Full Stack Development

Trainer: Muralidharan.R
Phone: 9894868015

What are the Types of Websites?

The 3 Main Categories of Websites are

- Static Websites
- Dynamic Websites
- E-Commerce Website

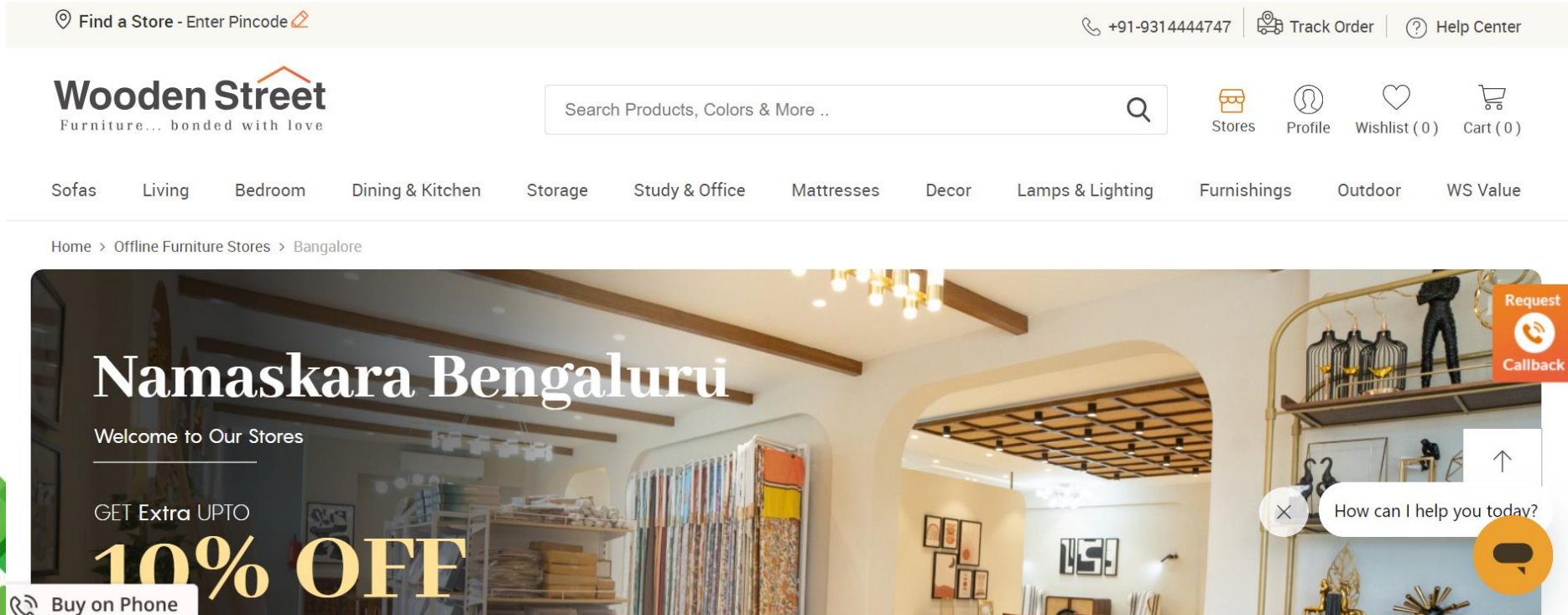
RESPONSIVE

Static Website

- The static websites consist of web pages whose content does not dynamically change. The content is indeed static.
- Many times, these websites are designed in plain HTML (Hyper-Text Markup Language), CSS (Cascading Style Sheets) and JavaScript.
- All website content is stored in the individual website files. Not in databases. We can therefore say they are “not database driven”.

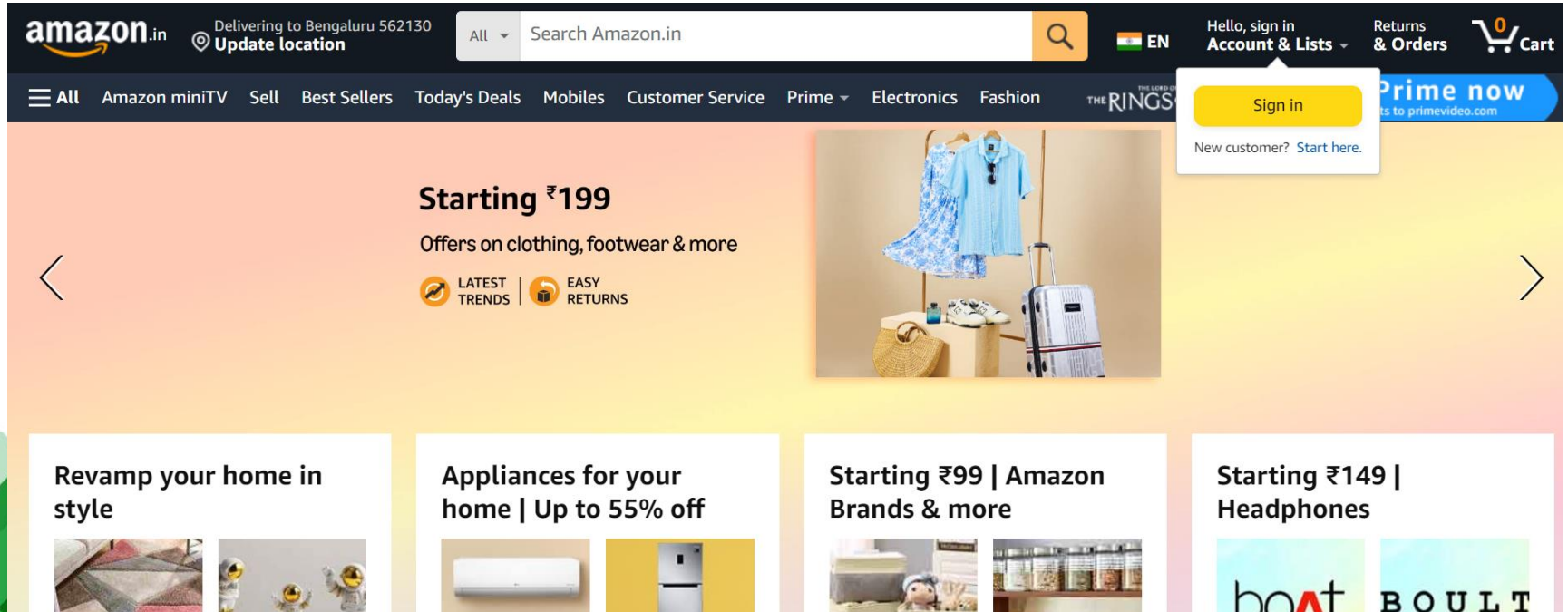
Dynamic Website

- Dynamic websites consist of web pages with dynamic content. This means, their content is ever changing. User can interact (Mail, Call, Chatbot, etc)

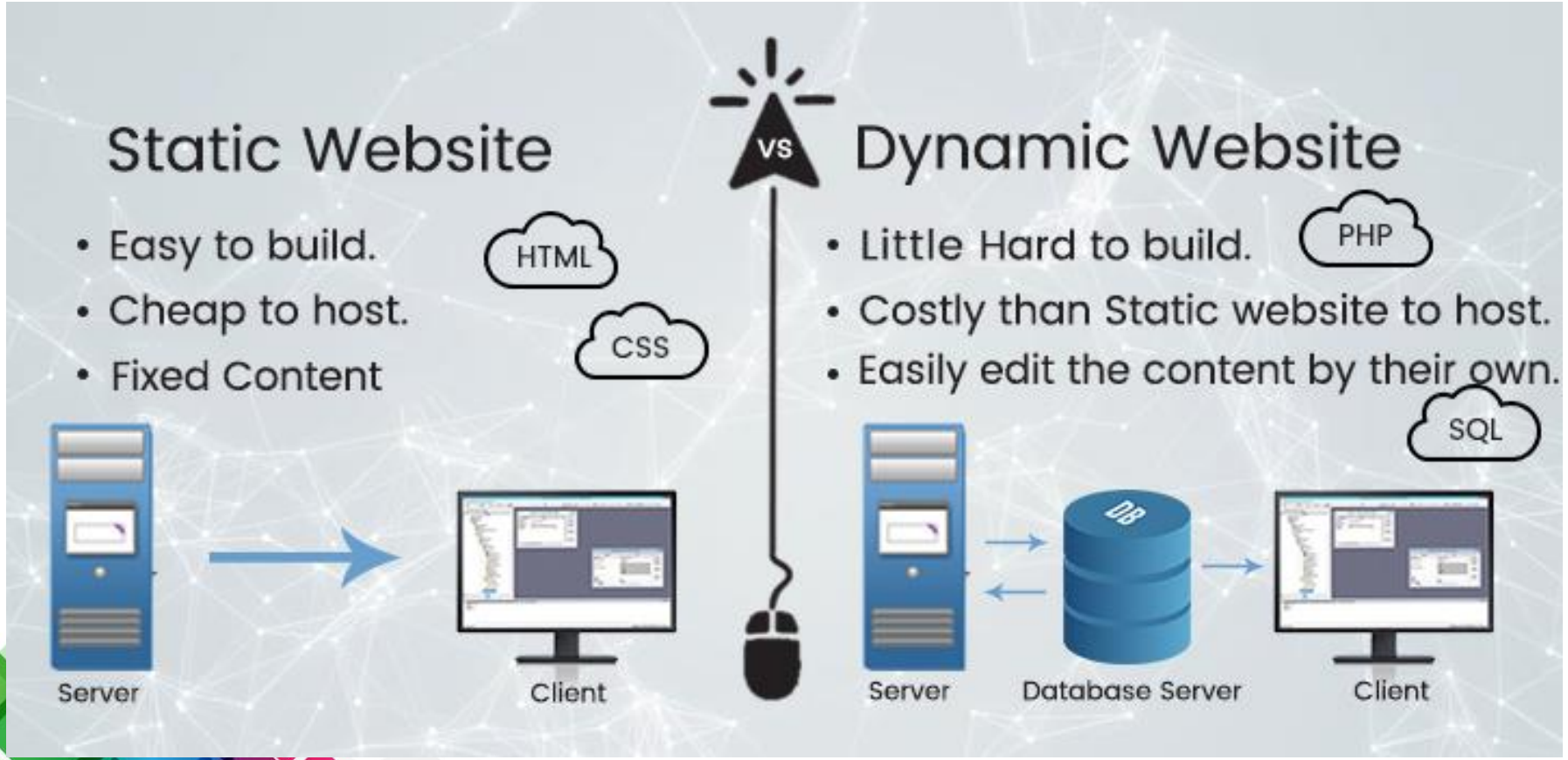


E-Commerce Website

- E-Commerce stands for electronic commerce. These are websites for selling products and services online (on the internet). Call them online shops or stores. They have the capability of accepting orders and payments.

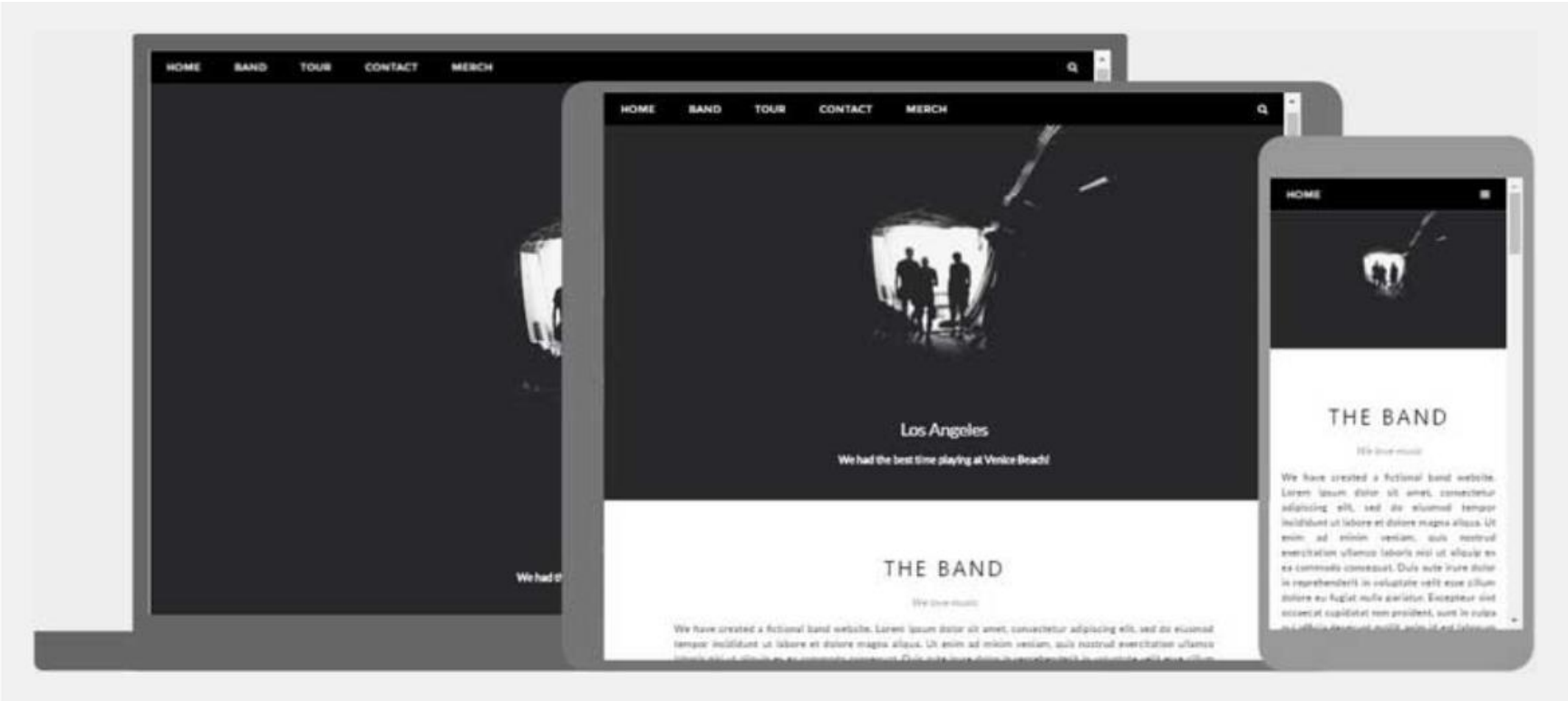


Static vs Dynamic Website

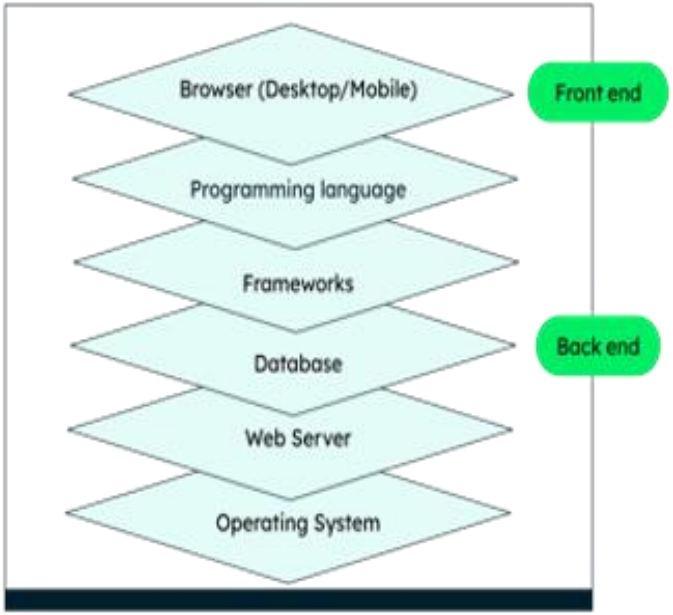


Responsive Website

- Responsive Web Design is about using HTML and CSS to automatically resize, hide, shrink, or enlarge, a website, to make it look good on all devices (desktops, tablets, and phones)



What is a Stack?



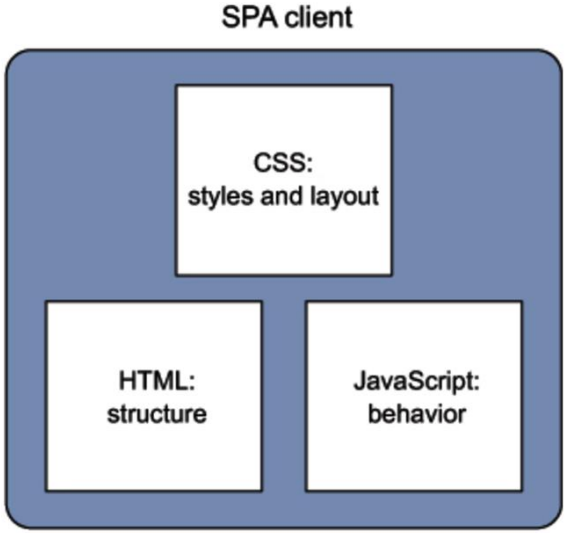
Full Stack - Python

- HTML
- CSS
- JavaScript
- BootStrap
- React.Js
- Angular.js
- SQL
- MongoDB
- Python
- Django
- Git Essentials

Did you know what is SPA ?

Single Page Application

What are the Prerequisites to learn Full Stack ?



HTML

HTML - History

- HTML stands for Hyper Text Markup Language, which is the most widely used language on Web to develop web pages.
- HTML was created by Berners-Lee in late 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995.
- HTML 4.01 was a major version of HTML and it was published in late 1999.
- Though HTML 4.01 version is widely used but currently we are having HTML-5 version which is an extension to HTML 4.01, and this version was published in 2012.

HTML

- Hypertext refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.
- As its name suggests, HTML is a Markup Language which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.

Prerequisites:

- Text Editor(Notepad)
- Web browser(Internet Explorer/Mozilla Firefox/Google Chrome)

Why to Learn HTML?

- **Create Web site** - You can create a website or customize an existing web template if you know HTML well.
- **Become a web designer** - If you want to start a career as a professional web designer, HTML and CSS designing is a must skill.
- **Understand web** - If you want to optimize your website, to boost its speed and performance, it is good to know HTML to yield best results.
- **Learn other languages** - Once you understands the basic of HTML then other related technologies like javascript, php, angular or react are become easier to understand.

Applications of HTML

- It is easy to learn and is user-friendly.
- HTML is supported by all browsers i.e. not much consideration needs to be given to check compatibility with the browsers.
- It can be easily incorporated with other programming languages and provide added functionalities and dynamism.
- HTML can be easily encoded with basic knowledge and is widely used.
- It is the most friendly search engine i.e. it easily delivers user quality websites with relevant information.
- HTML can be easily edited using simple editors such as notepad or any other text editor, it doesn’t need a special interface.

Disadvantages of HTML

- HTML can deploy only static web pages, thus for dynamic web pages other technologies have to be incorporated.
- A lot of code needs to be written to develop a simple website, thus making the process cumbersome.
- It is difficult to develop attractive web-pages with HTML alone and CSS needs to be incorporated along with it.
- The offered security features are limited and not so reliable in the long run.
- HTML shows unpredictable behavior across different browsers i.e. even though it is compatible with most of the browsers, it could still show different results.

HTML Page Structure

```
<html>
  <head>
    <title>Page title</title>
  </head>
  <body>
    <h1>This is a heading</h1>
    <p>This is a paragraph.</p>
    <p>This is another paragraph.</p>
  </body>
</html>
```

Basic HTML Document

```
<!DOCTYPE html>
<html>
<head>
      <title>This is document title</title>
   </head>

   <body>
      <h1>This is a heading</h1>
      <p>Document content goes here.....</p>
   </body>

</html>
```

Steps to run the program:

- Type the program in Notepad and save it as .html.
- Open the browser to see the output

Explanation

- The HTML program begins and ends with <html> and </html> tag.
- The <title> tag represents the title of the web page.
- The <head> tag is optional.
- The <body> tag represents where the actual content can be stored.

Html5 overview

- HTML5 is the next major revision of the HTML standard superseding HTML 4.01, XHTML 1.0, and XHTML 1.1. HTML5 is a standard for structuring and presenting content on the World Wide Web.

- HTML5 is a cooperation between the World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG).

- The new standard incorporates features like video playback and drag-and-drop that have been previously dependent on third-party browser plug-ins such as Adobe Flash, Microsoft Silverlight, and Google Gears.

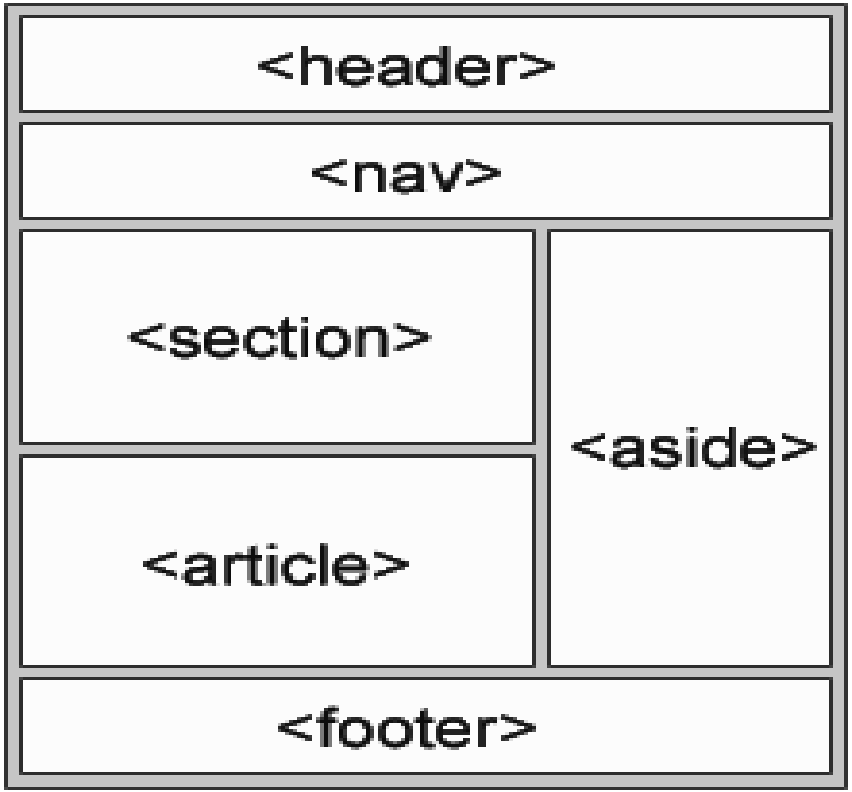
HTML5 Semantic Elements

What are Semantic Elements?

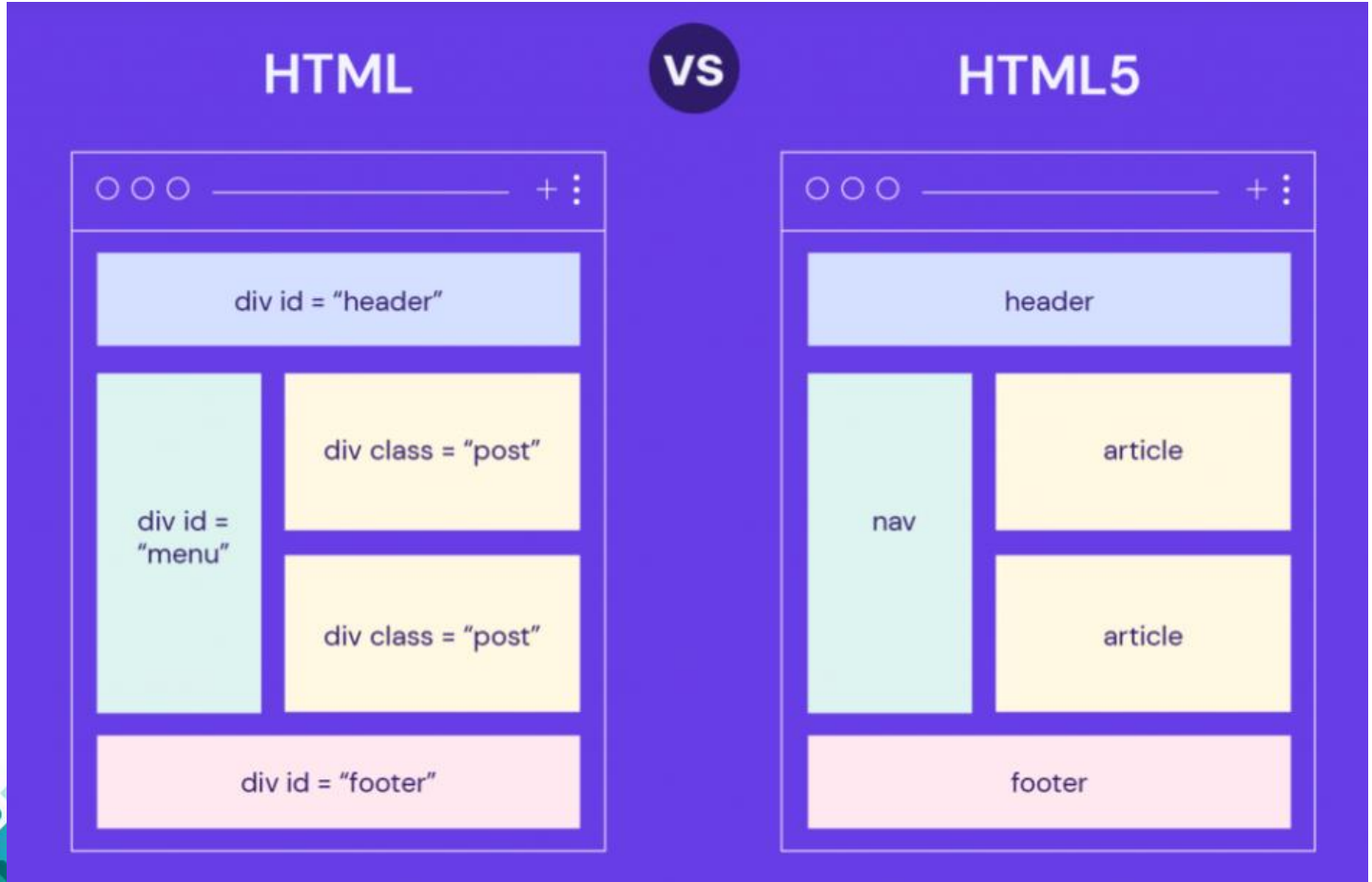
- A semantic element clearly describes its meaning to both the browser and the developer.
- Examples of non-semantic elements: and - Tells nothing about its content.
- Examples of semantic elements: <form>, <table>, and <article> - Clearly defines its content.

Semantic Elements in HTML

<article>
<aside>
<details>
<figcaption>
<figure>
<footer>
<header>
<main>
<mark>
<nav>
<section>
<summary>
<time>



HTML vs HTML5



Building blocks of HTML

An HTML document consist of its basic building blocks which are:

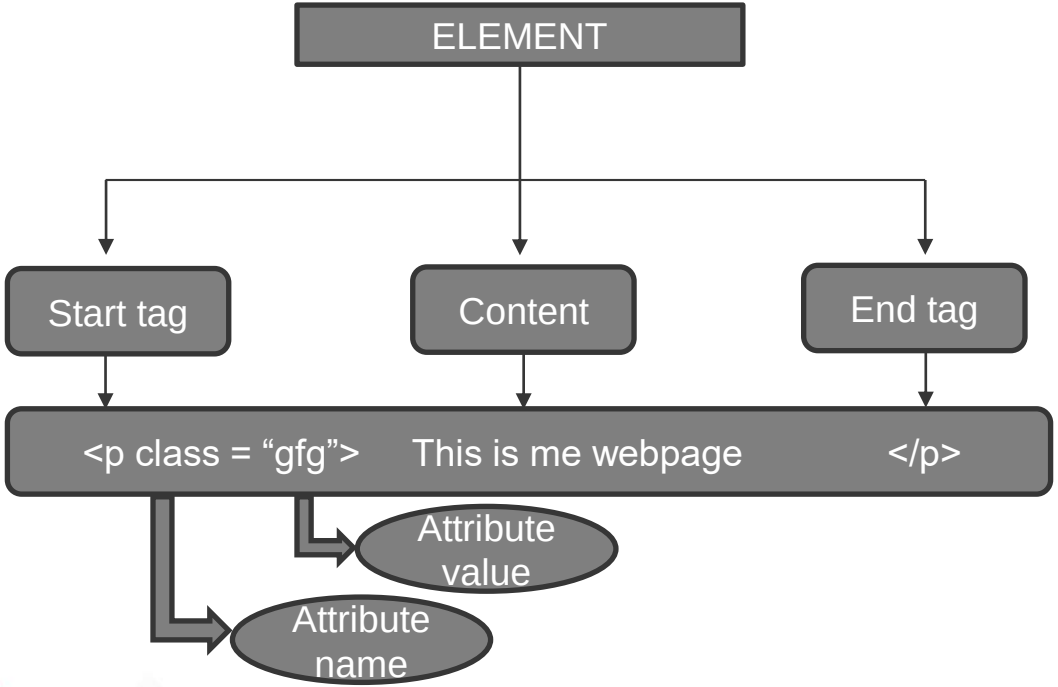
- Tags
- Attribute

Syntax

<tag name attribute_name= " attr_value"> content </ tag name>

HTML Elements

- An HTML element is an individual component of an HTML file.
- In an HTML file, everything written within tags are termed as HTML elements.



HTML Attributes

HTML attributes provide additional information about HTML elements

- 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"

HTML Tags

HTML TAGS - Alphabetical Order					
<!DOCTYPE>	<button>	<embed>	<label>	<pre>	<table>
<!--...-->	<canvas>	<fieldset>	<legend>	<progress>	<tbody>
<a>	<caption>	<figcaption>		<q>	<td>
<abbr>		<figure>	<link>	<rp>	<template>
<acronym>	<cite>	<font>	<main>	<rt>	<textarea>
<address>	<code>	<footer>	<map>	<ruby>	<tfoot>
<applet>	<col>	<form>	<mark>	<s>	<th>
<area>	<colgroup>	<frame>	<meta>	<samp>	<thead>
<article>	<data>	<frameset>	<meter>	<script>	<time>
<aside>	<datalist>	<h1> to <h6>	<nav>	<section>	<title>
<audio>	<dd>	<head>	<noframes>	<select>	<tr>
<b>	<del>	<header>	<noscript>	<small>	<track>
<base>	<details>	<hr>	<object>	<source>	<tt>
<basefont>	<dfn>	<html>			<u>
<bdi>	<dialog>	<i>	<optgroup>	<strike>	
<bdo>	<dir>	<iframe>	<option>		<var>
<big>		<img>	<output>	<style>	<video>
<blockquote>	<dl>	<input>	<p>	<sub>	<wbr>
<body>	<dt>	<ins>	<param>	<summary>	
 		<kbd>	<picture>	<sup>	

Block-level Elements

Definition:

A block-level element always starts on a new line, and the browsers automatically add some space (a margin) before and after the element.

A block-level element always takes up the full width available (stretches out to the left and right as far as it can).

Two commonly used block elements are: <p> and .

The <p> element defines a paragraph in an HTML document. The element defines a division or a section in an HTML document.

Example:

Here are the block-level elements in HTML:

<address><article><aside><blockquote><canvas><dd>

<dl><dt><fieldset><figcaption><figure><footer>

<form><h1>-

<h6><header><hr>
<main><nav><noscript>
<p><p

re><section><table><tfoot>
<video>

Inline Elements

Definition:

An inline element does not start on a new line.
An inline element only takes up as much width as necessary.
This is a element inside a paragraph.

Example:

Hello World

Here are the inline elements in HTML:

<a><abbr><acronym><b><bdo><big>
<button><cite><code><dfn><i><img><input><kbd><label><map><object><output><q><samp><script><select><small><sub><sup><textarea><time><tt><var>

Div Element

Definition:

The element is used as a container for other HTML elements.

The element is by default a block element, meaning that it takes all available width, and comes with line breaks before and after.

The element has no required attributes, but style, class and id are common.

The element is often used to group sections of a web page together.

If you have a element that is not 100% wide, and you want to center-align it, set the CSS margin property to auto.

You can have many containers on the same page.

Example:

Lorem Ipsum I am a div dolor sit amet.

```
<div>
  <h2>London</h2>
  <p>London is the capital city of England.</p>
  <p>London has over 13 million inhabitants.</p>
</div>
```

Class Attribute

Definition:

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.

In the example we have three elements with a class attribute with the value of "city". All of the three elements will be styled equally according to the .city style definition in the head section.

Example:

```
<!DOCTYPE html><html><head><style>
.city {
  background-color: tomato;
  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></body></html>
```

ID Attribute

Definition:

The HTML id attribute is used to specify a unique id for an HTML element. You cannot have more than one element with the same id in an HTML document.

The id attribute specifies 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 to point to a specific style declaration in a style sheet. It is also used by JavaScript to access and manipulate the element with the specific id.
The syntax for id is: write a hash character (#), followed by an id name. Then, define the CSS properties within curly braces {}.
In the example we have an <h1> element that points to the id name "myHeader". This <h1> element will be styled according to the #myHeader style definition in the head section:

Example:

```
<!DOCTYPE html>
<html>
<head>
<style>
#myHeader {
  background-color: lightblue;
  color: black;
  padding: 40px;
  text-align: center;
}
</style>
</head>
<body>

<h1 id="myHeader">My Header</h1>

</body>
</html>
```

<!DOCTYPE>

Definition:

All HTML documents must start with a declaration.

The declaration is not an HTML tag. It is an "information" to the browser about what document type to expect.

In HTML 5, the declaration is simple:

Example:

<!DOCTYPE>

<!DOCTYPE html>

The `<!DOCTYPE>` declaration is NOT case sensitive.

<!--...--> - Comment Tag

Definition:

The comment tag is used to insert comments in the source code.

Comments are not displayed in the browsers.

You can use comments to explain your code, which can help you when you edit the source code at a later date.

This is especially useful if you have a lot of code.

You can use the comment tag to "hide" scripts from browsers without support for scripts (so they don't show them as plain text):

Example:

<!--This is a comment. Comments are not displayed in

the browser-->

This is a paragraph.

The two forward slashes at the end of comment line (//) is the JavaScript comment symbol. This prevents JavaScript from executing the --> tag.

```
<script type="text/javascript">
<!--
function displayMsg() {
  alert("Hello World!")
}
//-->
</script>
```

The comment tag does not support any event attributes.
The comment tag does not support any standard attributes.

<a> - Anchor Tag

Definition:

The <a> tag defines a hyperlink, which is used to link from one page to another.

The most important attribute of the <a> element is the **href** attribute, which indicates the link's destination.

By default, links will appear as follows in all browsers:

An **unvisited** link is underlined and **blue**
A **visited link** is underlined and **purple**
An **active link** is underlined and **red**

.

Example:

<a href="second.html"**>**Click for Second Page****

How to open a link in a new browser window:

Google

How to link to an email address:

Send email

How to link to a phone number:

+9894868015

How to link to another section on the same page:

Go to Section 2

How to link to a JavaScript:

Execute
JavaScript

<abbr>- Abbreviation Tag

Definition:

The <abbr> tag is used to represent an acronym or abbreviation of a longer word or phrase, such as www, HTML, HTTP, etc. The content written between <abbr> tags renders with dotted underline in some browser.

This tag can be used with "title" attribute (optional), and the value of title attribute will be pop-up when the mouse hovers over the content written between <abbr> tag.

Most browsers will display the <abbr> element with the default values →

Example:

The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.

```
abbr {
  display: inline;
}
```

<acronym> Tag

Definition:

HTML <acronym> tag is used with title attribute to contain a full explanation of an acronym content. When you hover the mouse on content, then it will show the explanation of word.

The <acronym> tag was used in HTML 4 to define an acronym. An acronym or abbreviation should be marked up with the <abbr> tag in HTML5

Example:

<acronym title="Indian Space Research Organisation"**>**
ISRO**</acronym>**

<address> Tag

Definition:

The <address> tag defines the contact information for the author/owner of a document or an article.

The contact information can be an email address, URL, physical address, phone number, social media handle, etc.

The text in the <address> element usually renders in italic, and browsers will always add a line break before and after the <address> element.

If you want to specify the information of the author for an article, you must place the <address> tag inside the <article> element.

Most browsers will display the <address> element with the default values →

Example:

```
<address>
Written
by <a href="mailto:webmaster@example.com">Jon
Doe</a>.<br>
Visit us at:<br>
Example.com<br>
Box 564, Disneyland<br>
USA
</address>
```

```
address {
  display: block;
  font-style: italic;
}
```

<applet> tag

Definition:

The <applet> tag was used in HTML 4 to define an embedded applet (Plug-in). The <applet> tag is deprecated in HTML4.0 and not supported in HTML5. So you can use <object> tag or <embed> tag instead of <applet>.

Plug-ins

Plug-ins are a computer programs that extend the standard functionality of the browser.
Plug-ins have been used for many different purposes:
Run Java applets
Run ActiveX controls
Display Flash movies
Display maps
Scan for viruses
Verify a bank id
Most browsers no longer support Java Applets and Plug-ins.

Example:

<applet code="URL" height="200" width="100">.....
</applet>

Instead you can use?

- If you want to embed audio, use the <audio> tag:
- Embed a document with the <embed> or <iframe> element:
- Embed a picture with the <embed> or <img> element:
- Embed a document with the <object>

<area> tag

Definition:

The <area> tag defines an area inside an image map (an image map is an image with clickable areas).

The coords attribute specifies the coordinates of an area in an image map.

The coords attribute is used together with the shape attribute to specify the size, shape, and placement of an area.

Tip: The coordinates of the top-left corner of an area are 0,0.

Example:

```
<html> <body>

<img src="Actors.jpg" usemap="#image-map">

<map name="image-map">
    <area target="_blank" alt="Hrithik" title="Hrithik"
href="https://en.wikipedia.org/wiki/Hrithik_Roshan"
coords="20, 23, 629, 1024" shape="rectangle">
    <area target="_blank" alt="Dhanush" title="Dhanush"
href="https://en.wikipedia.org/wiki/Dhanush"
coords="664, 22, 1260, 1065" shape="rectangle">
    <area target="_blank" alt="Ram Charan" title="Ram
Charan"
href="https://en.wikipedia.org/wiki/Ram_Charan"
coords="1329, 42, 1904, 1069" shape="rectangle">
</map>
</body> </html>
```

<article> Tag

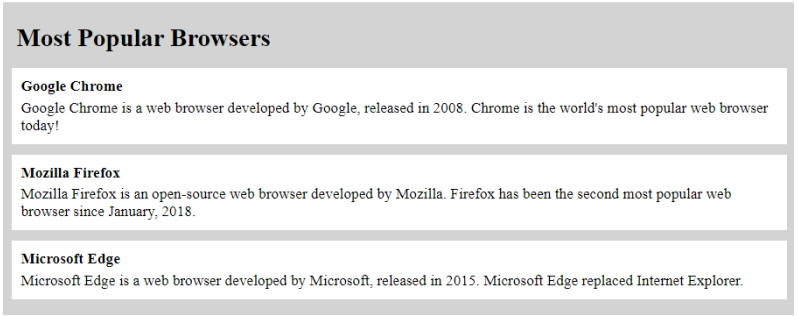
Definition:

The <article> tag specifies independent, self-contained content.

An article should make sense on its own and it should be possible to distribute it independently from the rest of the site.

Potential sources for the <article> element:

Forum post
Blog post
News story



Example:

```
<article class="all-browsers">
  <h1>Most Popular Browsers</h1>
  <article class="browser">
    <h2>Google Chrome</h2>
    <p>Google Chrome is a web browser developed by Google, released in 2008. Chrome is the world's most popular web browser today!</p>
  </article>
  <article class="browser">
    <h2>Mozilla Firefox</h2>
    <p>Mozilla Firefox is an open-source web browser developed by Mozilla. Firefox has been the second most popular web browser since January, 2018.</p>
  </article>
  <article class="browser">
    <h2>Microsoft Edge</h2>
    <p>Microsoft Edge is a web browser developed by Microsoft, released in 2015. Microsoft Edge replaced Internet Explorer.</p>
  </article>
```

<aside> Tag

Definition:

The <aside> tag defines some content aside from the content it is placed in.

The aside content should be indirectly related to the surrounding content.

Tip: The <aside> content is often placed as a sidebar in a document.

Example:

```
<aside>
<h4>Epcot Center</h4>
<p>Epcot is a theme park at Walt Disney World Resort featuring exciting attractions, international pavilions, award-winning fireworks and seasonal special events.</p>
</aside>
```

<audio> Tag

Definition:

The <audio> tag is used to embed sound content in a document, such as music or other audio streams.

The <audio> tag contains one or more <source> tags with different audio sources. The browser will choose the first source it supports.

The text between the <audio> and </audio> tags will only be displayed in browsers that do not support the <audio> element.

Example:

```
<audio controls>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
  Your browser does not support the audio tag.
</audio>
```

There are three supported audio formats in HTML: MP3, WAV, and OGG.

Attributes

Attribute	Value	Description
autoplay	autoplay	Specifies that the audio will start playing as soon as it is ready
controls	controls	Specifies that audio controls should be displayed (such as a play/pause button etc)
loop	loop	Specifies that the audio will start over again, every time it is finished
muted	muted	Specifies that the audio output should be muted
preload	auto metadata none	Specifies if and how the author thinks the audio should be loaded when the page loads
src	*URL*	Specifies the URL of the audio file

Tag

Definition:

Make some text bold (without marking it as important):

The tag specifies bold text without any extra importance.

Example:

This is normal text - and this is bold text.

Tip: You can also use the following CSS to set bold text: "font-weight: bold;".

```
<p>This is normal text - <span style="font-weight:bold;">and this is bold text</span>.</p>
```

<base> Tag

Definition:

Specify a default URL and a default target for all links on a page.

The <base> tag specifies the base URL and/or target for all relative URLs in a document.

The <base> tag must have either an href or a target attribute present, or both.

There can only be one single <base> element in a document, and it must be inside the <head> element.

Example:

```
<head>
  <base href="https://www.w3schools.com/" target="_blank">
</head>

<body>
<img src="images/stickman.gif" width="24" height="39" alt="Stickman">
<a href="tags/tag_base.asp">HTML base Tag</a>
</body>
```

<basefont> Tag

Definition:

The <basefont> tag was used in HTML 4 to specify a default text-color, font-size or font-family for all the text in an HTML document.

Specify a default text-color for a page (with CSS)

Specify a default font-family for a page (with CSS)

Example:

```
<style>
body {
  color: red;
  font-family: courier, serif;
}
</style>
</head>
<body>
<h1>This is a heading</h1>
<p>This is a paragraph.</p>
</body>
```

<bdi> Tag

Definition:

BDI stands for Bi-Directional Isolation. The <bdi> tag isolates a part of text that might be formatted in a different direction from other text outside it. This element is useful when embedding user-generated content with an unknown text direction.

Example:

```
<ul>
  <li>User <bdi>hrefs</bdi>: 60 points</li>
  <li>User <bdi>jdoe</bdi>: 80 points</li>
</ul>
```

<bdo> Tag

Definition:

BDO stands for Bi-Directional Override. The <bdo> tag is used to override the current text direction. Required. Specifies the text direction of the text inside the <bdo> element. Required. Specifies the text direction of the text inside the <bdo> element.

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

<bdo dir="ltr">
This text will go right-to-left.
</bdo>
```

<big> Tag

Definition:

The <big> tag was used in HTML 4 to define bigger text.

Not Supported in HTML5.

Specify different font-sizes for HTML elements (with CSS):

Example:

```
<html><head><style>
p.ex1 {
  font-size: 30px;
}
p.ex2 {
  font-size: 50px;
}
</style></head><body>
<p>This is a normal paragraph.</p>
<p class="ex1">This is a bigger paragraph.</p>
<p class="ex2">This is a much bigger paragraph.</p>
</body></html>
```

<blockquote> Tag

Definition:

The <blockquote> tag specifies a section that is quoted from another source. (Reference)

Browsers usually indent <blockquote> elements (look at example below to see how to remove the indentation).

Example:

```
<body>

<p>Here is a quote from WWF's website:</p>

<blockquote
cite="http://www.worldwildlife.org/who/index.html">

For 50 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million globally.

</blockquote>

</body>
```

<body> Tag

Definition:

The <body> tag defines the document's body.

The <body> element contains all the contents of an HTML document, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.

Note: There can only be one <body> element in an HTML document.

Example:

```
<html>
<head>
  <title>Title of the document</title>
</head>

<body>
  <h1>This is a heading</h1>
  <p>This is a paragraph.</p>
</body>

</html>
```


 Tag

Definition:

The
 tag inserts a single line break.

The
 tag is useful for writing addresses or poems.

The
 tag is an empty tag which means that it has no end tag.

Example:

To force
 line breaks
 in a text,
 use the br
 element.

<button> Tag

Definition:

The <button> tag defines a clickable button.

Inside a <button> element you can put text (and tags like <i>, <b>, ,
, <img>, etc.). That is not possible with a button created with the <input> element!

Tip: Always specify the type attribute for a <button> element, to tell browsers what type of button it is.

Example:

```
<button type="button">Click Me!</button>

<html><head><style>
.button {
  border: none;
  color: white;
  padding: 15px 32px;
  text-align: center;
  text-decoration: none;
  display: inline-block;
  font-size: 16px;
  margin: 4px 2px;
  cursor: pointer;
}
</style></head><body>
<button class="button button1">Green</button>
<button class="button button2">Blue</button>
</body></html>
```

<canvas> Tag

Definition:

The <canvas> tag is used to draw graphics, on the fly, via scripting (usually JavaScript).

The <canvas> tag is transparent, and is only a container for graphics, you must use a script to actually draw the graphics.

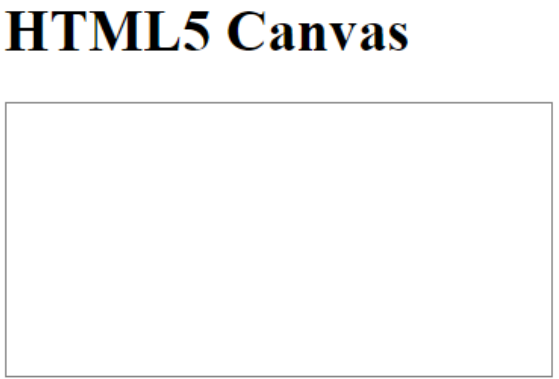
Any text inside the <canvas> element will be displayed in browsers with JavaScript disabled and in browsers that do not support <canvas>.

Example:

```
<!DOCTYPE html>
<html>
<body>
<h1>HTML5 Canvas</h1>

<canvas id="myCanvas" width="300" height="150"
style="border:1px solid grey"></canvas>

</body>
</html>
```



<caption> Tag

Definition:

The <caption> tag defines a table caption.

The <caption> tag must be inserted immediately after the <table> tag.

Tip: By default, a table caption will be center-aligned above a table. However, the CSS properties text-align and caption-side can be used to align and place the caption.

Example:

```
<table>
  <caption>Monthly savings</caption>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
</table
```

Tag

Definition:

The tag was used in HTML4 to center-align text.

Not Supported in HTML5.

Center-align text (with CSS):

Example:

```
<html>
<head>
<style>
h1 {text-align: center;}
p {text-align: center;}
div {text-align: center;}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>
<div>This is a div.</div>

</body>
</html>
```

<cite> Tag

Definition:

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.).

Note: A person's name is not the title of a work.

The text in the <cite> element usually renders in italic.

Example:

```
<p><cite>The Scream</cite> by Edward Munch.
Painted in 1893.</p>
```

<code> Tag

Definition:

The <code> tag is used to define a piece of computer code. The content inside is displayed in the browser's default monospace font.

Tip: This tag is not deprecated. However, it is possible to achieve richer effect by using CSS (see example below).

Tag	Description
<samp>	Defines sample output from a computer program
<kbd>	Defines keyboard input
<var>	Defines a variable
<pre>	Defines preformatted text

Example:

```
<p>The HTML <code>button</code> tag defines a clickable button.</p>

<p>The CSS <code>background-color</code> property defines the background color of an element.</p>
```

The HTML `button` tag defines a clickable button.

<col> Tag

Definition:

The <col> tag specifies column properties for each column within a <colgroup> element. The <col> tag is useful for applying styles to entire columns, instead of repeating the styles for each cell, for each row.

<colgroup> Tag

Definition:

The <colgroup> tag specifies a group of one or more columns in a table for formatting. The <colgroup> tag is useful for applying styles to entire columns, instead of repeating the styles for each cell, for each row.

Example:

Set the background color of the three columns with the <colgroup> and <col> tags:

```
<table>
  <colgroup>
    <col span="2" style="background-color:red">
    <col style="background-color:yellow">
  </colgroup>
  <tr>
    <th>ISBN</th>
    <th>Title</th>
    <th>Price</th>
  </tr>
  <tr>
    <td>3476896</td>
    <td>My first HTML</td>
    <td>$53</td>
  </tr>
</table>
```

Note: The <colgroup> tag must be a child of a <table> element, after any <caption> elements and before any <thead>, <tbody>, <tfoot>, and <tr> elements.

<data> Tag

Definition:

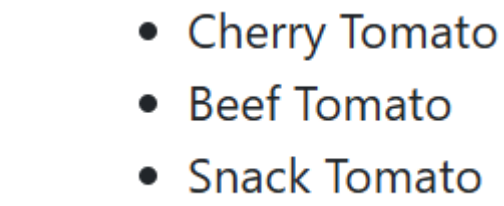
The <data> tag is used to add a machine-readable translation of a given content.

This element provides both a machine-readable value for data processors, and a human-readable value for rendering in a browser.

Tip: If the content is time- or date-related, use the <time> element instead.

Example:

```
<ul>
  <li><data value="21053">Cherry Tomato</data></li>
  <li><data value="21054">Beef Tomato</data></li>
  <li><data value="21055">Snack Tomato</data></li>
</ul>
```



<datalist> Tag

Definition:

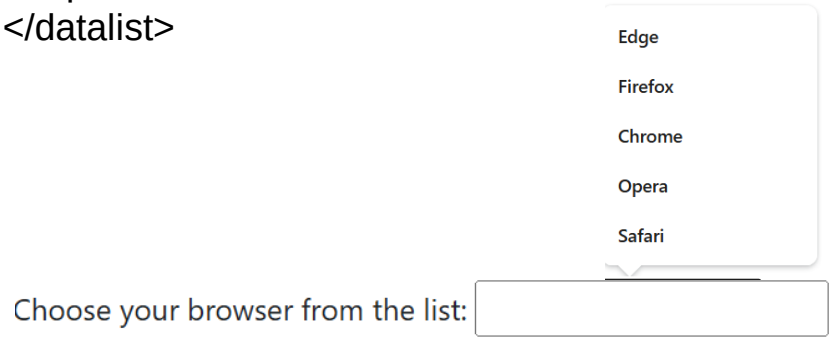
The <datalist> tag specifies a list of pre-defined options for an <input> element.

The <datalist> tag is used to provide an "autocomplete" feature for <input> elements. Users will see a drop-down list of pre-defined options as they input data.

The <datalist> element's id attribute must be equal to the <input> element's list attribute (this binds them together)

Example:

```
<label for="browser">Choose your browser from the list:</label>
<input list="browsers" name="browser">
  <datalist id="browsers">
    <option value="Edge">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Opera">
    <option value="Safari">
  </datalist>
```



<dd> Tag

Definition:

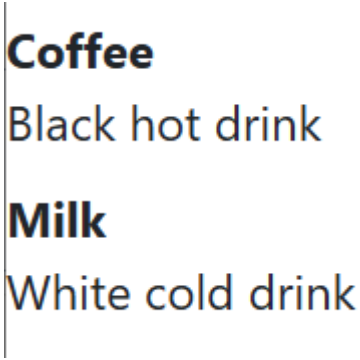
The <dd> tag is used to describe a term/name in a description list.

The <dd> tag is used in conjunction with <dl> (defines a description list) and <dt> (defines terms/names).

Inside a <dd> tag you can put paragraphs, line breaks, images, links, lists, etc.

Example:

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



<del> Tag

Definition:

The <del> tag defines text that has been deleted from a document. Browsers will usually strike a line through deleted text.

Example:

A text with a deleted part, and a new, inserted part:

```
<p>My favorite color is <del>blue</del>
<ins>red</ins>!</p>
```

My favorite color is ~~blue~~ red!

<details> Tag

Definition:

The <details> tag specifies additional details that the user can open and close on demand.

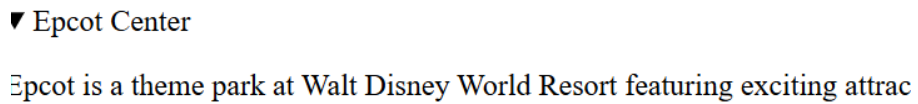
The <details> tag is often used to create an interactive widget that the user can open and close. By default, the widget is closed. When open, it expands, and displays the content within.

Any sort of content can be put inside the <details> tag.

Example:

Specify details that the user can open and close on demand:

```
<details>
  <summary>Epcot Center</summary>
  <p>Epcot is a theme park at Walt Disney World Resort featuring exciting attractions, international pavilions, award-winning fireworks and seasonal special events.</p>
</details>
```



<dfn> Tag

Definition:

The <dfn> tag stands for the "definition element", and it specifies a term that is going to be defined within the content.

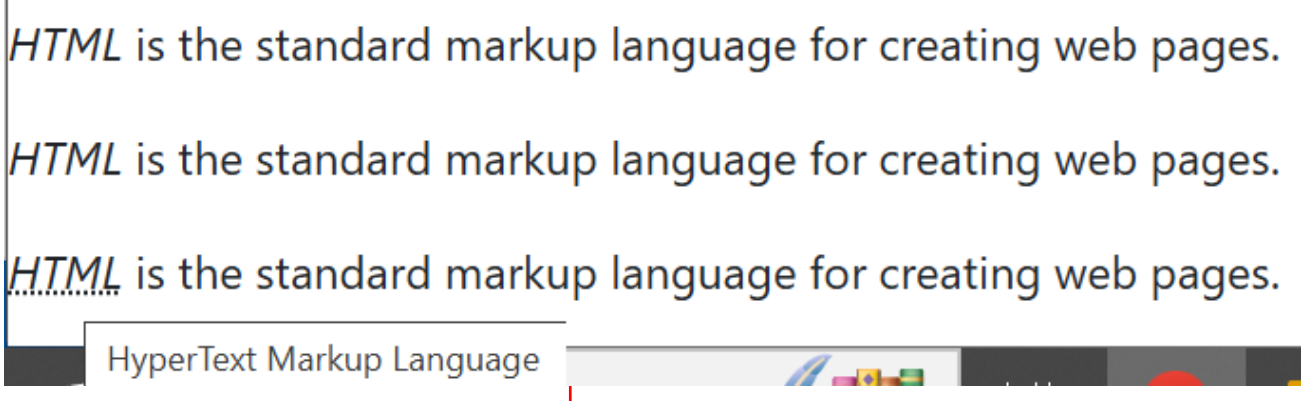
The nearest parent of the <dfn> tag must also contain the definition/explanation for the term.

Example:

```
<p><dfn>HTML</dfn> is the standard markup language for creating web pages.</p>

<p><dfn title="HyperText Markup Language">HTML</dfn> is the standard markup language for creating web pages.</p>

<p><dfn><abbr title="HyperText Markup Language">HTML</abbr></dfn> is the standard markup language for creating web pages.</p>
```



<dialog> Tag

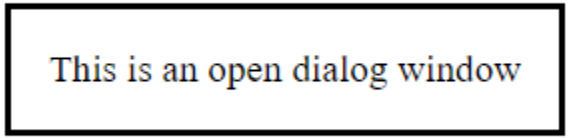
Definition:

The <dialog> tag defines a dialog box or subwindow.

The <dialog> element makes it easy to create popup dialogs and modals on a web page.

Example:

```
<dialog open>This is an open dialog window</dialog>
```



Tag

Definition:

The tag defines a division or a section in an HTML document.

The tag is used as a container for HTML elements - which is then styled with CSS or manipulated with JavaScript.

The tag is easily styled by using the class or id attribute.

Any sort of content can be put inside the tag!

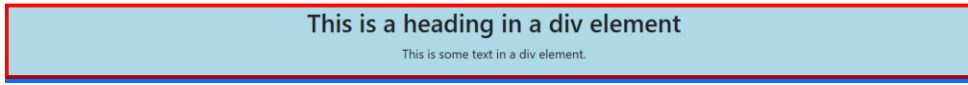
Note: By default, browsers always place a line break before and after the element.

Example:

```
<html> <head>
<style>
.myDiv {
  border: 5px outset red;
  background-color: lightblue;
  text-align: center;
}
</style>
</head>
<body>

<div class="myDiv">
  <h2>This is a heading in a div element</h2>
  <p>This is some text in a div element.</p>
</div>

</body></html>
```



<dl> Tag

Definition:

The <dl> tag defines a description list.

The <dl> tag is used in conjunction with <dt> (defines terms/names) and <dd> (describes each term/name).

Example:

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

Coffee
Black hot drink

Milk
White cold drink

<dt> Tag

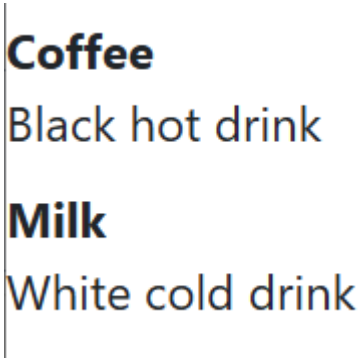
Definition:

The <dt> tag defines a term/name in a description list.

The <dt> tag is used in conjunction with <dl> (defines a description list) and <dd> (describes each term/name).

Example:

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



Tag

Definition:

The tag is used to define emphasized text. The content inside is typically displayed in italic.

A screen reader will pronounce the words in with an emphasis, using verbal stress.

Example:

```
<p>You <em>have</em> to hurry up!</p>

<p>We <em>cannot</em> live like this.</p>
```

You*have*to hurry up!

We*cannot*live like this.

<embed> Tag

Definition:

The <embed> tag defines a container for an external resource, such as a web page, a picture, a media player, or a plug-in application.

Most browsers no longer support Java Applets and Plug-ins.

Suggestion:

To display a picture, it is better to use the <img> tag.

To display HTML, it is better to use the <iframe> tag.

To display video or audio, it is better to use the <video> and <audio> tags.

Example:

An embedded image:

```
<embed type="image/jpg" src="pic_trulli.jpg" width="300
" height="200">
```

An embedded HTML page:

```
<embed type="text/html" src="snippet.html" width="500"
 height="200">
```

An embedded video:

```
<embed type="video/webm" src="video.mp4" width="40
0" height="300">
```

<fieldset> Tag

Definition:

The <fieldset> tag is used to group related elements in a form.

The <fieldset> tag draws a box around the related elements.

Example:

```
<form action="/action_page.php">
  <fieldset>
    <legend>Personalia:</legend>
    <label for="fname">First name:</label>
    <input type="text" id="fname" name="fname"><br>
<br>
    <label for="lname">Last name:</label>
    <input type="text" id="lname" name="lname"><br>
<br>
    <label for="email">Email:</label>
    <input type="email" id="email" name="email"><br>
<br>
    <label for="birthday">Birthday:</label>
    <input type="date" id="birthday" name="birthday">
<br><br>
    <input type="submit" value="Submit">
  </fieldset>
</form>
```

<figcaption> Tag

Definition:

The <figcaption> tag defines a caption for a <figure> element.

The <figcaption> element can be placed as the first or last child of the <figure> element.

<figure> Tag

The <figure> tag specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.

While the content of the <figure> element is related to the main flow, its position is independent of the main flow, and if removed it should not affect the flow of the document.

Example:

```
<figure>
  <img src="pic_trulli.jpg" alt="Trulli"
style="width:100%">
  <figcaption>Fig.1 - Trulli, Puglia, Italy.</figcaption>
</figure>
```

The figure and figcaption element

Fig.1 - Trulli, Puglia, Italy.

<font> Tag

Definition:

The <font> tag was used in HTML 4 to specify the font face, font size, and color of text.

Not Supported in HTML5.

Set the color of text (with CSS):

Example:

```
<p style="color:red">This is a paragraph.</p>

<p style="font-family:verdana">This is a paragraph.</p>

<p style="font-size:30px">This is a paragraph.</p>
```

<footer> Tag

Definition:

The <footer> tag defines a footer for a document or section. A <footer> element typically contains:

- authorship information
- copyright information
- contact information
- sitemap
- back to top links
- related documents

You can have several <footer> elements in one document.

Example:

```
<footer>
  <p>Author: Hege Refsnes</p>
  <p><a
href="mailto:hege@example.com">hege@example.com
</a></p>
</footer>
```

<frame> Tag

Definition:

The <frame> tag was used in HTML 4 to define one particular window (frame) within a <frameset>.

Not Supported in HTML5.

<frameset> Tag

Definition:

The <frameset> tag was used in HTML 4 to define a frameset.

Not Supported in HTML5.

Example:

Instead of <frame> tag use the <iframe> tag to embed another document within the current HTML document:

<iframe src="https://www.google.co.in/"></iframe>

<h1> to <h6> Tag

Definition:

The <h1> to <h6> tags are used to define HTML headings.

<h1> defines the most important heading. <h6> defines the least important heading.

Note: Only use one <h1> per page - this should represent the main heading/subject for the whole page. Also, do not skip heading levels - start with <h1>, then use <h2>, and so on.

Example:

```
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
```

<head> Tag

Definition:

The <head> element is a container for metadata (data about data) and is placed between the <html> tag and the <body> tag.

Metadata is data about the HTML document. Metadata is not displayed.

Metadata typically define the document title, character set, styles, scripts, and other meta information.

Example:

The following elements can go inside the <head> element:

<title> (required in every HTML document)

<style>

<base>

<link>

<meta>

<script>

<noscript>

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Title of the document</title>
</head>
<body>
```

<header> Tag

Definition:

The <header> element represents a container for introductory content or a set of navigational links.

A <header> element typically contains:

- one or more heading elements (<h1> - <h6>)
- logo or icon
- authorship information

Note: You can have several <header> elements in one HTML document. However, <header> cannot be placed within a <footer>, <address> or another <header> element.

Example:

```
<article>
  <header>
    <h1>A heading here</h1>
    <p>Posted by John Doe</p>
    <p>Some additional information here</p>
  </header>
  <p>Lorem Ipsum dolor set amet....</p>
</article>
```

<hgroup> Tag

Definition:

The <hgroup> tag is used to surround a heading and one or more <p> elements.

The heading inside the <hgroup> element can be any of the <h1> to <h6> headings.

Note: The <hgroup> element does not render as anything special in a browser. However, you can use CSS to style the <hgroup> element and its content.

Example:

```
<hgroup>
  <h2>Norway</h2>
  <p>The land with the midnight sun.</p>
</hgroup>
```

<hr> Tag

Definition:

The <hr> tag defines a thematic break in an HTML page (e.g. a shift of topic).

The <hr> element is most often displayed as a horizontal rule that is used to separate content (or define a change) in an HTML page.

Example:

HTML is the standard markup language for creating Web pages. HTML describes the structure of a Web page, and consists of a series of elements. HTML elements tell the browser how to display the content.

<hr>

CSS is a language that describes how HTML elements are to be displayed on screen, paper, or in other media. CSS saves a lot of work, because it can control the layout of multiple web pages all at once.

<html> Tag

Definition:

The <html> tag represents the root of an HTML document.

The <html> tag is the container for all other HTML elements (except for the <!DOCTYPE> tag).

Note: You should always include the lang attribute inside the <html> tag, to declare the language of the Web page. This is meant to assist search engines and browsers.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Title of the document</title>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Tag

Definition:

The tag defines a part of text in an alternate voice or mood. The content inside is typically displayed in italic.

The tag is often used to indicate a technical term, a phrase from another language, a thought, a ship name, etc.

Use the element only when there is not a more appropriate semantic element, such as:

, ,<mark>, <cite>, <dfn>

Example:

Lorem ipsum is the most popular filler text in history.

The RMS Titanic, a luxury steamship, sank on April 15, 1912 after striking an iceberg.

<iframe> Tag

Definition:

The <iframe> tag specifies an inline frame.

An inline frame is used to embed another document within the current HTML document.

Example:

```
<iframe src="https://www.w3schools.com" title="W3Schools Free Online Web Tutorials"></iframe>
```

<img> Tag

Definition:

The <img> tag is used to embed an image in an HTML 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 has two required attributes:

src - Specifies the path to the image

alt - Specifies an alternate text for the image, if the image for some reason cannot be displayed

Note: Also, always specify the width and height of an image. If width and height are not specified, the page might flicker while the image loads.

Example:

```
<img src="img_girl.jpg" alt="Girl in a
jacket" width="500" height="600">
```

Tip: To link an image to another document, simply nest the <img> tag inside an <a> tag

<input> Tag

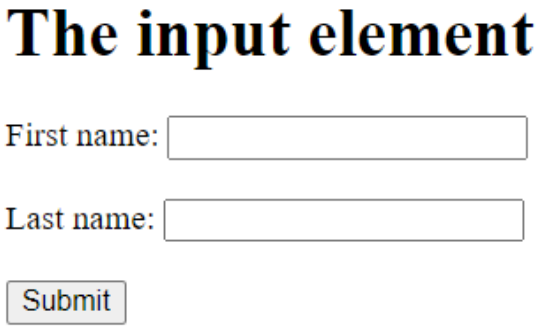
Definition:

The <input> tag specifies an input field where the user can enter data. The <input> element is the most important form element. The <input> element can be displayed in several ways, depending on the type attribute. The different input types are as follows:

<input type="button">
<input type="checkbox">
<input type="color">
<input type="date">
<input type="datetime-local">
<input type="email">
<input type="file">
<input type="hidden">
<input type="image">
<input type="month">
<input type="number">
<input type="password">
<input type="radio">
<input type="range">
<input type="reset">
<input type="search">
<input type="submit">
<input type="tel">
<input type="text">
<input type="time">
<input type="url">
<input type="week">

Example:

```
<form action="/action_page.php">
  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname"><br>
<br>
  <label for="lname">Last name:</label>
  <input type="text" id="lname" name="lname"><br>
<br>
  <input type="submit" value="Submit">
</form>
```



<ins> Tag

Definition:

The <ins> tag defines a text that has been inserted into a document. Browsers will usually underline inserted text.

A text with a deleted part, and a new, inserted part:

Example:

```
<p>My favorite color
is <del>blue</del> <ins>red</ins>!</p>
```

<kbd> Tag

Definition:

Define some text as keyboard input in a document:

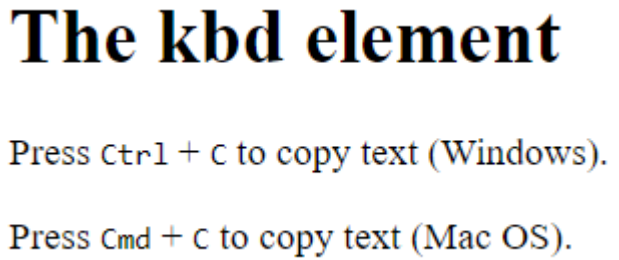
The <kbd> tag is used to define keyboard input. The content inside is displayed in the browser's default monospace font.

Tag	Description
<code>	Defines a piece of computer code
<samp>	Defines sample output from a computer program
<var>	Defines a variable
<pre>	Defines preformatted text

Example:

```
<p>Press <kbd>Ctrl</kbd> + <kbd>C</kbd> to copy text (Windows).</p>

<p>Press <kbd>Cmd</kbd> + <kbd>C</kbd> to copy text (Mac OS).</p>
```



<label> Tag

Definition:

The <label> tag defines a label for several elements. Proper use of labels with the elements above will benefit: Screen reader users (will read out loud the label, when the user is focused on the element)

<input type="checkbox">, <input type="color">
<input type="date">, <input type="datetime-local">
<input type="email">, <input type="file">
<input type="month">, <input type="number">
<input type="password">, <input type="radio">
<input type="range">, <input type="search">
<input type="tel">, <input type="text">
<input type="time">, <input type="url">
<input type="week">, <meter>
<progress>, <select>, <textarea>

Example:

```
<form action="/action_page.php">
  <input type="radio" id="html" name="fav_language" value="HTML">
  <label for="html">HTML</label><br>
  <input type="radio" id="css" name="fav_language" value="CSS">
  <label for="css">CSS</label><br>
  <input type="radio" id="javascript" name="fav_language" value="JavaScript">
  <label for="javascript">JavaScript</label><br><br>
  <input type="submit" value="Submit">
</form>
```

<legend> Tag

Definition:

The <legend> tag defines a caption for the <fieldset> element.

Example:

```
<form action="/action_page.php">
  <fieldset>
    <legend>Personalia:</legend>
    <label for="fname">First name:</label>
    <input type="text" id="fname" name="fname"><br>
<br>
    <label for="lname">Last name:</label>
    <input type="text" id="lname" name="lname"><br>
<br>
    <label for="email">Email:</label>
    <input type="email" id="email" name="email"><br>
<br>
    <label for="birthday">Birthday:</label>
    <input type="date" id="birthday" name="birthday">
<br><br>
    <input type="submit" value="Submit">
  </fieldset>
</form>
```

 Tag

Definition:

The <li> tag defines a list item.

The <li> tag is used inside ordered lists(<ol>), unordered lists (<ul>), and in menu lists (<menu>).

In <ul> and <menu>, the list items will usually be displayed with bullet points.

In <ol>, the list items will usually be displayed with numbers or letters.

Example:

```
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>
```

The ol element defines an ordered list:

1. Coffee
2. Tea
3. Milk

The ul element defines an unordered list:

- Coffee
- Tea
- Milk

<link> Tag

Definition:

The <link> tag defines the relationship between the current document and an external resource.

The <link> tag is most often used to link to external style sheets or to add a favicon to your website.

The <link> element is an empty element, it contains attributes only.

Example:

```
<head>
  <link rel="stylesheet" href="styles.css">
</head>
```

<main> Tag

Definition:

The <main> tag specifies the main content of a document.

The content inside the <main> element should be unique to the document. It should not contain any content that is repeated across documents such as sidebars, navigation links, copyright information, site logos, and search forms.

Note: There must not be more than one <main> element in a document. The <main> element must NOT be a descendant of an <article>, <aside>, <footer>, <header>, or <nav> element.

Example:

```
<main>
  <h1>Most Popular Browsers</h1>
  <p>Chrome, Firefox, and Edge are the most used browsers today.</p>

  <article>
    <h2>Google Chrome</h2>
    <p>Google Chrome is a web browser developed by Google, released in 2008. Chrome is the world's most popular web browser today!</p>
  </article>
</main>
```

<map> Tag

Definition:

The <map> tag is used to define an image map. An image map is an image with clickable areas.

The required name attribute of the <map> element is associated with the <img>'s usemap attribute and creates a relationship between the image and the map.

The <map> element contains a number of <area> elements, that defines the clickable areas in the image map.

Example:

```
<img src="workplace.jpg" alt="Workplace"
usemap="#workmap" width="400" height="379">

<map name="workmap">
  <area shape="rect" coords="34,44,270,350"
alt="Computer" href="computer.htm">
  <area shape="rect" coords="290,172,333,250"
alt="Phone" href="phone.htm">
  <area shape="circle" coords="337,300,44" alt="Cup of
coffee" href="coffee.htm">
</map>
```

<mark> Tag

Definition:

The <mark> tag defines text that should be marked or highlighted.

Example:

```
<p>Do not forget to buy <mark>milk</mark> today.</p>
```

Do not forget to buy milk today.

<menu> Tag

Definition:

The <menu> tag defines an unordered list of content.

Use the <menu> tag together with the <li> tag to create menu items.

Note: <menu> tag is an alternative to the <ul> tag and browsers will treat these two lists equally.

Example:

```
<menu>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</menu>
```

- Coffee
- Tea
- Milk

<meta> Tag

Definition:

The <meta> tag defines metadata about an HTML document. Metadata is data (information) about data. <meta> tags always go inside the <head> element, and are typically used to specify character set, page description, keywords, author of the document, and viewport settings.

Metadata will not be displayed on the page, but is machine parsable.

Metadata is used by browsers (how to display content or reload page), search engines (keywords), and other web services.

Example:

```
<html>
<head>
  <meta charset="UTF-8">
  <meta name="description" content="Web tutorials">
  <meta name="keywords"
content="HTML,CSS,XML,JavaScript">
  <meta name="author" content="John Doe">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
</head>
<body>
<p>All meta information goes in the head section...</p>
</body>
</html>
```

Output:

All meta information goes in the head section...

<meter> Tag

Definition:

The <meter> tag defines a scalar measurement within a known range, or a fractional value. This is also known as a gauge.

Examples: Disk usage, the relevance of a query result, etc.

Note: The <meter> tag should not be used to indicate progress (as in a progress bar). For progress bars, use the <progress> tag.

Example:

```
<label for="disk_c">Disk usage C:</label>
<meter id="disk_c" value="2" min="0" max="10">2 out of 10</meter><br>

<label for="disk_d">Disk usage D:</label>
<meter id="disk_d" value="0.6">60%</meter>
```

The meter element is used to display a gauge:

Disk usage C:
Disk usage D:

Note: The meter tag is not supported in Edge 12 (or earlier).

<nav> Tag

Definition:

The <nav> tag defines a set of navigation links.

Notice that NOT all links of a document should be inside a <nav> element. The <nav> element is intended only for major blocks of navigation links.

Browsers, such as screen readers for disabled users, can use this element to determine whether to omit the initial rendering of this content.

Example:

```
<nav>
  <a href="/html/">HTML</a> |
  <a href="/css/">CSS</a> |
  <a href="/js/">JavaScript</a> |
  <a href="/python/">Python</a>
</nav>
```

The nav element defines a set of navigation links:

HTML | CSS | JavaScript | Python

<noframes> Tag

Definition:

The <noframes> tag was used in HTML 4 to act as a fallback tag for browsers that did not support frames.

Not Supported in HTML5.

.

Example:

<iframe src="https://www.google.com"></iframe>

<noscript> Tag

Definition:

The <noscript> tag defines an alternate content to be displayed to users that have disabled scripts in their browser or have a browser that doesn't support script.

The <noscript> element can be used in both <head> and <body>. When used inside <head>, the <noscript> element could only contain <link>, <style>, and <meta> elements.

.

Example:

```
<h1>The noscript element</h1>

<p>A browser with JavaScript disabled will show the text inside the noscript element ("Hello World!" will not be displayed).</p>

<script>
document.write("Hello World!")
</script>
<noscript>Sorry, your browser does not support JavaScript!</noscript>

</body>
</html>
```

<object> Tag

Definition:

The <object> tag defines a container for an external resource.

The external resource can be a web page, a picture, a media player, or a plug-in application.

- To embed a picture, it is better to use the <img> tag.
- To embed HTML, it is better to use the <iframe> tag.
- To embed video or audio, it is better to use the <video> and <audio> tags.

Example:

An embedded image:

```
<object data="pic_trulli.jpg" width="300"
height="200"></object>
```

An embedded HTML page:

```
<object data="snippet.html" width="500"
height="200"></object>
```

An embedded video:

```
<object data="video.mp4" width="400"
height="300"></object>
```

 Tag

Definition:

The <ol> tag defines an ordered list. An ordered list can be numerical or alphabetical.

The <li> tag is used to define each list item.

Tip: Use CSS to style lists.

Attribute	Value	Description
reversed	reversed	Specifies that the list order should be reversed (9,8,7...)
start	*number*	Specifies the start value of an ordered list
type	1 A a I i	Specifies the kind of marker to use in the list

Example:

```
<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

1. Coffee
2. Tea
3. Milk

```
<ol start="50">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

50. Coffee
51. Tea
52. Milk

<optgroup> Tag

Definition:

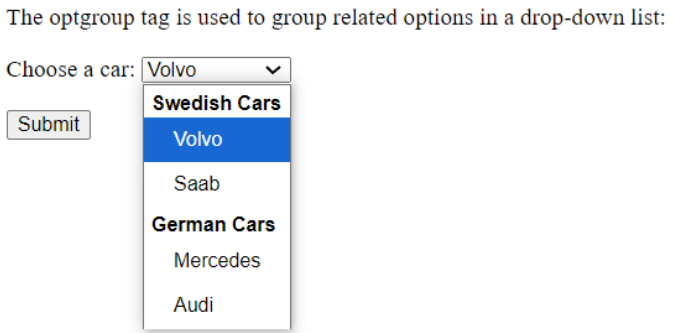
The <optgroup> tag is used to group related options in a <select> element (drop-down list).

If you have a long list of options, groups of related options are easier to handle for a user.

Example:

```
<label for="cars">Choose a car:</label>
<select  name="cars" id="cars">
  <optgroup label="Swedish Cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
  </optgroup>
  <optgroup label="German Cars">
    <option value="mercedes">Mercedes</opti
on>
    <option value="audi">Audi</option>
  </optgroup>
</select>
```

Attribute	Value	Description
disabled	disabled	Specifies that an option-group should be disabled
label	*text*	Specifies a label for an option-group



<option> Tag

Definition:

The <option> tag defines an option in a select list.

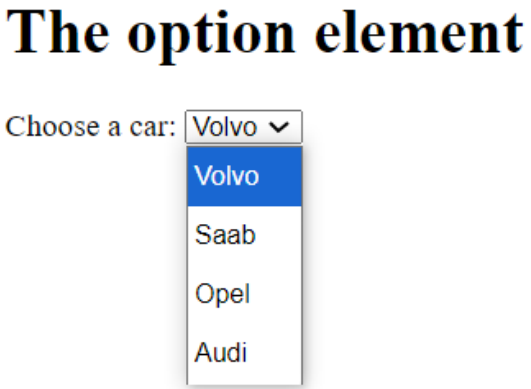
<option> elements go inside a <select>, <optgroup>, or <datalist> element.

Note: The <option> tag can be used without any attributes, but you usually need the value attribute, which indicates what is sent to the server on form submission.

Example:

```
<label for="cars">Choose a car:</label>

<select id="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="opel">Opel</option>
  <option value="audi">Audi</option>
</select>
```



<output> Tag

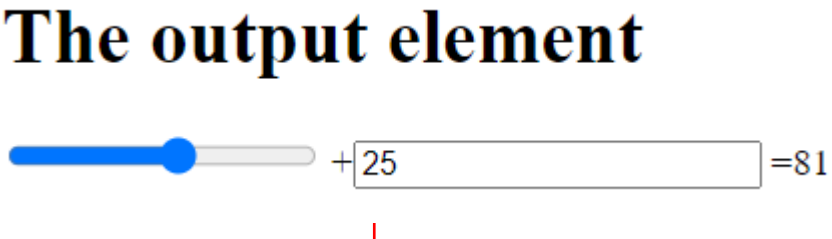
Definition:

The <output> tag is used to represent the result of a calculation (like one performed by a script).

Example:

```
<form oninput="x.value=parseInt(a.value)+parseInt(b.value)">
  <input type="range" id="a" value="50">
  +<input type="number" id="b" value="25">
  =<output name="x" for="a b"></output>
</form>
```

Attribute	Value	Description
for	*element_id*	Specifies the relationship between the result of the calculation, and the elements used in the calculation
form	*form_id*	Specifies which form the output element belongs to
name	*name*	Specifies a name for the output element



<p> Tag

Definition:

The <p> tag defines a paragraph.

Browsers automatically add a single blank line before and after each <p> element.

Example:

```
<p>This is some text in a paragraph.</p>
```

<param> Tag

Definition:

The <param> tag is used to define parameters for an <object> element. Eg: Set the "autoplay" parameter to "true", so the sound will start playing

Example:

```
<object data="horse.wav">
  <param name="autoplay" value="true">
</object>
```

Attribute	Value	Description
name	*name*	Specifies the name of a parameter
value	*value*	Specifies the value of the parameter

<picture> Tag

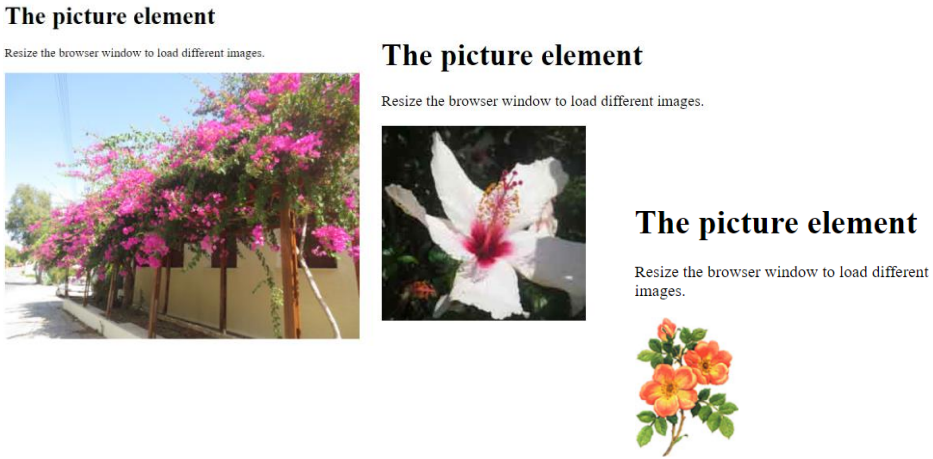
Definition:

The <picture> tag gives web developers more flexibility in specifying image resources. The most common use of the <picture> element will be for art direction in responsive designs. Instead of having one image that is scaled up or down based on the viewport width, multiple images can be designed to more nicely fill the browser viewport.

The <picture> element contains two tags: one or more <source> tags and one <img> tag. The browser will look for the first <source> element where the media query matches the current viewport width, and then it will display the proper image (specified in the srcset attribute). The <img> element is required as the last child of the <picture> element, as a fallback option if none of the source tags matches.

Example:

```
<picture>
  <source media="(min-
width:650px)" srcset="img_pink_flowers.jpg">
  <source media="(min-
width:465px)" srcset="img_white_flower.jpg">
  <img src="img_orange_flowers.jpg" alt="Flow
ers" style="width:auto;">
</picture>
```



<pre> Tag

Definition:

The <pre> tag defines preformatted text.

Text in a <pre> element is displayed in a fixed-width font, and the text preserves both spaces and line breaks. The text will be displayed exactly as written in the HTML source code.

Tag	Description
<code>	Defines a piece of computer code
<samp>	Defines sample output from a computer program
<kbd>	Defines keyboard input
<var>	Defines a variable

Example:

```
<pre>
Text in a pre element
is displayed in a fixed-width
font, and it preserves
both      spaces and
line breaks
</pre>
```

<progress> Tag

Definition:

The <progress> tag represents the completion progress of a task.

Tip: Always add the <label> tag for best accessibility practices!

Tip: Use the <progress> tag in conjunction with JavaScript to display the progress of a task.

Note: The <progress> tag is not suitable for representing a gauge (e.g. disk space usage or relevance of a query result). To represent a gauge, use the <meter> tag instead.

Example:

```
<label for="file">Downloading
progress:</label>
<progress id="file" value="32" max="100"> 32
% </progress>
```

<q> Tag

Definition:

The <q> tag defines a short quotation.

Browsers normally insert quotation marks around the quotation.

Example:

```
<p>WWF's goal is to:
<q>Build a future where people live in
harmony with nature.</q>
We hope they succeed.</p>
```

The q element

WWF's goal is to: “Build a future where people live in harmony with nature.” We hope they succeed.

<rp> Tag

Definition:

The <rp> tag can be used to provide parentheses around a ruby text, to be shown by browsers that do not support ruby annotations. Use <rp> together with <ruby> and <rt>: The <ruby> element consists of one or more characters that needs an explanation/pronunciation, and an <rt> element that gives that information, and an optional <rp> element that defines what to show for browsers that not support ruby annotations.

<rt> Tag

Definition:

The <rt> tag defines an explanation or pronunciation of characters (for East Asian typography) in a ruby annotation.

Example:

```
<ruby>
漢 <rp>(</rp><rt>ㄏㄢˋ</rt><rp>)</rp>
</ruby>
```

<ruby> Tag

Definition:

The <ruby> tag specifies a ruby annotation. A ruby annotation is a small extra text, attached to the main text to indicate the pronunciation or meaning of the corresponding characters. This kind of annotation is often used in Japanese publications.

<s> Tag

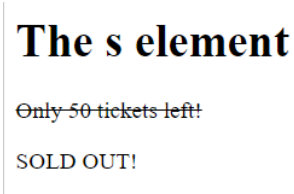
Definition:

The <s> tag specifies text that is no longer correct, accurate or relevant. The text will be displayed with a line through it.

The <s> tag should not be used to define deleted text in a document, use the <del> tag for that.

Example:

```
<p><s>Only 50 tickets left!</s></p>
<p>SOLD OUT!</p>
```



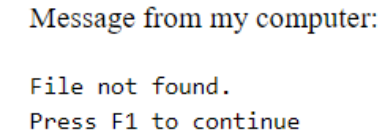
<sample> Tag

Definition:

The <samp> tag is used to define sample output from a computer program. The content inside is displayed in the browser's default monospace font.

Example:

```
<p>Message from my computer:</p>
<p><samp>File not found.<br>Press F1 to continue</samp></p>
```



<script> Tag

Definition:

The <script> tag is used to embed a client-side script (JavaScript).

The <script> element either contains scripting 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.

Example:

```
<script>
document.getElementById("demo").innerHTML = "Hello JavaScript!";
</script>
```

<search> Tag

Definition:

The <search> tag is used to specify that here comes a set of elements that is related to search.

Elements inside a <search> elements can typically be form elements used to perform a search.

Note: The <search> element does not render as anything special in a browser. However, you can use CSS to style the <search> element and its content.

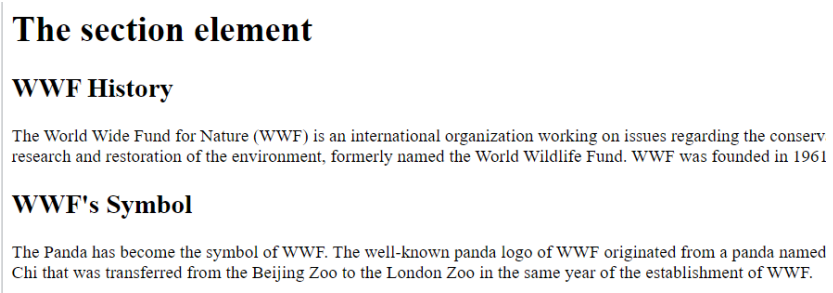
Example:

```
<search>
  <form>
    <input name="fsrch" id="fsrch" placeholder="Search itvedant">
  </form>
</search>
```

<section> Tag

Definition:

The <section> tag defines a section in a document.



The section element

WWF History

The World Wide Fund for Nature (WWF) is an international organization working on issues regarding the conserv research and restoration of the environment, formerly named the World Wildlife Fund. WWF was founded in 1961

WWF's Symbol

The Panda has become the symbol of WWF. The well-known panda logo of WWF originated from a panda named Chi that was transferred from the Beijing Zoo to the London Zoo in the same year of the establishment of WWF.

Example:

```
<section>
  <h2>WWF History</h2>
  <p>The World Wide Fund for Nature (WWF) is an international organization working on issues regarding the conservation, research and restoration of the environment, formerly named the World Wildlife Fund. WWF was founded in 1961.</p>
</section>

<section>
  <h2>WWF's Symbol</h2>
  <p>The Panda has become the symbol of WWF. The well-known panda logo of WWF originated from a panda named Chi Chi that was transferred from the Beijing Zoo to the London Zoo in the same year of the establishment of WWF.</p>
</section>
```

<select> Tag

Definition:

The <select> element is used to create a drop-down list.

The <select> element is most often used in a form, to collect user input.

The name attribute is needed to reference the form data after the form is submitted (if you omit the name attribute, no data from the drop-down list will be submitted).

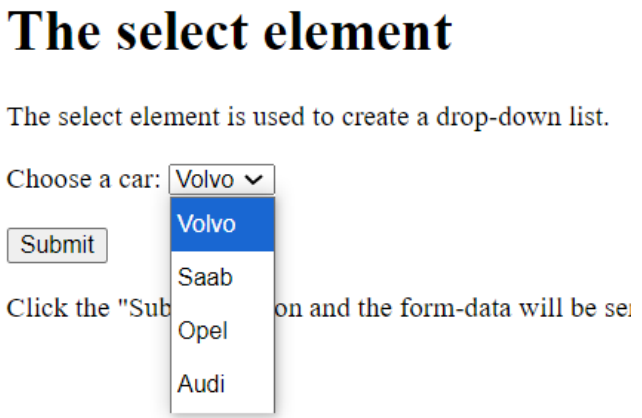
The id attribute is needed to associate the drop-down list with a label.

The <option> tags inside the <select> element define the available options in the drop-down list.

Example:

```
<label for="cars">Choose a car:</label>

<select name="cars" id="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="mercedes">Mercedes</option>
  <option value="audi">Audi</option>
</select>
```



<small> Tag

Definition:

The <small> tag defines smaller text (like copyright and other side-comments).

Example:

```
<p>This is some normal text.</p>
<p><small>This is some smaller text.</small></p>
```

<source> Tag

Definition:

The <source> tag is used to specify multiple media resources for media elements, such as <video>, <audio>, and <picture>.

The <source> tag allows you to specify alternative video/audio/image files which the browser may choose from, based on browser support or viewport width. The browser will choose the first <source> it supports.

Example:

```
<audio controls>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
  Your browser does not support the audio element.
</audio>
```

Tag

Definition:

The tag is an inline container used to mark up a part of a text, or a part of a document.

The tag is easily styled by CSS or manipulated with JavaScript using the class or id attribute.

The tag is much like the element, but is a block-level element and is an inline element.

Example:

```
<p>My mother has <span style="color:blue;font-weight:bold">blue</span> eyes and my father has <span style="color:darkolivegreen;font-weight:bold">dark green</span> eyes.</p>
```

<strike> Tag

Definition:

The <strike> tag was used in HTML 4 to define strikethrough text.

Not Supported in HTML5.

Tag

Definition:

The tag is used to define text with strong importance. The content inside is typically displayed in bold.

Example:

Instead use the <del> tag to define deleted text:

```
<p>My favorite color
is <del>blue</del> <ins>red</ins>!</p>
```

Use the <s> tag to mark up text that is no longer correct:

```
<p><s>My car is blue.</s></p>
```

Example:

```
<strong>This text is important!</strong>
```

This text is normal.

This text is important!

<style> Tag

Definition:

The <style> tag is used to define style information (CSS) for a document.

Inside the <style> element you specify how HTML elements should render in a browser.

The <style> element must be included inside the <head> section of the document.

Example:

```
<html>
<head>
<style>
  h1 {color:red;}
  p {color:blue;}
</style>
</head>
<body>

<h1>A heading</h1>
<p>A paragraph.</p>

</body>
</html>
```

<sub> Tag

Definition:

The <sub> tag defines subscript text. Subscript text appears half a character below the normal line, and is sometimes rendered in a smaller font. Subscript text can be used for chemical formulas, like H2O.

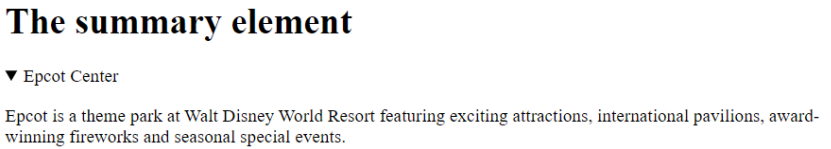
Example:

```
<p>This text contains <sub>subscript</sub> text.</p>
```

<summary> Tag

Definition:

The <summary> tag defines a visible heading for the <details> element. The heading can be clicked to view/hide the details.



Example:

```
<details>
  <summary>Epcot Center</summary>
  <p>Epcot is a theme park at Walt Disney World Resort featuring exciting attractions, international pavilions, award-winning fireworks and seasonal special events.</p>
</details>
```

<sup> Tag

Definition:

The <sup> tag defines superscript text. Superscript text appears half a character above the normal line, and is sometimes rendered in a smaller font.

Example:

```
<p>This text contains <sup>superscript</sup> text.</p>
```

<svg> Tag

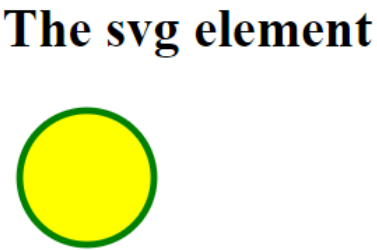
Definition:

The <svg> tag defines a container for SVG graphics.

SVG has several methods for drawing paths, boxes, circles, text, and graphic images.

Example:

```
<svg width="100" height="100">
  <circle cx="50" cy="50" r="40" stroke="green" stroke-width="4" fill="yellow" />
</svg>
```



<table> Tag

Definition:

The <table> tag defines an HTML table.

An HTML table consists of one <table> element and one or more <tr>, <th>, and <td> elements.

The <tr> element defines a table row, the <th> element defines a table header, and the <td> element defines a table cell.

An HTML table may also include <caption>, <colgroup>, <thead>, <tfoot>, and <tbody> elements.

Example:

```
<table>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
</table>
```

The table element

Month	Savings
January	$100
February	$80

<td> Tag

Definition:

The <td> tag defines a standard data cell in an HTML table.

An HTML table has two kinds of cells:

Header cells - contains header information (created with the <th> element)

Data cells - contains data (created with the <td> element)

The text in <td> elements are regular and left-aligned by default.

The text in <th> elements are bold and centered by default.

Example:

```
<table>
  <tr>
    <td>Cell A</td>
    <td>Cell B</td>
  </tr>
  <tr>
    <td>Cell C</td>
    <td>Cell D</td>
  </tr>
</table>
```

<td> Tag

Definition:

The <td> tag defines a standard data cell in an HTML table.

An HTML table has two kinds of cells:

Header cells - contains header information (created with the <th> element)

Data cells - contains data (created with the <td> element)

The text in <td> elements are regular and left-aligned by default.

The text in <th> elements are bold and centered by default.

Example:

```
<table>
  <tr>
    <td>Cell A</td>
    <td>Cell B</td>
  </tr>
  <tr>
    <td>Cell C</td>
    <td>Cell D</td>
  </tr>
</table>
```

<textarea> Tag

Definition:

The <textarea> tag defines a multi-line text input control.

The <textarea> element is often used in a form, to collect user inputs like comments or reviews.

A text area can hold an unlimited number of characters, and the text renders in a fixed-width font (usually Courier).

The size of a text area is specified by the cols and rows attributes (or with CSS).

The name attribute is needed to reference the form data after the form is submitted (if you omit the name attribute, no data from the text area will be submitted).

The id attribute is needed to associate the text area with a label.

Example:

```
<label for="review">Review of HTML:</label>

<textarea id="review" name="review" rows="4" cols="50
">
You will learn how to make a website. We offer free
tutorials in all web development technologies.
</textarea>
```

<tfoot> Tag

Definition:

The <tfoot> tag is used to group footer content in an HTML table.

The <tfoot> element is used in conjunction with the <thead> and <tbody> elements to specify each part of a table (footer, header, body).

Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page.

Note: The <tfoot> element must have one or more <tr> tags inside.

Example:

```
<table>
  <thead>
    <tr>
      <th>Month</th>
      <th>Savings</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>January</td>
      <td>$100</td>
    </tr>
    <tr>
      <td>February</td>
      <td>$80</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td>Sum</td>
      <td>$180</td>
    </tr>
  </tfoot>
</table>
```

Month	Savings
January	$100
February	$80
Sum	$180

<th> Tag

Definition:

The <th> tag defines a header cell in an HTML table.

An HTML table has two kinds of cells:

Header cells - contains header information (created with the <th> element)

Data cells - contains data (created with the <td> element)

The text in <th> elements are bold and centered by default.

The text in <td> elements are regular and left-aligned by default.

Example:

```
<table>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$80</td>
  </tr>
</table>
```

<thead> Tag

Definition:

The <thead> tag is used to group header content in an HTML table.

The <thead> element is used in conjunction with the <tbody> and <tfoot> elements to specify each part of a table (header, body, footer).

Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page.

Note: The <thead> element must have one or more <tr> tags inside.

Example:

```
<table>
  <thead>
    <tr>
      <th>Month</th>
      <th>Savings</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>January</td>
      <td>$100</td>
    </tr>
    <tr>
      <td>February</td>
      <td>$80</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td>Sum</td>
      <td>$180</td>
    </tr>
  </tfoot>
</table>
```

Month	Savings
January	$100
February	$80
Sum	$180

<time> Tag

Definition:

The <time> tag defines a specific time (or datetime).

The datetime attribute of this element is used translate the time into a machine-readable format so that browsers can offer to add date reminders through the user's calendar, and search engines can produce smarter search results.

Example:

```
<p>Open from <time>10:00</time> to <time>21:00</time> every weekday.</p>

<p>I have a date on <time datetime="2008-02-14 20:00">Valentines day</time>.</p>
```

Open from 10:00 to 21:00 every weekday.

I have a date on Valentines day.

Note: The time element does not render as anything special in any of the major browsers.

<title> Tag

Definition:

The <title> tag defines the title of the document. The title must be text-only, and it is shown in the browser's title bar or in the page's tab.

The <title> tag is required in HTML documents!

The contents of a page title is very important for search engine optimization (SEO)! The page title is used by search engine algorithms to decide the order when listing pages in search results.

The <title> element:

- defines a title in the browser toolbar
- provides a title for the page when it is added to favorites
- displays a title for the page in search-engine results

Note: You can NOT have more than one `<title>` element in an HTML document

Example:

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Elements Reference</title>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Tips:

- Go for a longer, descriptive title (avoid one- or two-word titles)
- Search engines will display about 50-60 characters of the title, so try not to have titles longer than that
- Do not use just a list of words as the title (this may reduce the page's position in search results)

<tr> Tag

Definition:

The <tr> tag defines a row in an HTML table.

A <tr> element contains one or more <th> or <td> elements.

Example:

```
<table>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
  <tr>
    <td>February</td>
    <td>$80</td>
  </tr>
</table>
```

Month	Savings
January	$100
February	$80

<track> Tag

Definition:

The <track> tag specifies text tracks for <audio> or <video> elements.

This element is used to specify subtitles, caption files or other files containing text, that should be visible when the media is playing.

Tracks are formatted in WebVTT format (.vtt files).

Example:

```
<video width="320" height="240" controls>
  <source src="forrest_gump.mp4" type="video/mp4">
  <source src="forrest_gump.ogg" type="video/ogg">
  <track src="fgsubtitles_en.vtt" kind="subtitles" srclang="en" label="Eng
lish">
  <track src="fgsubtitles_no.vtt" kind="subtitles" srclang="no" label="Nor
wegian">
</video>
```

VTT - A VTT file is a type of captioning file that is compatible with most major media hosting platforms. “VTT file” is essentially shorthand for WebVTT file or Web Video Text to Track File. Captions created in the WebVTT format will contain a . vtt extension.

Attribute	Value	Description
default	default	Specifies that the track is to be enabled if the user's preferences do not indicate that another track would be more appropriate
kind	captions chapters descriptions metadata subtitles	Specifies the kind of text track
label	*text*	Specifies the title of the text track
src	*URL*	Required. Specifies the URL of the track file
srclang	*language_code*	Specifies the language of the track text data (required if kind="subtitles")

<tt> Tag

Definition:

The <tt> tag was used in HTML 4 to define teletype text.

Not Supported in HTML.

Consider the <kbd> element (for keyboard input), the <var> element (for variables), the <code> element (for computer code), the <samp> element (for computer output), or use CSS instead.

Example:

```
<p style="font-family:'Lucida Console', monospace">This text is monospace text.</p>
```

This text is normal.

This text is monospace text.

<u> Tag

Definition:

The <u> tag represents some text that is unarticulated and styled differently from normal text, such as misspelled words or proper names in Chinese text. The content inside is typically displayed with an underline. You can change this with CSS (see example below).

Example:

```
<p>This is some <u>mispeled</u> text.</p>
```

Tip: Avoid using the <u> element where it could be confused for a hyperlink!

 Tag

Definition:

The <ul> tag defines an unordered (bulleted) list.

Use the <ul> tag together with the <li> tag to create unordered lists.

Tip: Use CSS to style lists.

Tip: For ordered lists, use the <ol> tag.

Example:

```
<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>
```

- Coffee
- Tea
- Milk

<var> Tag

Definition:

The <var> tag is used to defines a variable in programming or in a mathematical expression. The content inside is typically displayed in italic.

Example:

```
<p>The area of a triangle is: 1/2 x <var>b</var> x <var>h</var>, where <var>b</var> is the base, and <var>h</var> is the vertical height.</p>
```

The area of a triangle is: 1/2 x *b* x *h*, where *b* is the base, and *h* is the vertical height.

<video> Tag

Definition:

The <video> tag is used to embed video content in a document, such as a movie clip or other video streams.

The <video> tag contains one or more <source> tags with different video sources. The browser will choose the first source it supports.

The text between the <video> and </video> tags will only be displayed in browsers that do not support the <video> element.

There are three supported video formats in HTML: MP4, WebM, and OGG.

Example:

```
<video width="320" height="240" controls>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
  Your browser does not support the video tag.
</video>
```

Browser	MP4	WebM	Ogg
Edge	YES	YES	YES
Chrome	YES	YES	YES
Firefox	YES	YES	YES
Safari	YES	YES	NO
Opera	YES	YES	YES

<wbr> Tag

Definition:

The <wbr> (Word Break Opportunity) tag specifies where in a text it would be ok to add a line-break.

Tip: When a word is too long, the browser might break it at the wrong place. You can use the <wbr> element to add word break opportunities.

Example:

<p>To learn AJAX, you must be familiar with the XML<wbr>Http<wbr>Request Object.</p>

Try to shrink the browser window, to view how the very long word in the paragraph below will break:

This is a veryveryveryveryveryveryveryveryveryveryveryveryveryveryveryveryveryverylongwordthatwillbreakatspecific placeswhenthebrowserwindowisresized.

Web Storage Api

What is HTML Web Storage?

- ✓ With web storage, web applications can store data locally within the user's browser.
- ✓ Before HTML5, application data had to be stored in cookies, included in every server request. Web storage is more secure, and large amounts of data can be stored locally, without affecting website performance.
- ✓ Unlike cookies, the storage limit is far larger (at least 5MB) and information is never transferred to the server.
- ✓ Web storage is per origin (per domain and protocol). All pages, from one origin, can store and access the same data.

Web Storage Objects

- HTML5 introduces two mechanisms, similar to HTTP session cookies, for storing structured data on the client side and to overcome following drawbacks.
- Cookies are included with every HTTP request, thereby slowing down your web application by transmitting the same data.
- Cookies are included with every HTTP request, thereby sending data unencrypted over the internet.
- Cookies are limited to about 4 KB of data. Not enough to store required data.
- **The two storages are**
  - **local storage (stores data with no expiration date)**
  - **session storage (stores data for one session (data is lost when the browser tab is closed)**
- The latest versions of pretty much every browser supports HTML5 Storage including Internet Explorer.

Local Storage

- **The Local Storage is designed for storage that spans multiple windows, and lasts beyond the current session. In particular, Web applications may wish to store megabytes of user data, such as entire user-authored documents or a user's mailbox, on the client side for performance reasons.**
- Again, cookies do not handle this case well, because they are transmitted with every request.
- **HTML5 introduces the localStorage attribute which would be used to access a page's local storage area without no time limit and this local storage will be available whenever you would use that page.**
- Following is the code which would set a local storage variable and access that variable every time this page is accessed, even next time, when you open the window.

Example

```
<!DOCTYPE html>
   <html>
   <body>
      <script type = "text/javascript">
         if( localStorage.hits ) {
            localStorage.hits = Number(localStorage.hits) +1;
         } else {
            localStorage.hits = 1;
         }
         document.write("Total Hits :" + localStorage.hits );
      </script>
      <p>Refresh the page to increase number of hits.</p>
      <p>Close the window and open it again and check the result.</p>
   </body>
</html>
```

Session storage

- **The Session Storage is designed for scenarios where the user is carrying out a single transaction, but could be carrying out multiple transactions in different windows at the same time.**
- For example, if a user buying plane tickets in two different windows, using the same site.
- If the site used cookies to keep track of which ticket the user was buying, then as the user clicked from page to page in both windows, the ticket currently being purchased would "leak" from one window to the other, potentially causing the user to buy two tickets for the same flight without really noticing.
- HTML5 introduces the sessionStorage attribute which would be used by the sites to add data to the session storage, and it will be accessible to any page from the same site opened in that window, i.e., session and as soon as you close the window, the session would be lost.

Example

```
<!DOCTYPE HTML>
<html>
   <body>
      <script type = "text/javascript">
         if( sessionStorage.hits ) {
            sessionStorage.hits = Number(sessionStorage.hits) +1;
         } else {
            sessionStorage.hits = 1;
         }
         document.write("Total Hits :" + sessionStorage.hits );
      </script>
      <p>Refresh the page to increase number of hits.</p>
      <p>Close the window and open it again and check the result.</p>
    </body>
</html>
```

MCQ

MULTIPLE CHOICE QUESTION

HTML Basic

HTML stands for

A. HighText Machine Language
B. HyperText and links Markup Language
C. HyperText Markup Language
D. None of these

HTML Basic

Who is the father of HTML?

A. Rasmus Lerdorf
B. Tim Berners-Lee
C. Brendan Eich
D. Sergey Brin

HTML Basic

The correct sequence of HTML tags for starting a web page is

A. Head, Title, HTML, body
B. HTML, Body, Title, Head
C. HTML, Title, Head, Body
D. HTML, Head, Title, Body

HTML Basic

Which of the following element is responsible for making the text bold in HTML?

A. <pre>
B. <a>
C. <b>
D.

HTML Basic

Which of the following tag is used for inserting the largest heading in HTML?

A. <h3>
B. <h1>
C. <h5>
D. <h6>

HTML Basic

Which character is used to represent the closing of a tag in HTML?

A. \
B. !
C. /
D. .

HTML Basic

HTML tags are enclosed in-

A. # and #
B. { and }
C. ! and ?
D. < and >

HTML Basic

Which of the following is the paragraph tag in HTML?

A. <p>
B. <b>
C. <pre>
D. None of the above

HTML Tables

In HTML tables table row is defined by

A. <th> tag
B. <tr> tag
C. <td> tag
D. <row> tag

HTML Tables

In HTML tables gap between two cells of same tables are known as

A. Cell spacing
B. Cell difference
C. Cell padding
D. All of above

HTML Tables

In HTML tables table header is defined by

A. <th> tag
B. <tr> tag
C. <td> tag
D. <t head> tag

HTML Tables

If you want to merge two or more rows in a table which attribute you can use?

A. Rowmerge
B. Rowspan
C. Colmerge
D. Colspan

HTML Tables

Which tag allows you to add a row in a table?

A. <td> and </td>
B. <cr> and </cr>
C. <th> and </th>
D. <tr> and </tr>

HTML Tables

Which of the following is an attribute of <Table> tag?

A. SRC
B. LINK
C. CELLPADDING
D. BOLD

HTML Tables & List

Which of the following tags are related to Table in HTML ?

A. <table> <row> <column>
B. <table> <tr> <td>
C. <table< <head> <body>
D. <table> <header> <footer>

HTML List

An unordered list in HTML document starts with a

A. tag
B. tag
C. <lu> tag.
D. None

HTML List

For arranging your list items in same way as they were arranged in dictionary which tag you will use?

A.
B.
C.
D. <dl>

HTML List

An ordered list in HTML document starts with a

A. tag
B. tag
C. tag
D. None

HTML List

How can you make a bulleted list?

A. <list>
B. <nl>
C.
D.

HTML List

What tag is used to list individual items of an ordered list?

A. LI
B. OL
C. UL
D. None of above

HTML List

How can you make a numbered list?

A. <dl>
B.
C. <list>
D.

HTML List

HTML supports

A. ordered lists
B. unordered lists
C. both type of lists
D. does not support those types

HTML HyperLinks

Link URL in HTML is specified using _____ attribute.

A. src
B. href
C. link
D. rel

HTML HyperLinks

Following tag Stands for - <a>

A. Active Tag
B. Action Tag
C. Anchor Tag
D. Additional Tag

HTML HyperLinks

Value of Attribute "href" is also called as _____ of the Destination Web Page

A. URM
B. URL
C. URK
D. URS

HTML HyperLinks

URL in HTML stands for _____.

A. Uni Resource Locator
B. Uniform Resource Locator
C. Universal Resource Locator
D. None of these

HTML HyperLinks

Default Style and Color of Unvisited Link in any browser is _____

A. Normal and Blue
B. Underline and Pink
C. Underline and Magento
D. Underlined and Blue

HTML HyperLinks

Default color of active link in browser is _____.

A. red
B. blue
C. green
D. brown

HTML HyperLinks

Which of the Attribute(s) Cannot be Present if the href attribute is not present ?

A. target
B. hreflang
C. rel
D. All of these

HTML HyperLinks

This Your text tag is used to define a

A. Link
B. Class
C. CSS sheet
D. Both A and B

HTML HyperLinks

How can you make an e-mail link?

A.
B. <mail href=”xxx@yyy”>
C. <mail>xxx@yyy
D.

HTML HyperLinks

What is the correct HTML for making a hyperlink?

A. HTML MCQ Quiz
B. HTML MCQ Quiz
C. <http://study2online.com
D. HTML MCQ Quiz

HTML Images

Type of tag used for inserting an image in web document is

A. <imp>
B. <img>
C. <image>
D. <src>

HTML Images

Ismap attribute makes a special image when user click somewhere on image

A. It blinks
B. It hides
C. It opens a hyper link
D. All of above

HTML Images

For specifying height and width of an image which attribute is used in image tag?

A. alt attribute
B. Height and width attribute
C. Style tag
D. Both A and C

HTML Images

"src" attribute for an image specifies what?

A. Text for image
B. Url for an image
C. Alternate image
D. Both A and B

HTML Images

In image tag " alt " attribute specifies what?

A. Alternative text
B. Alternative image
C. Link of image
D. None

HTML Images

A webpage displays a picture. What tag was used to display that picture?

A. picture
B. image
C. img
D. src

HTML Images

When should you use path along with file name of picture in IMG tag?

A. path is optional and not necessary
B. when the location of image file and html file are different
C. when image file and html file both are on same location
D. path is always necessary when inserting image

HTML Images

Which attribute is used with img tag to display the text if image could not load in browser?

A. description
B. name
C. alt
D. id

HTML Frames

Which inline function embeds an independent HTML document into current document?

A.
B.
C. <iframe>
D. <form>

HTML Frames

Which from following is not a type of screen frames in HTML

A. iframe
B. noframe
C. frameset
D. uframe

HTML Frames

What is the use of iframe in HTML?

A. to display a web page within a web page.
B. to display a web page with animation effect.
C. to display a web page without browser.
D. All of the Above.

HTML Frames

The _____attribute in frame tag specifies the web page to load into that frame.

A. Id
B. src
C. href
D. name

HTML Frames

Which attribute of the frameset tag creates two horizontal frame?

A. Both
B. None
C. Cols
D. Rows

HTML Frames

A group of Frame is Called as:

A. List
B. Index
C. FrameSet
D. Form

HTML Frames

Which inline function embeds an independent HTML document into current document?

A. <iframe>
B.
C. <form>
D.

HTML Frames

Which of the following is a tag used in the creation of a frame definition?

A. All of the above
B. <NOFRAMES>
C. <FRAMESET>
D. <FRAME>

HTML5 Web Storage

In localStorage object data _____

A. is deleted after the browser has been closed
B. is not deleted after the browser has been closed
C. can be seen but can not edit
D. can be seen as well as edit

HTML5 Web Storage

In sessionStorage object data _____

A. is not deleted after the browser has been closed
B. can be seen but can’t edit
C. can be seen as well as edit
D. is deleted after the browser has been closed

Projects

HTML - Projects

Project 1: Registration Form, Table, Image Gallery using HTML Tags

Registration form

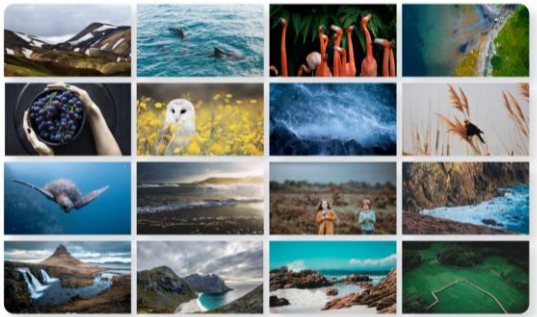
Enter your first name	enter your first name
Enter your last name	
Enter your password	
ReEnter your password	
Enter your email	
Enter your mobile	
Enter your address	
Select your gender	male ○ female ○
Select your hobbies	hobby1 ☐ hobby2 ☐ hobby3 ☐
Select your DOB	dd-mm-yyyy
Select your Country	Select your country ▼
Upload your pic	Choose File No file chosen
	Save My Data Reset Data

Top 10 Grossing Animated Films of All Time

Film Title	Released	Studio	Worldwide Gross	Domestic Gross	International Gross	Budget
The Lion King (2019 remake)	2019	Disney	$1,657,870,986	$543,638,043	$1,114,232,943	$260,000,000
Frozen II	2019	Disney	$1,450,026,933	$477,373,578	$972,653,355	$150,000,000
Frozen	2013	Disney	$1,281,019,275	$400,953,009	$880,066,266	$150,000,000
Incredibles 2	2018	Disney Pixar	$1,243,089,244	$608,581,744	$634,507,500	$200,000,000
Minions	2015	Universal	$1,159,444,662	$336,045,770	$823,398,892	$74,000,000
Toy Story 4	2019	Disney Pixar	$1,073,394,593	$434,038,008	$639,356,585	$200,000,000
Toy Story 3	2010	Disney Pixar	$1,066,970,811	$415,004,880	$651,965,931	$200,000,000
Despicable Me 3	2017	Universal	$1,034,800,131	$264,624,300	$770,175,831	$80,000,000
Finding Dory	2016	Disney Pixar	$1,028,570,942	$486,295,561	$542,275,381	$175,000,000
Zootopia	2016	Disney	$1,023,792,558	$341,268,248	$682,524,310	$150,000,000

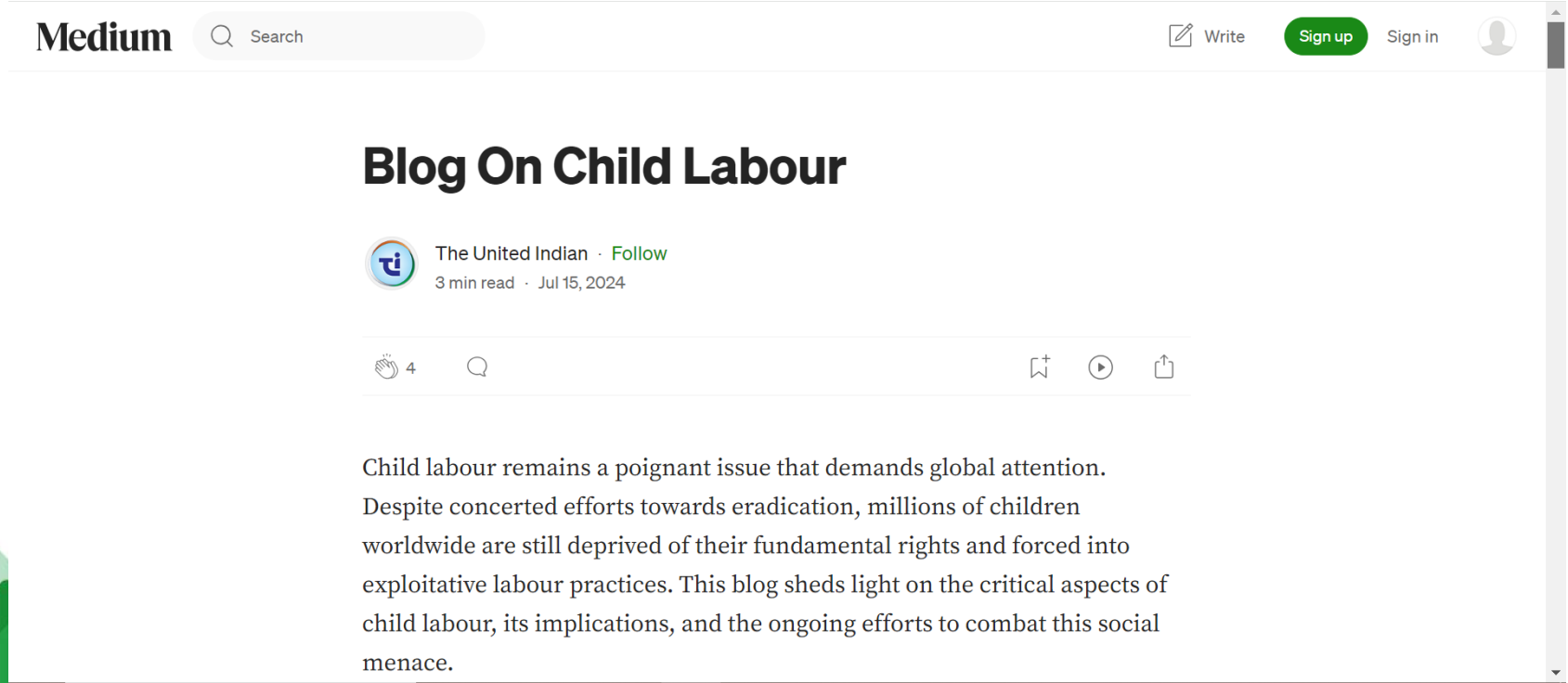
Sources: Wikipedia & Box Office Mojo. Data is current as of March 31, 2021.

Thumbnail View



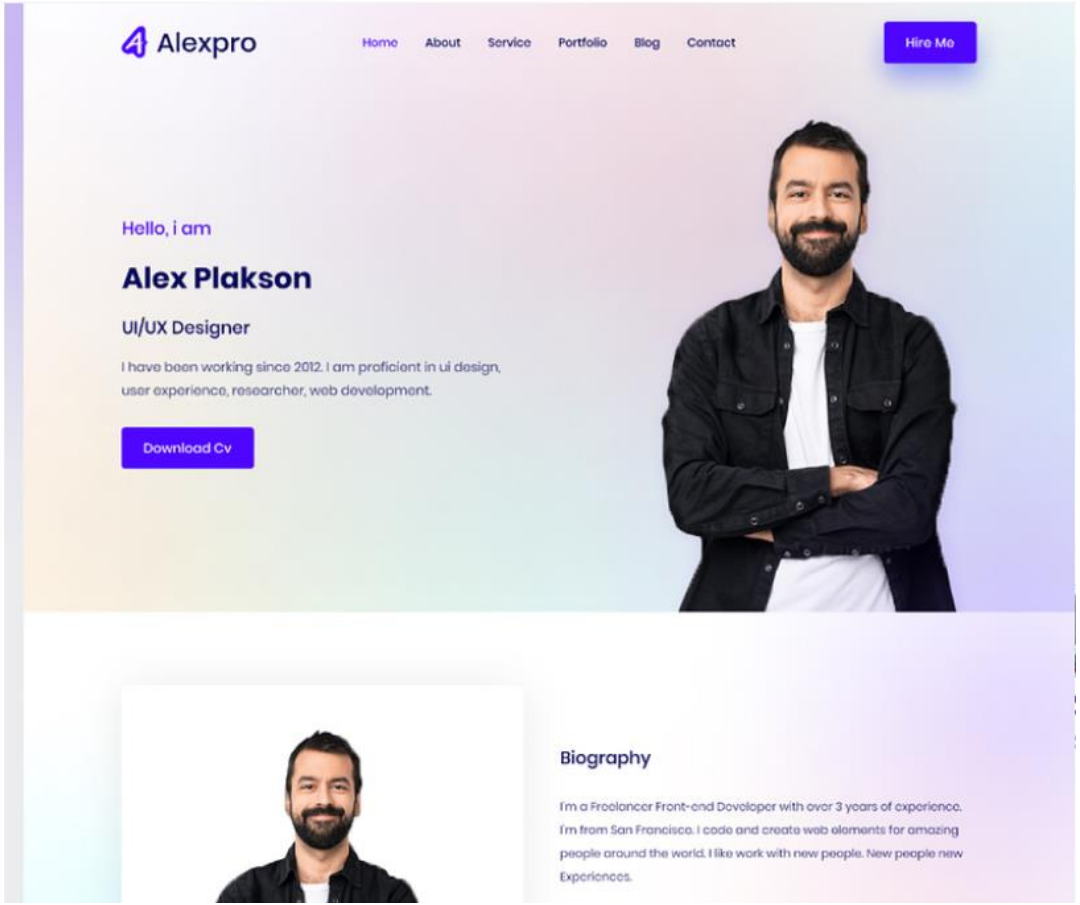
HTML - Projects

Project 2: Simple Blog Layout
https://medium.com/@theunitedindian006/blog-on-child-labour-d6f1ab9031b7



HTML - Projects

Project 3: Personal Portfolio Page



HTML - Test

Complete all the 3 Projects and upload it during your HTML Test

Questions


THANK YOU :)