title Page Name</title>
    </head>
    <body>
        <h1>My First Heading</h1>

        <p>My first paragraph.</p>
    </body>
</html>
```

My First Heading

My first paragraph.

Below is a visualization of an HTML page structure:

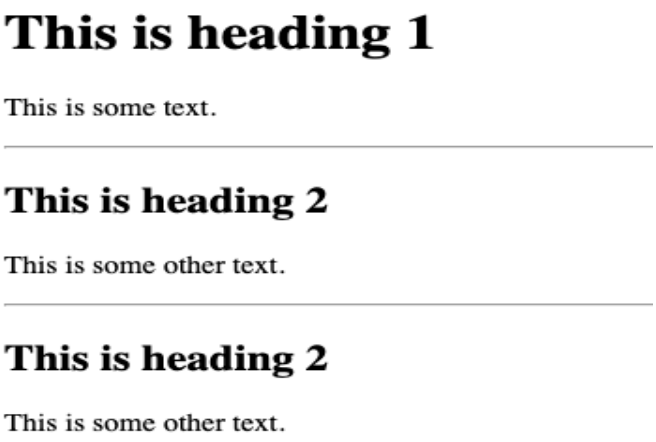


Note: HTML is Not Case Sensitive. HTML tags are not case sensitive: <P> means the same as <p>.

Most Useful HTML Tag Reference:

1) **<!--...-->** : Defines a comment. HTML comments are not displayed in the browser, but they can help document your HTML source code
2) **<html>**: Defines an HTML document
3) **<head>:** Contains metadata/information for the document
4) **<title>:** Defines a title for the document
5) **<body>:** Defines the document's body
6) **<h1> to <h6>:** Defines HTML headings HTML headings are titles or subtitles that you want to display on a webpage. **<h1>** defines the most important heading. **<h6>** defines the least important heading.
7) **<p>:** Defines a paragraph: A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph.
8) **
:** Inserts a single line break
9) **<hr>:** Defines a thematic change in the content and is most often displayed as a horizontal rule. The **<hr>** element is used to separate content (or define a change) in an HTML page:

```
<!DOCTYPE html>
<html>
<body>
<!-- You can Write Comment here -->
<h1>This is heading 1</h1>
<p>This is some text.</p>
<!-- <hr> will break the page -->
<hr>
<!--Can you see difference between
<h1>,<h2>,and <h3>-->
<h2>This is heading 2</h2>
<p>This is some other text.</p>
<hr>

<h2>This is heading 2</h2>
<p>This is some other text.</p>

</body>
</html>
```



More HTML tags that useful for Formatting:

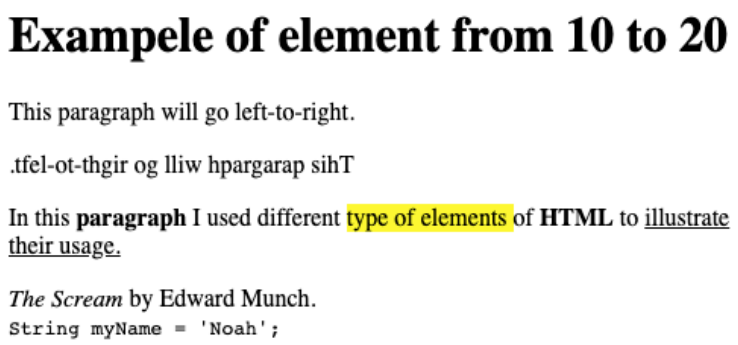
10) **<b> :** The <b> tag specifies bold text without any extra importance
11) **<bdo>** : The <bdo> tag is used to override the current text direction.

Note: dir attribute with value 'ltr' or 'rtl' is required to Specifies the text direction of the text inside the <bdo> element.

12) **<cite>:** The <cite> tag defines the title of a creative work (e.g. a book, a poem, a song, a movie, a painting, a sculpture, etc.). The text in the <cite> element usually renders in it alic.
13) **<code>:** Defines a piece of computer code
14) **:** The tag is used to define emphasized text. The content inside is typically displayed in italic.
15) **<mark>:** Defines marked/highlighted text
16) **<small>:** Defines smaller text
17) **:** Defines important text
18) **<u>:** Defines some text that is unarticulated and styled differently from normal text
19) **<var>:** Defines a variable
20) **<template>:** The <template> tag is used as a container to hold some HTML content hidden from the user when the page loads. The content inside <template> can be rendered later with a JavaScript.

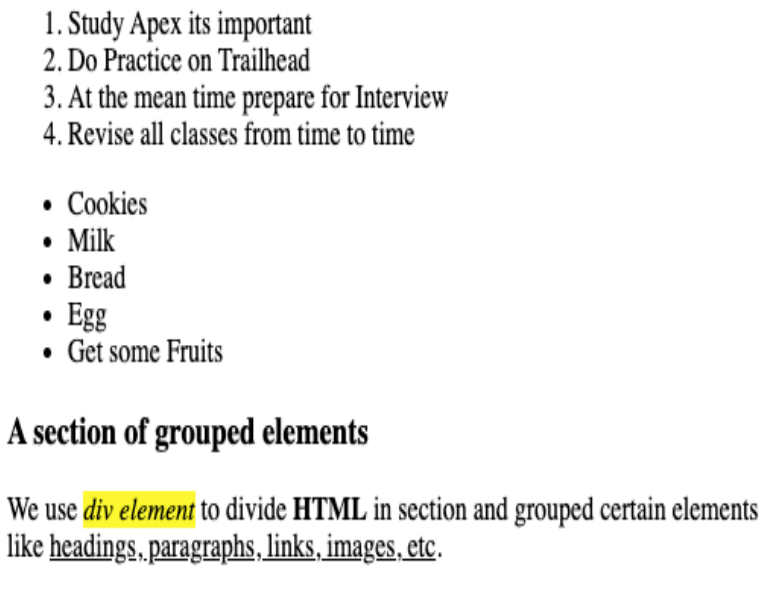
You can use the <template> tag if you have some HTML code you want to use over and over again, but not until you ask for it. To do this without the <template> tag, you have to create the HTML code with JavaScript to prevent the browser from rendering the code

```
<!DOCTYPE html>
<html>
<body>
<h1>Examples of element from 10 to 20</h1>

<p>This paragraph will go left-to-right.</p>

<p><bdo dir="rtl">This paragraph will go right-to-left.
</bdo></p>

<p> In this <b>paragraph</b> I used different
<mark>type of elements </mark> of
<strong>HTML</strong> to
<u>illustrate their usage.</u>
</p>

<p>
<cite>The Scream</cite> by Edward Munch. <br>
<code> String myName = 'Noah'; </code>
</p>

</body>
</html>
```



21) **<ol>:** The **<ol>** ordered list element creates a list of items in sequential order. Each list item appears numbered by default.
22) **<ul>:** The **<ul>** unordered list element is used to create a list of items in no particular order. Each individual list item will have a bullet point by default.
23) **<li>:** The **<li>** list item element create list items inside.
24) ** :** The ** ** element is used as a container that divides an HTML document into sections and is short for "division". ** ** elements can contain flow content such as headings, paragraphs, links, images, etc.

```
<ol>
  <li>Study Apex its important</li>
  <li>Do Practice on Trailhead</li>
  <li>At the mean time prepare for Interview</li>
  <li>Revise all classes from time to time</li>
</ol>
<ul>
  <li>Cookies</li>
  <li>Milk</li>
  <li>Bread</li>
  <li>Egg</li>
  <li>Get some Fruits</li>
</ul>
<div>
  <h3>A section of grouped elements</h3>
  <p>We use <mark><em>div element</em></mark> to divide
<b>HTML</b> in section and grouped certain elements
like <u>headings, paragraphs, links, images, etc</u>.
</p>
</div>
```



To change a bullet point for ordered list you can use **type** attribute and for unordered you can use **style** attribute with **'list-style-type: circle'** value.

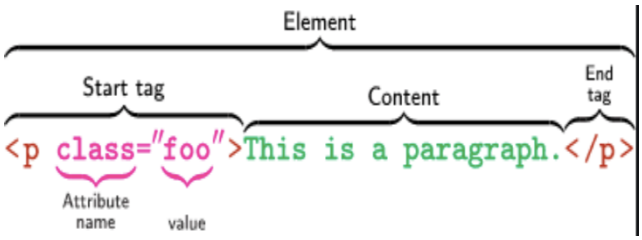
Note: To change a bullet point for ordered list you can use **type** attribute and for unordered you can use **style** attribute with **'list-style-type: circle'** value.

```
<ul style="list-style-type:circle;">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>
```

```
<ol type="1">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

HTML Attributes

- 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"



Some Useful Global Attributes

1) **href** attribute of **<a>** specifies the URL of the page the link goes to
2) **src** attribute of **<img>** specifies the path to the image to be displayed
3) **width** and **height** attributes of **<img>** provide size information for images
4) **alt** attribute of **<img>** provides an alternate text for an image
5) **style** attribute is used to add styles to an element, such as color, font, size, and more
6) **lang** attribute of the **<html>** tag declares the language of the Web page
7) **title** attribute defines some extra information about an element
8) **dir:** Specifies the text direction for the content in an element
9) **class:** Specifies one or more classnames for an element (refers to a class in a style sheet)
10) **id:** Specifies a unique id for an element
11) **data:** Used to store custom data private to the page or application

Note: You can use more than one attributes in element by separating them with semicolon (;).

Example:

```
<!DOCTYPE html>
<html lang='en'>
<body>
<h1> Attributes Examples </h1>
<p title="Hyper-Link">
<a href="https://[redacted]"> <b>Visit our
Wepsite </b> </a>
</p>

<h3> Style Attribute is important </h3>
<p Style="Color:red;background-color:powderblue;"> We
use style attribute to formatting the elements</p>
<h3>Width and Height Attributes</h3>

<p style="font-family:courier;"> The width and height
attributes of the img tag, defines the width and height
of the image:</p>
<img src="img_girl.jpg"; width="100"; height="80">

</body>
</html>
```

What is CSS?

Cascading **S**tyle **S**heets (CSS) is used to format the layout of a webpage.
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 and screen sizes, and much more!

Note: The word **cascading** means that a style applied to a parent element will also apply to all children elements within the parent. So, if you set the color of the body text to "blue", all headings, paragraphs, and other text elements within the body will also get the same color (unless you specify something else)!

Using CSS

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

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

1) Inline CSS

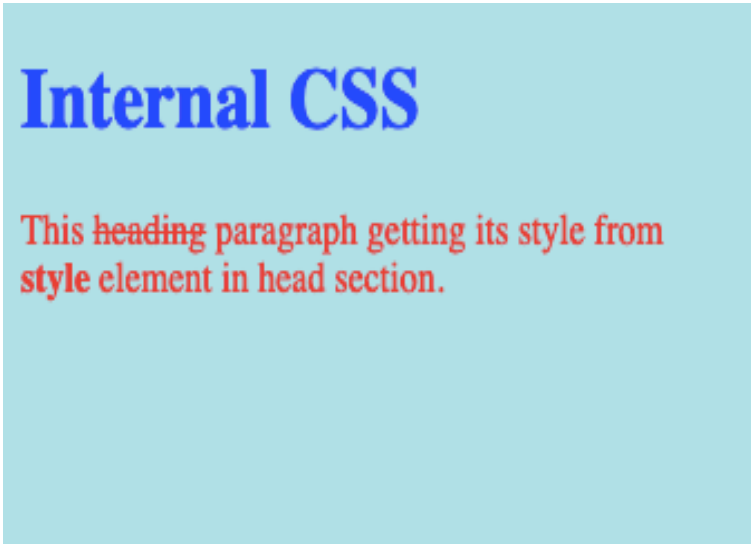
An inline CSS is used to apply a unique style to a single HTML element. An inline CSS uses the **style** attribute of an HTML element.

```
<!DOCTYPE html>
<html>
<body>
<h1 style="color:blue;background-color:yellow" >
A Blue Heading</h1>
<p style="color:red">A red paragraph. </p>
</body>
</html>
```

2) Internal CSS

An internal CSS is used to define a style for a single HTML page. An internal CSS is defined in the **<head>** section of an HTML page, within a **<style>** element.

```
<!DOCTYPE html>
<html>
<head>
<style>
body {background-color: powderblue;}
h1   {color: blue;}
p    {color: red;}
</style>
</head>
<body>
<h1>Internal CSS </h1>
<p>This <del>heading</del> paragraph getting
it's style from <br>
<b>style</b> element in head section.</p>
</body>
</html>
```



3) External CSS

An external style sheet is used to define the style for many HTML pages. To use an external style sheet, add a **link** to it in the **<head>** section of each HTML page:

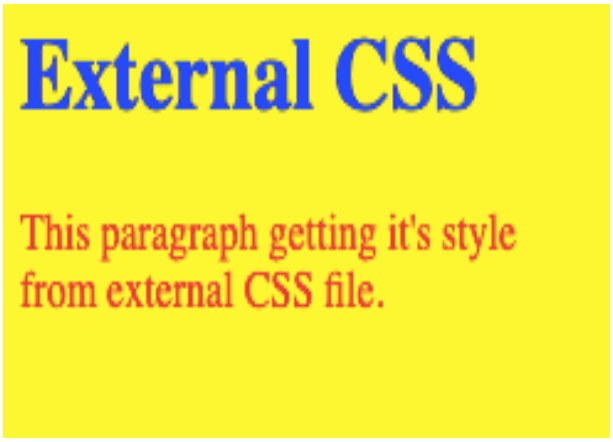
Example:

```
<!DOCTYPE html>
<html>
<head>
<!--Note: your HTML and CSS file should be in same
file-->
<link rel="stylesheet" href="myPractice.css">
</head>
<body>
<h1>External CSS</h1>
<p>This paragraph getting it's style from external CSS
file.</p>
</body>
</html>
```

myPractice.CSS file:

```
1   body {
2       background-color: yellow;
3   }
4   h1 {
5       color: blue;
6   }
7   p {
8       color: red;
9   }
```

The Result is like below:



Commonly Used CSS Properties:

- **color** property defines the text color to be used.
- **font-family** property defines the font to be used.
- **font-size** property defines the text size to be used.
- **border** property defines a border around an HTML element.
- **padding** property defines a padding (space) between the text and the border.
- **margin** property defines a margin (space) outside the border.

Note: In interview they can ask you difference between padding and margin.

HTML Links – Hyperlinks (< a href= "url"> link text)

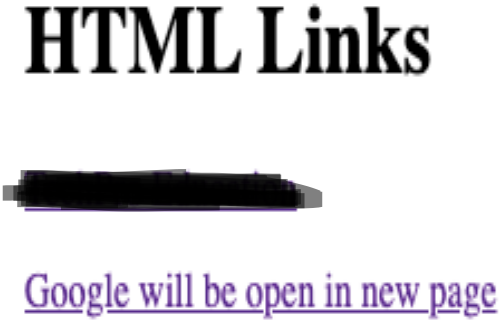
HTML links are hyperlinks. You can click on a link and jump to another document. When you move the mouse over a link, the mouse arrow will turn into a little hand.

Note: A link does not have to be text. A link can be an image or any other HTML element!

- The most important attribute of the <a> element is the **href** attribute, which indicates the link's destination.
- The **target** attribute can have one of the following values:
  - **_self** - Default. Opens the document in the same window/tab as it was clicked
  - **_blank** - Opens the document in a new window or tab
  - **_parent** - Opens the document in the parent frame
  - **_top** - Opens the document in the full body of the window.

Example:

```
<!DOCTYPE html>
<html>
<body>
<h1> HTML Links</h1>
<p><a href="[redacted]
Education </a></p>
<p><a href="https://www.google.com/"
target="_blank">Google will be open in new page </a>
</p> <html> <body>
```



HTML Images Syntax

- The HTML <img> tag is used to embed an image in a web page.
- Images are not technically inserted into a web page; images are linked to web pages. The <img> tag creates a holding space for the referenced image.
- The <img> tag is empty, it contains attributes only, and does not have a closing tag.
- The <img> tag has two required attributes:
  - **src -** Specifies the path to the image
  - **alt -** Specifies an alternate text for the image

Syntax ➔ <img src="url or picture file in your computer" alt="this text will appear if picture don't upload ">

Example:

```
<img src="myPractice.jpeg" alt="Butterfly">
```

➔ That HTML code will get Butterfly photo that saved in same file with HTML. We can use **Style**, **width**, **height** attributes to give styling to the photo. Use the CSS **float** property to let the image float to the left or to the right

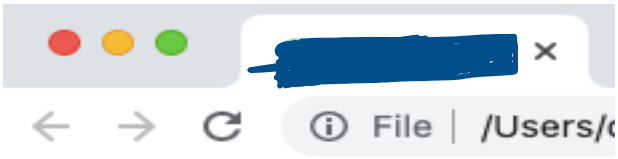
HTML Favicon

A favicon is a small image displayed next to the page title in the browser tab.

How to add Favicon in HTML

➔add a <link> element to your "index.html" file, after the <title> element, in <head> section like below:

```
<head>
<title>Wisequarter Education</title>
<link rel="icon" type="image/x-icon" href="favicon.ico">
</head>
```



HTML class Attribute:

The HTML **class** attribute is used to specify a **class** for an HTML element. 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.

- The HTML **class** attribute specifies one or **more class** names for an element
- Classes are used by CSS and JavaScript to select and access specific elements
- The **class attribute** can be used on any HTML element
- The class name is **case sensitive**
- Different HTML elements can point to the same class name
- JavaScript can access elements with a specific class name with the **getElementsByClassName**() method
- To call HTML class in CSS use (.) before class name **(.classname)** {}

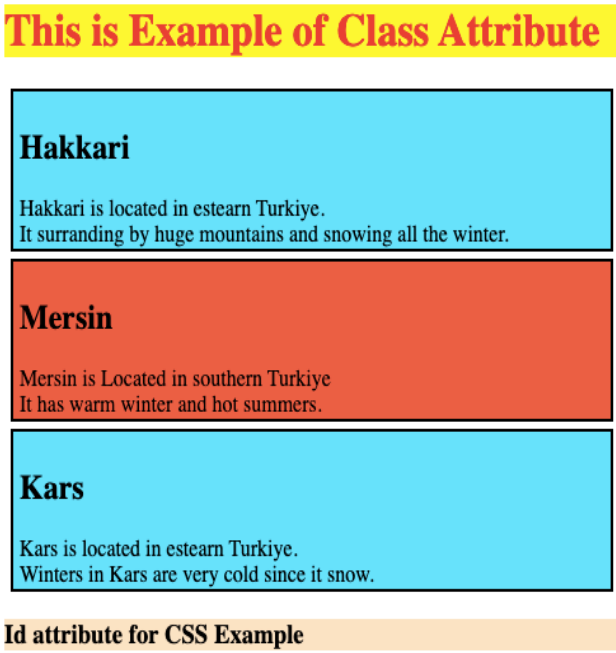
HTML id Attribute

- The **id attribute** is used to specify a unique id for an HTML element
- The value of the **id attribute** must be unique within the HTML document
- The **id attribute** is used by **CSS** and **JavaScript** to style/select a specific element
- The value of the id attribute is case sensitive
- The **id attribute** is also used to create HTML bookmarks
- JavaScript can access an element with a specific id with the **getElementById()** method.
- The syntax for **id** is: write a hash character **(#),** followed by an **id name**. Then, define the **CSS** properties within curly braces {}. ➔ **#idname{}**

Example: In a following you can observe that many elements in HTML shared same class names,

```html
<!DOCTYPE html>
<html>
<head>
<!--Lets use internal styling for h1-->
<style>
h1{color: red; background-color:yellow;}
</style>
<!-- For other elements lets use external CSS file-->
<link rel="stylesheet"  href="myPractice.css"> </head>
<body>
<h1>This is Example of Class Attribute</h1>
<!-- In mody I have 3 div (part)-->
<!--I used same class name for two div element-->
<div class="estearnCity">
<h2>Hakkari</h2>
<p>Hakkari is located in estearn Turkiye.<br>
It surranding by huge mountains and snowing all the winter.</p>
</div>
<div class="southearnCity">
<h2>Mersin</h2>
<p>Mersin is Located in southern Turkiye<br>
It has warm winter and hot summers.</p>
</div>
<div class="estearnCity">
<h2>Kars</h2>
<p>Kars is located in estearn Turkiye.<br>
Winters in Kars are very cold since it snow.</p>
</div>
<div>
<h3 id="idExample">Id attribute for CSS Example </h3>
</div>
</body>
</html>
```

```css
/*The CSS file with Class names and ID */
.estearnCity {
  background-color: rgb(0, 225, 255);
  color: red;
  border: 2px solid black;
  margin: 5px;
  padding: 5px;
}
.southearnCity {
  background-color: tomato;
  color: black;
  border: 2px solid black;
  margin: 5px;
  padding: 5px;
}
#idExample{
  border: 5px;
  background-color: bisque;
}
```



Note: Difference Between Class and ID

A class name can be used by multiple HTML elements, while an id name must only be used by one HTML element within the page.

```
<!DOCTYPE html>
<html>
<body>
<p><a href="#C3">Jump to Chapter 3</a></p>
<h2>Chapter 1</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 2</h2>
<p>This chapter explains ba bla bla</p>
<h2>Chapter 3</h2>
<p id="C3">Create a bookmark with the id
attribute</p>
```

Jump to Chapter 3

Chapter 1

This chapter explains ba bla bla

Chapter 2

This chapter explains ba bla bla

Chapter 3

create a bookmark with the id attribute

HTML Iframes

An HTML iframe is used to display a web page within a web page.
Syntax:
➔<iframe src="url" title="description"></iframe>

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Iframes</h2>
<p>You can use the height and width
<br>attributes to specify the size
of the iframe:</p>
<!-- This will get htm file in main page-->
<iframe src="demo_iframe.htm" height="200"
width="300" title="Iframe Example"></iframe>
</body>
</html>
```

HTML Iframes

You can use the height and width attributes to specify the size of the iframe:

This page is displayed in an iframe

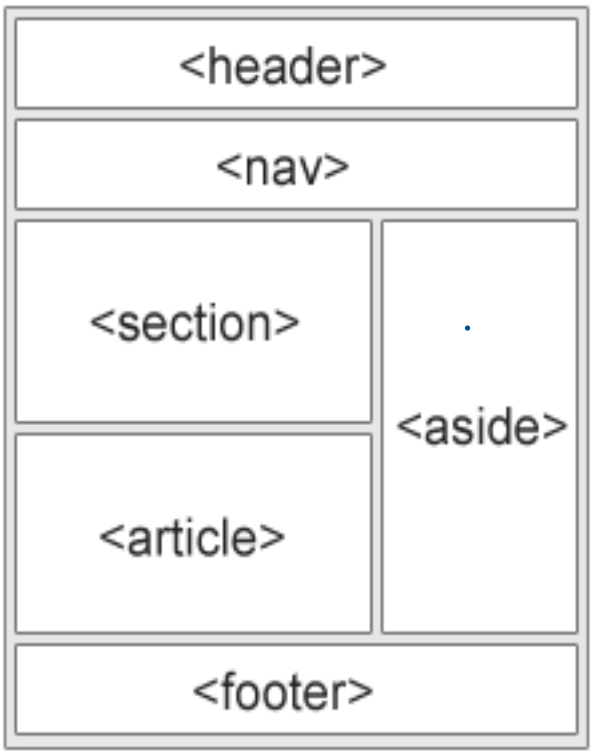
Note: HTML File Paths
A file path describes the location of a file in a web site's folder structure. File paths are used when linking to external files, like: Web pages, Images, Style sheets, JavaScripts for that we use **src attribute.**
Example: <img src="picture.jpg">.
<script src= “myJavaScript”> </script>.

HTML Layout Elements

HTML has several semantic elements that define the different parts of a web page:

- **<header>** - Defines a header for a document or a section
- **<nav> -** Defines a set of navigation links
- **<section>** - Defines a section in a document

- <article> - Defines an independent, self-contained content
- <aside> - Defines content aside from the content (like a sidebar)
- <footer> - Defines a footer for a document or a section
- <details> - Defines additional details that the user can open and close on demand
- <summary> - Defines a heading for the <details> element




```
<div>
<header>
  <h2>Options</h2>
</header>
<section>
  <nav>
    <ul>
      <li><a href="#">Option1</a></li>
      <li><a href="#">Option2</a></li>
      <li><a href="#">Option3</a></li>
    </ul>
  </nav>
  <article>
    <h1>Option</h1>
    <p> Detail Description goes here</p>
  </article>
</section>
<footer>
  <p>Footer</p>
</footer>
</div>
```

HTML Tables

- A <table> in HTML consists of table cells inside rows <tr> and columns <td>.
- **Table Cells:** Each table cell is defined by a <td> and a </td> tag. td stands for table data.
- **Table Rows:** Each table row starts with a <tr> and end with a </tr> tag. tr stands for table row.
- **Table Headers:** Sometimes you want your cells to be headers, in those cases use the <th> tag instead of the <td> tag

Note: table data elements are the data containers of the table. They can contain all sorts of HTML elements; text, images, lists, other tables, etc.

```html
<h1>Tables in HTML </h1>
<table>
    <th colspan="3" style="background-color:blueviolet">Personel Info</th>
    <tr id="head">
        <td style="border: 1px solid black;">Name</td>
        <td style="border: 1px solid black;">Surname</td>
        <td style="border: 1px solid black;">Age</td>
    </tr>
    <tr>
        <td class="name">Std1</td>
        <td class="surname">sur1</td>
        <td class="age">age1</td>
    </tr>
    <tr>
        <td class="name">Std2</td>
        <td class="surname">sur2</td>
        <td class="age"></td>
    </tr>
    <tr>
        <td class="name">std3</td>
        <td class="surname">sur3</td>
        <td class="age">18</td>
    </tr>
    <tr>
        <td class="name">std4</td>
        <td class="surname">sur4</td>
        <td class="age">age4</td>
    </tr>
    <tr class="merge">
        <td rowspan="2">std5</td>
        <td class="surname">sur5</td>
        <td class="age">30</td>
    </tr>
    <tr class="merge">
        <td class="surname">sur6</td>
        <td class="age">age6</td>
    </tr>
</table>
```

Personel Info		
Name	Surname	Age
Std1	sur1	age1
Std2	sur2	
std3	sur3	18
std4	sur4	age4
std5	sur5	30
	sur6	age6

```css
table{
    border: 2px solid blue;
    border-collapse:collapse;
    height: 300px;
    width: 600px;

}
th{
    text-align: center;
    border: 1px solid red;
    padding: 0.5em;
    cursor:grab;
}
#head{
    border: 1px solid black;
    background-color: lightgreen;
    color: black;
    font-size: large;
    text-align: center;
}
.name{
    background-color: yellow;
    border: 1px solid black;
}
.surname{
    background-color: pink;
    border: 1px solid black;
}
.age{
    background-color: lightcyan;
    border: 1px solid black;
    text-align: center;
}
.merge{
    background-color: bisque;
    border: 1px solid black;
}
```

CSS Advanced Features:

1) **CSS Multiple Backgrounds:** CSS allows you to add multiple background images for an element, through the background-image property.

```
#example1 {
  background-image: url(img_flwr.gif), url(paper.gif);
  background-position: right bottom, left top;
  background-repeat: no-repeat, repeat;
}
```

2) **CSS Specificity:**

If there are two or more CSS rules that point to the same element, the selector with the highest specificity value will "win", and its style declaration will be applied to that HTML element.
Think of specificity as a score/rank that determines which style declaration is ultimately applied to an element.

Inline CSS ➔ ID➔Class➔tag

Example:

3) **CSS Shadow Effects:**

➔The CSS text-shadow property applies shadow to text.

Example:

```
h1 {
  text-shadow: 2px 2px red;
}
```

➔The CSS **box-shadow** property is used to apply one or more shadows to an element.

Example:

```
div {
  box-shadow: 10px 10px lightblue;
}
```

4) **CSS :hover selector:**

➔The :hover selector is used to select elements when you mouse over them.

Example1: This is before :hover=

```
p, h1, a {
  background-color: yellow;
}
```

After hover= Select and style a <p>, <h1> and <a> element when you mouse over it:

```
p:hover, h1:hover, a:hover {
  background-color: yellow;
}
```

Example2: Hover over a element to show a element (like a tooltip):

```
<style>
div {
  display: none;
}
span:hover + div {
  display: block;
}
</style>
```

```
<body>
<span>Hover over me! </span>
<div>I will show on hover…</div> </body>
```

HTML Forms. *<form> form elements </form>*

An HTML form is used to collect user input. The user input is most often sent to a server for processing.

HTML Form Elements

- **<input>** Defines an input control
- **<textarea>** Defines a multiline input control (text area)
- **<label>** Defines a label for an **<input>** element
- **<fieldset>** Groups related elements in a form
- **<legend>** Defines a caption for a **<fieldset>** element
- **<select>** Defines a drop-down list
- **<optgroup>** Defines a group of related options in a drop-down list
- **<option>** Defines an option in a drop-down list
- **<button>** Defines a clickable button
- **<datalist>** Specifies a list of pre-defined options for input controls
- **<output>** Defines the result of a calculation

HTML Form Attributes

- **The action** attribute defines the action to be performed when the form is submitted.
- **The target** attribute specifies where to display the response that is received after submitting the form.
- **The method** attribute specifies the HTTP method to be used when submitting the form data.
- **The autocomplete** attribute specifies whether a form should have autocomplete on or off.
- **The novalidate** attribute is a boolean attribute.

HTML Input Types: Syntax <input type= “”>

- **The <input type="text">** defines a single-line text input field
- **The <input type="password">** defines a password field
- **The <input type="submit">** defines a button for submitting form data to a form-handler.
- **The <input type="reset">** defines a reset button that will reset all form values to their default values:
- **The <input type="radio">** defines a radio button. Radio buttons let a user select ONLY ONE of a limited number of choices:
- **The <input type="checkbox">** defines a checkbox. Checkboxes let a user select ZERO or MORE options of a limited number of choices.
- **The <input type="button">** defines a button.

Example: <input type="button" onclick="alert('Hello World!')" value="Click Me!">

- **The <input type="date">** is used for input fields that should contain a date.
- **The <input type="month">** allows the user to select a month and year.
- **The <input type="week">** allows the user to select a week and year.
- **The <input type="time">** allows the user to select a time (no time zone).
- **The <input type="email">** is used for input fields that should contain an e-mail address.
- **The <input type="tel">** is used for input fields that should contain a telephone number.
- **The <input type="file">** defines a file-select field and a "Browse" button for file uploads.
- **The <input type="range">** defines a control for entering a number whose exact value is not important (like a slider control).

Important: The best practice to have <label> element before each <input> element with id and name and use for attribute to define label for that input.

Example:

```
<h1> HTML Forms </h1>
<form action="" style="background-color: pink">
    <p>Please Login: </p>
      <label for="uname">User Name:</label>
    <input type="text" id="uname" name="uname" placeholder="please enter your name">
      <label for="pass">Password:</label>
    <input type="password" name="pass" id=pass" placeholder="please enter your password">
    <input type="button" name="Login" id="login" " value="Login">
</form>
<form action="">
<p>Create an Account: </p>
  <fieldset id="personel">
    <legend> Personel Information</legend>
      <label for="fname">First Name:</label> <br>
    <input type="text" id="fname" name="fname"> <br>
      <label for="email">Email:</label> <br>
    <input type="email" id="email" name="email" placeholder="Enter your email"> <br>
      <label for="lname">Last Name: </label> <br>
    <input type="text" id="lname" name="lname"> <br>
      <label for="age">Date of Birth: </label> <br>
    <input type="date" id="age" name="age">
  </fieldset>

<p>Please choose you gender: </p>
<!-- for input type radio I can select only one option-->
  <input type="radio" id="m" name="gender" value="Man">
    <label for="m">Man</label> <br>
  <input type="radio" id="w" name="gender" value="Women">
    <label for="w">Women</label> <br>
  <input type="radio" id="o" name="gender" value="Others">
    <label for="w">Others</label> <br>
  <input type="radio" id="n" name="gender" value="User don't want to share its gender">
    <label for="n">Don't want to say</label>

<p>Please provide all of your education levels: </p>
  <!-- In checkbox type we can select more than one fields-->
    <input type="checkbox" id="h" name="high" value="Highschool">
    <label for="under"> Highschool</label><br>
    <input type="checkbox" id="under" name="under" value="Undergrad">
    <label for="under"> Undergrad</label> <br>
    <input type="checkbox" id="master" name="master" value="Master Degree">
    <label for="master"> Master</label> <br>
    <input type="checkbox" id="phd" name="phd" value="Ph.d">
    <label for="phd"> Ph.d</label> <br>
    <label for="file"> Please provide proof of your educations:</label> <br>
    <input type="file" name="file" id="file" value="file"> <br>
    <input type="button" onclick="alert ('Hello World!')" value="Click Me" id="button">
    <button> Refresh </button> <br>
    <Label for="range"> Please select your weight (50-100):</Label>
    <input type="range" id="range" min="50" max="100"> <br>
    <label>Country:</label><br>
                <select multiple>
                    <option value="USA" >USA</option>
                    <option value= "England" >England</option>
                    <option value="Germany" selected >Germany</option>
                    <option value= "France" >France</option>
                </select><br>
      <label>Select Your Color</label><br>
      <input type="color">
    <textarea name="textarea" id="ta" cols="50" rows="5"></textarea> <br>
    <input type="reset" value="Reset" style="background-color: rgba(54, 204, 101, 0.856)">
    <input type="submit" name="sub" id="sub">
</form>
```

HTML Forms

Please Login:

User Name: Password: Login

Create an Account:

Personel Information

First Name:

Last Name:

Date of Birth:

mm/dd/yyyy

Please choose you gender:

- Man
- Women
- Others
- Don't want to say

Please provide all of your education levels:

- Highschool
- Undergrad
- Master
- Ph.d

Please provide proof of your educations:

Choose File No file chosen

Click Me Refresh

Please select your weight:

Reset Submit

```
1   .tg{
2    height: 500px;
3    width: 600px;
4   }
5   body{
6       background-color: bisque;
7   }
8   form{
9       background-color: lightcyan;
10  }
11  #personel{
12      background-color: aqua;
13  }
14  #button{
15      margin: 10px;
16  }
```

Summary of <input>

- The **for** attribute of the **<label>** tag should be equal to the id attribute of the **<input>** element to bind them together.
- Notice that each input field **must have a name attribute** to be submitted. If the name attribute is omitted, the value of the input field will not be sent at all.

HTML JavaScript

- The HTML **<script>** tag is used to define a client-side script (JavaScript).
- The **<script>** element either contains script statements, or it points to an external script file through the src attribute.
- Common uses for JavaScript are image manipulation, form validation, and dynamic changes of content.
- To select an HTML element, JavaScript most often uses the **document.getElementById()** method.
- HTML Layout Elements

```
<!DOCTYPE html>
<html>
<body>
<h1>My First JavaScript</h1>
<button type="button"
onclick="document.getElementById('demo').innerHTML =
Date()">
Click me to display Date and Time.</button>
<!-- This will not Appear until we click on button-->
<p id="demo"></p>
</body>
</html>
```

Interview Questions:

In that section, you will find common interview questions related to the topic. The above text provides answers to those questions. Our expert instructors will also share and discuss the answers they prepared during the Interview Preparation class.

Please give extra attention to questions with a star beside them. They are always asked in every interviews.

1. **What are differences between Margin and Padding ?** ★★
2. **What are Tags?**
3. **What are html. div, span tags?**
4. **What is the difference between the 'id' attribute and the 'class' attribute of HTML elements?** ★★★
5. **What is the difference between HTML elements and tags?**
6. **How to specify the link in HTML and explain the target attribute?** ★
7. **What are empty elements?**
8. **Does a hyperlink only apply to text?**
9. **What is a style sheet?**
10. **In how many ways can we specify the CSS styles for the HTML element?** ★★
11. **What is the use of an iframe tag?**
12. **What are the different new form element types in HTML 5?**