HTML- Basic

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HTML(Hypertext markup language)

Html is the language of the webpage.

It is used to create websites.

We use html tags to define look & feel of a websites with understanding

of these tags and how to but them together, we can create beautiful

websites easily!

Then why css & javascript ?

HTML is used for defining the layout of a page - A backbone page

structure.

Css is used to add styling to that backbone page created using html.

Javascript is used to program logic for the page layout.

Example :
What happens when a user hovers on a text when to hide or
show elements etc.

A beautiful analogy,

```
Html        = car body (only metal)
Css         = car paint (paint or decoration ect.)
Javascript  = car engine + interior logic
```

We will start learning how to build beautiful layouts in this course :
Installing vs code ,
We can use any text editor of our choice here ,
I am using vs code because it is lightweight open source & from microsoft.

Go to google type vs code & install it

Note : you can write html even in a notepad text editor like vs code just to make these easier.

This is the first example of html code :

Example :

```
<!DOCTYPE html>
<html lang="en">
<head>
     <meta charset="UTF-8">
     <meta http-equiv="X-UA-Compatible" content="IE=edge">
     <meta name="viewport" content="width=device-width,
     initial-scale=1.0">
          <title>Document</title>
</head>
<body>
</body>
</html>
```

Chapter:1 - Creating First Website

We start building a website by creating a file named index.
Html is a special filename which is presented when the website root
address is typed.

A basic HTML page ,

```
<!DOCTYPE html>        //Specifies this is an html5 doc
<html lang="en">       //root of an html page
<head>                         //contains page metadata
<title>Ionx  Website</title>          //contains title
</head>
<body>            //the main body of the page
<h1>This is a heading tag</h1>
<p>this is a paragraph</p>
</body>                //closing body tag
</html>
```

A tag is like a container for either content or other html tags :

HTML→ Browser → Render page

HTML elements = Start tag + Content + End tag

Comments in html :
>   Comments in html are used to mark text which should not be parsed
>   they can help to understand source code.
>   `<!--HTML Comment-->`

Html is a case insensitive language
<H1>and<h1> tags are the same.

IMP Notes :

Head & body tages are children of html tag
Html is the parent of head & body tages
Most of the html elements have opening & closing tag with content in between
Opening & Closing tags
Some html tags have no content.these are called empty elements
We can either use .html or htm extension
you can use "inspect elements" or "View page Source" option
from chrome to look into a website html code

Chapter 1 Exercise :

1. Understand the shortcut of the browser
2. Understand the shortcut of Vs code
3. Install live server
4. Install Xampp
5. Visit www.w3.org

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Chapter 2 - Basic Html Tags

We can add elements inside the body tag to define the page layout.

HTML elements everything from starting to the ending tag.

<body>-->opening tag
---content----
</body>closing tag

HTML Attributes used to add more information corresponding to an html tag.

Example :

<a (anchor tag) href (href attribute) ="mega.com"> Ionx

The Heading Tag,

 Heading tag is used to mask heading in html.
 From h1 to h6 we have tags for the most important to the least important heading.

<h1>Most important heading </h1>
<h2>Most important heading </h2>
<h3>Most important heading </h3>
<h4>Most important heading </h4>
<h5>Most important heading </h5>
<h6>Most important heading </h6>

Note : We should not use html heading to make it thick or bold.
We can either use Single or double quotes in attributes

The Paragraph Tag

Paragraph tags are used to add paragraphs to an html page.

<p>This is a Paragraph </p>

The Anchor Tag

The Anchor tag is used to add links to an existing content inside an html
page.

Click me

The img Tag
 ----
img tag is used to add images in an html page.

<img src="img.jpg">,   ⟵ *relative url of an img*

Bold italic and underline tags

We can use bold,italic and underline tags to highlight the text as follows :

 this is bold
<i> this is   italic </i>
<u>   this isunderline</u>

**
 tag**

Unclosed HTML Tags.
br stands for break line, it breaks the line of the code.
Some HTML tags are not closed, for example br and hr.

<hr> tag
 ----

hr stands for Horizontal Rule. This tag is used to put a line across the webpage.

HTML Meta Tags

<!DOCTYPE> , <title> , <link> , <meta> and <style>

HTML Text Tags

<p>, <h1>, <h2>, <h3>, <h4>, <h5>, <h6>, <strong>, <em>, <abbr>, <acronym>, <address>, <bdo>, <blockquote>, <cite>, <q>, <code>, <ins>, <del>, <dfn>, <kbd>, <pre>, <samp>, <var> and

HTML Link Tags

<a> and <base>

HTML Image and Object Tags

<img>, <area>, <map>, <param>, <object>

HTML List Tags

, <ol>, <li>, <dl>, <dt> and <dd>

HTML Table Tags

<table>, <tr>, <td>, <th>, <tbody>, <thead>, <tfoot>, <col>, <colgroup> and <caption>

HTML Form Tags

<form>, <input>, <textarea>, <select>, <option>, <optgroup>, <button>, <label>, <fieldset> and <legend>

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Tag name & Description

Tag Name	Description
<!-- -->	This tag is used to apply comments in an HTML document.
<!DOCTYPE>	This tag is used to specify the version of HTML

A

<a>	It is termed as an anchor tag and it creates a hyperlink or link.
<address>	It defines the author's contact information of the HTML article.
<area>	It defines the area of an image map.
<article>	HTML Tags List It defines the self-contained content.
<aside>	HTML Tags List It defines content aside from main content. Mainly represented as a sidebar.
<audio>	HTML Tags List It is used to embed sound content in HTML documents.

B

<b>	It is used to make a text bold.
<blockquote>	It is used to define a content which is taken from another source.
<body>	It is used to define the body section of an HTML document.

 	It is used to apply a single line break
<button>	It is used to represent a clickable button

C

<canvas>	HTML Tags List It is used to provide a graphics space within a web document.
<caption>	It is used to define a caption for a table.
<code>	It is used to display a part of programming code in an HTML document.
<col>	It defines a column within a table which represents common properties of columns and used with the <colgroup> element.

D

<data>	HTML Tags List It is used to link the content with the machine-readable translation.
<datalist>	HTML Tags List It is used to provide a predefined list for input options.
<dd>	It is used to provide definition/description of a term in a description list.
<details>	HTML Tags List It defines additional details which the user can either view or hide.
<dialog>	HTML Tags List It defines a dialog box or other interactive components.
<div>	It defines a division or section within an HTML document.
<dl>	It is used to define a description list.
<dt>	It is used to define a term in a description list.

E

<em>	It is used to emphasize the content applied within this element.
<embed>	HTML Tags List It is used as an embedded container for external file/application/media, etc.

F

<fieldset>	It is used to group related elements/labels within a web form
<figcaption>	HTML Tags List It is used to add a caption or explanation for the <figure> element.
<figure>	HTML Tags List It is used to define the self-contained content, and mostly refer to a single unit.
<footer>	HTML Tags List It defines the footer section of a webpage.
<form>	It is used to define an HTML form.

H

<h1> to <h6>	<h1> to <h6>It defines headings for an HTML document from level 1 to level 6.
<head>	It defines the head section of an HTML document.
<header>	HTML Tags List It defines the header of a section or webpage.
<hr>	It is used to apply thematic break between paragraph-level elements.
<html>	It represents the root of an HTML document.

I

<i>	It is used to represent a text in some different voice.
<iframe>	It defines an inline frame which can embed other content.
<img>	It is used to insert an image within an HTML document.
<input>	It defines an input field within an HTML form.

L

<label>	It defines a text label for the input field of form.
<legend>	It defines a caption for content of <fieldset>
	It is used to represent items in a list.
<link>	It represents a relationship between the current document and an external resource.

M

<main>	HTML Tags List It represents the main content of an HTML document.
<map>	It defines an image map with active areas.
<mark>	HTML Tags List It represents a highlighted text.
<menu>	It is used for creating a menu list of commands.
<meta>	It defines metadata of an HTML document.

N

<nav>	HTML Tags List It represents a section of the page to represent navigation links.
<noscript>	It provides an alternative content if a script type is not supported in the browser.

O

<object>	It is used to embed an object in an HTML file.
	It defines an ordered list of items.
<optgroup>	It is used to group the options of a drop-down list.
<option>	It is used to define options or items in a drop-down list.
<output>	HTML Tags List It is used as a container element which can show the result of a calculation.

P

<p>	It represents a paragraph in an HTML document.
<param>	It defines parameter for an <object> element
<picture>	HTML Tags List It defines more than one source element and one image element.
<pre>	It defines preformatted text in an HTML document.
<progress>	HTML Tags List It defines the progress of a task within an HTML document.

Q

<q>	It defines short inline quotations.

S

<s>	It renders text which is no longer correct or relevant.
<select>	It represents a control which provides a menu of options.
<samp>	It is used to represent sample output of a computer program.
<script>	It is used to declare the JavaScript within an HTML document.
<section>	HTML Tags List It defines a generic section for a document.
<small>	It is used to make text fonts one size smaller than the document's base font size.
<source>	HTML Tags List It defines multiple media resources for different media element such as <picture>, <video>, and <audio> element.
<span>	It is used for styling and grouping inline.
<strong>	It is used to define important text.
<style>	It is used to contain style information for an HTML document.
<sub>	It defines a text which displays as a subscript text.
<summary>	HTML Tags List It defines a summary which can be used with <details> tag.
<sup>	It defines a text which is represented as superscript text.
<svg>	It is used as a container of SVG (Scalable Vector Graphics).

T

<table>	It is used to present data in tabular form or to create a table within an HTML document.
<tbody>	It represents the body content of an HTML table and is used along with <thead> and <tfoot>.
<td>	It is used to define cells of an HTML table which contains table data
<textarea>	It is used to define multiple line input, such as comment, feedback, and review, etc.
<tfoot>	It defines the footer content of an HTML table.
<th>	It defines the head cell of an HTML table.
<thead>	It defines the header of an HTML table. It is used along with <tbody> and <tfoot> tags.
<time>	HTML Tags List It is used to define data/time within an HTML document.
<title>	It defines the title or name of an HTML document.
<tr>	It defines the row cells in an HTML table
<track>	It is used to define text tracks for <audio> and <video> elements.

U

<u>	It is used to render enclosed text with an underline.
	It defines an unordered list of items.

V

<var>	It defines variable names used in mathematical or programming contexts.
<video>	HTML Tags List It is used to embed video content with an HTML document.

Chapter 3 - Creating A Page Layout

When we use the right tag in the right place it results in a better page layout, better indexing by search engines and better user experience.

We use the following tag to get the job done,

      <header>
      <main>
      <nav> *//contains nav tag website layout*
      <footer>

Inside the main tag we insert the following tags :

<main>   → The main opening tag
<section> → A page section
<article>   → A self contained content
<aside>   → content aside from the content
</main>   → the main closing tag

Creating a page like this is not necessary but it creates a readole & structured layout also they are useful for seo,

Like attribute

Contact Us --contact page in same tab
Contact us

we can put any content inside an anchor tag
                      (image,headings etc are all allowed)

It the page is inside a directory we need to make sure that we link to the correct page,

we can add links to images like this,

<img src=='a.jpg'width="120">
                    Height will set automatically

The Div tag

Div tag is often used as a container for other elements div is a block level element.
Always takes full width.

The span tag

Span is an inline container take as much width as necessary

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Chapter 4 - SEO (Search Engine Optimization)

We will focus only on html standpoint of seo we will not be looking into keyword building and content optimization aspect of Seo.

Type of Seo

On page seo → can be done by html developer

Off page seo → can be done by a seo expert.

HTML Seo → html developers can implement seo using the following techniques :

```html
<meta charset="utf-8" />
//title is use for title
<title>IONX Networking Training Institutes in
Ahmedabad</title>
//this tag is use for mobile size
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
//this tag is use for page description
<meta name="description" content="Ahmedabad Institute of
Networking Courses. IONX is a well reputed institute offering
professional Netwroning courses, Networking Training
Institutes in Ahmedabad, Best hardware and networking
institute in ahmedabad, CCNA Traning Institute in Ahmedabad,
Ethical Hacking Course in Ahmedabad" />
//this tag is use for page keyword
<meta name="keywords" content="Networking Training Institutes
in Ahmedabad, Hardware Training Institutes in Ahmedabad, Best
hardware and networking institute in ahmedabad, CCNA Traning
```

```html
Institute in Ahmedabad, Cisco Courses in Ahmedabad, CCNP
Course in Ahmedabad, CCNP Traning Institute in Ahmedabad,
CCIE Traning Institute in Ahmedabad, CCIE Courses in
Ahmedabad, RHCA Traning Institute in Ahmedabad, Best Redhat
REHCA Traning Institute in AHmedabad, MCSE Traning Institute
in Ahmedabad, Ethical Hacking Course in Ahmedabad" />
//this tag is use for author information
<meta name="author" content="ionxworld" />
//this tag is use for email
<meta name="email" content="info@ionxworld.com" />
//this tag is use for website name
<meta name="website" content="https://ionxworld.com" />
//this tag is use for website version
<meta name="Version" content="v1.0" />
//this tag is use for theme color
<meta name="theme-color" content="#4285f4">
//this tag is use for most promoting page
<link rel="canonical" href="https://ionxworld.com" />


<!-- favicon -->


<link rel="shortcut icon" href="images/favicon.png">
```

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