HTML

Full Course PDF

About this PDF

In this PDF, we have covered all the topics of HTML(Hyper Text Markup Language), in detail.

We have used some real-life examples for better understanding. Hope you will enjoy this PDF as we have also used some funny things in between because
(Padhai ke Sath Masti is very important 😆)

Audience

This course is basically for a person like you who want to make a career in frontend development. If you are beginner then you are at right place.

Requirement

1. Ofcourse (Laptop, Computer) 😁

2. Use of Code Editor (Notepad, Notepad++, Sublime, code, Brackets, etc)

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Are you ready?? 😆

To chaliye Shuru karte hai pehle topic se

Get ready with laptop, pen, notebook 😎

HTML Introduction

HTML stands for?

==> Hyper Text Markup Language

Ye hai
HTML 😁

Use of HTML?

==> It is used to create the structure of web pages.

Hypertext - Hypertext refers to text that contains links or hyperlinks to other content, such as images, videos, audio files, web pages, or other documents. It allows users to navigate from one content to another just by clicking the links.

Markup - It consists of a set of tags, elements, and attributes which is used to create the structure of web pages.

Language - Computer system understands and uses to Render commands.

Imp Note : HTML is not programming language it is markup language. (Remember this line always 😁) for better understanding you can search meme on this 😜

HTML is Not Case Sensitive: The HTML standard does not require lowercase tags, but W3C recommends lowercase in HTML, and demands lowercase for stricter document types like XHTML

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title> Page Title </title>
</head>
<body>

    <h1>Heading</h1>
    <p>Paragraph</p>

</body>
</html>
```

We will see all the above elements & tags in detail.

Stay Tuned for more...

HTML – Basic Tags

<!DOCTYPE html>   Document type

<html>   Main element of HTML document

<head>   Contains Metadata like title, keywords, author

<title>   Title for the document

<body>   Content of the document

<h1>-<h6>   HTML Headings

<p>   HTML Paragraph

<a>   used for hyperlink to another webpage

<img>   used to add images in the document

 and <ol>   used to create ordered or unordered list

   used list items

<table>   used to create tables

<tr>   used to create tables row

<td>   used to create tables column

<form>   Used for HTML form for user input

<input>   Used for input control

<select>   Used for drop-down list

<option>   Used for option in a drop-down list

<button>   Used for clickable button

--------------------*Topic End*--------------------

HTML – Elements

- HTML elements are used to create the structure, content, and layout of a web page.
- HTML elements are represented by tags, which are enclosed in angle brackets (< >).

Examples -
<h1>--<h6>, <p>, <img>, <a>, <ul>, <li>, <table>, <form>, etc

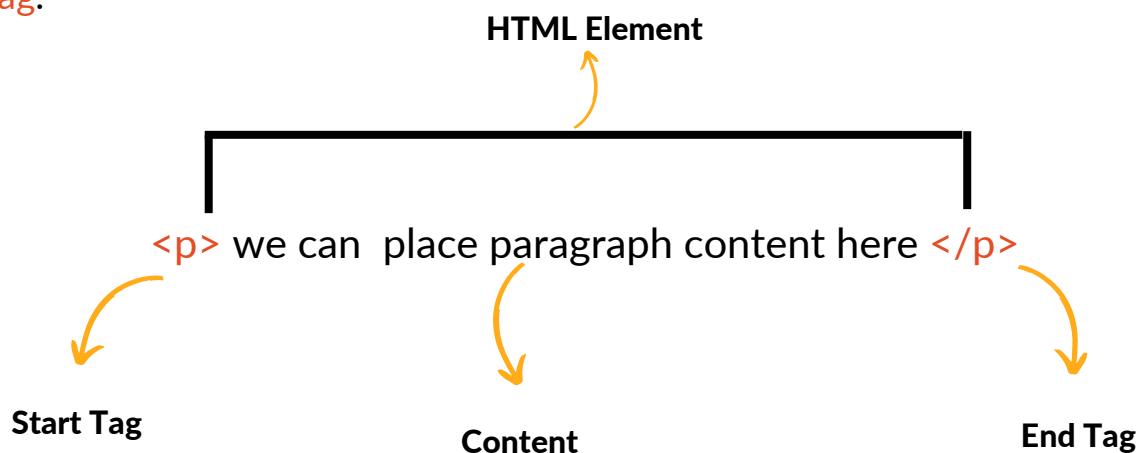ab aap bologe yahi sb to tags me use kiya ab elements me bhi same 😎 😣

take a chill pill 😁. *Lemme clear the doubt and tell you the difference between elements and tags.*

HTML Elements: They are represented by the tags

HTML Tags: Used to define HTML elements.

Note: An HTML element is started by a starting tag. then contains content, it ends with a closing tag.

HTML Element

<p> we can place paragraph content here </p>

Start Tag

Content

End Tag

--------------------*Topic End*--------------------

HTML – Attributes

- HTML attribute is used for additional information
- Attributes are placed in the start tag
- Attribute have name and value.

Examples -
`<div width = "100%">this is div element</div>`

In the above example

width ---> name
100% --> value

Note - Attribute values should always be enclosed in quotation marks.

Some Core Attribute

- **id** - Unique identifier for an HTML element.
- **title -** Specifies a title or tooltip for an HTML element.
- **href -** Specifies the URL of the page the link
- **class -** Specifies one or more class names for an HTML element.
- **style -** Specifies inline CSS styles for an HTML element.
- **lang -** Specifies the language of the content inside an HTML
- **height -** Used to set the height
- **width -** Use to set the width
- **alt -** Used to set the alternative text of the image

-------------------Topic End-------------------

HTML – Heading

- HTML Heading is used to add the heading in the web page.
- There are 6 heading h1, h2, h3, h4, h5, h6
- Each heading has default size
- <h1> defines the most important heading and h6 defines the least important heading.
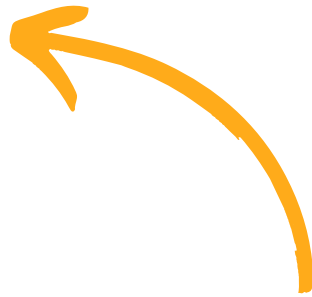
Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

Examples -

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

Why headings are important?

- It helps in SEO
- Always use <h1> headings for main page heading, <h2> for sub heading

--------------------Topic End--------------------

HTML – Paragraphs

- HTML paragraph <p> element is used to add paragraph text
- It is block level element
- <p> tag has default margin-top and margin-bottom i.e. 16px (1em)
- A paragraph always starts on a new line

Examples -

<p>This is a paragraph of text.</p>

Let's see how its output looks like -->

<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam</p>
<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam</p>

Output -

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam

NOTE: If you want to break the line in between paragraph then you can use <br> tag

Example - <p>This is
a paragraph
with line breaks.</p>

--------------------*Topic End*--------------------

HTML – Formatting

- HTML formatting is used to style the text to make it more presentable.
- These tags are used to define how text should be displayed on a web page
- used to change the appearance of text, such as making it bold, italic, underlined, or applying other formatting styles.

HTML Formatting Elements --> Here are HTML formatting tags given below:
- \<b\> - Bold text
- \<strong\> - Important text
- \<i\> - Italic text
- \<em\> - Emphasized text
- \<mark\> - Marked text
- \<small\> - Smaller text
- \<del\> - Deleted text
- \<ins\> - Inserted text
- \<sub\> - Subscript text
- \<sup\> - Superscript text

NOTE: for extra design and styling use CSS

Now I will cover every tag given above in detail

\<b\> Tag - It is used to make text bold.

Example - \<b\>This text is bold.\</b\>
Output - **This text is bold.**

\<strong\> Tag - It is used to define text with strong importance. The output is the same as bold.

Example - \<strong\>Important text\</strong\>
Output - **Important text**

\<i\> Tag - It is used to make the text italic

Example - \<i\>This text is italic\</i\>
Output - *This text is italic*

\<em\> Tag - It is used to emphasize text. The output of the text is italic

Example - \<em\>This text is emphasized\</em\>
Output - *This text is emphasized*

\<mark\> Tag - The \<mark\> tag is an HTML element used to highlight or mark a specific portion of text on a webpage.

Example - \<p\>This is used for\<mark\>highlighted text\</mark\>\</p\>
Output - This is used for <mark>highlighted text</mark>

\<small\> Tag - This element is used for smaller text

Example - \<p\>This is some \<small\>smaller text.\</small\>\</p\>
Output - This is some smaller text.

\<del\> Tag - This element is used to delete text

Example - \<p\>My fav channel is \<del\>DWR\</del\>\</p\>
Output - My fav channel is ~~DWR~~

<ins> Tag - It is used to insert text

Example - <p>My fav channel is <ins>DWR</ins></p>
Output - My fav channel is <u>DWR</u>

<sub> Tag - 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

Example - <p>My fav channel is _{DWR}</p>
Output - My fav channel is $_{DWR}$

<sup> Tag - Superscript text appears half a character above the normal line. It is used for footnotes

Example - <p>My fav channel is ^{DWR}</p>
Output - My fav channel is^{DWR}

So from the above tags, there are some tags that you will use frequently like - <i>, <b>, <sup>

so make sure don't skip these 😁. wo bhi dhyan se.

agr dhyan se nahi padha then scroll up again and read it properly 😊. agar mann kare to sare hi dhyan se padh lena

-------------------Topic End-------------------

HTML Quotation and Citation Elements

- Quotation - HTML Quotation refers to the HTML tag used to indicate a quoted text within a document.

- Quotation - HTML Quotation refers to the HTML tag used to indicate a quoted text within a document.

HTML Quotation and Citation Elements --> Here are tags given below:
- <blockquote> - quotation text
- <q> - defines a short quotation
- <cite> - defines the title of a creative work
- <abbr> - It is used for marking up abbreviated text.

NOTE: These elements help structure the content and provide semantic meaning to different types of text within a document

Now I will cover every tag given above in detail

<blockquote> Tag - It is commonly used to attribute the quoted text to its original author or source.

Example - <p>This is a quoted text.</p><blockquote>This text is output.</blockquote>

Output -

This is a quoted text.

This text is output.

<q> Tag - It is used to indicate a short quotation or inline quote within a paragraph.

Example - <p>This is a short quotation text.</p><q>This text is output</q>

Output -

This is a short quotation text.
 "This text is output"

<cite> Tag - It is used to indicate the title or source of a creative work, such as a book, article, or a piece of artwork. Its output shows in italic

Example - <p>This is a cite text.</p><cite>This text is output</cite>

Output -

This is a cite text.
 This text is output

<abbr> Tag - It is typically used to provide additional information or context about an abbreviated term. it uses title attribute. when you hover the text then you will see the text which you have added in the title attribute.

Example - <p>This is an abbr text.</p><abbr title ="abbr text">This text is output</abbr>

Output -

This is an abbr text.
 This text is output

--------------------Topic End--------------------

HTML Comments

HTML comments are the most important part of the code. HTML comments are not displayed in the browser.

Comments are basically used for clean code so that if the new person checks your code then he/she can easily understand your code.

In HTML, comments are denoted by the <!-- and --> delimiters. Anything between these delimiters is considered a comment and is ignored by the web browser when rendering the page.

Example:

```
<!-- Banner Section -->

<p>this is dummy text</p>

<!-- End Banner Section -->
```

Like the above example, you can add comments in your for every section.

jaise rooms ko alag karne ke liye diwaar ki jarurt padti hai waise hi code ko alg krne ke liye comments ki jarurt padti hai

😁 **samjh gaye naa ??**

HTML comments are commonly used for various purposes, including:

- Documenting and explaining sections of code
- Temporarily disabling or "commenting out" a piece of code without deleting it
- Providing instructions or reminders for future editing or maintenance
- Collaborative development, where multiple developers can add comments to the code for communication purposes

Agar bor ho gaye ho to thoda chill kr lo. Reels chala lo. 😂 aur coffee sath me rakh lo

HTML – Meta Tags

HTML meta tags are special elements used to provide additional information about an HTML document.

These are placed in the head section

```
<head>
.
.
</head>
```

Meta tags are not visible to the users. These are used by search engines, social media platforms, and web browsers to gather information about a webpage.

It is used to specify the character set, page description, keywords, author of the document, and viewport settings

Here are some commonly used meta tags:

<meta charset="UTF-8">

Specifies the character encoding for the HTML document. UTF-8 is the most common character encoding.

<meta name="viewport" content="width=device-width, initial-scale=1.0">

Sets the viewport properties for responsive web design, ensuring proper rendering on various devices and screen sizes.

<meta name="description" content="Description of the page">

Provides a brief summary or description of the webpage's content. Search engines often display this description in search results

<meta name="author" content="Author name">

Specifies the author of the webpage.

<meta http-equiv="refresh" content="5" URL=http://example.com/">

Redirects the user to another page after a specified time interval (in seconds). means in 5 sec

<meta name="keywords" content="keyword1, keyword2, ...">

Define keywords for search engines

Example :

```
<head>
  <meta charset="UTF-8">
  <meta name="description" content="Learn Free Frontend">
  <meta name="keywords" content="HTML, CSS, JavaScript">
  <meta name="author" content="Designwithrehana">
</head>
```

--------------------Topic End--------------------

HTML Links

HTML links are used to navigate from one page to another. It is also known as a hyperlink.

They allow users to click on a text or an image and be redirected to another page or location on the web.

HTML links are created using <a> tag

Let's take an example -

Join Now

Output: Join Now

In above example, if you click on Join Now then you will navigate to the "designwithrehana.com" page.

href attribute, which indicates the link's destination.

--------------------*Topic End*--------------------

HTML – Images

HTML images are used to display images on the web page.

The `<img>` tag is a self-closing tag, meaning it doesn't require a closing tag.

Example:

```
<img src="image.jpg" alt="Description of the image">
```

In the above example -

src attribute is used to mention the path of the image

File ka path ekdm sahi hona chahiye wrna image open nhi hogi too ronaa mat😁

alt text is alternative text, which is displayed if the image cannot be loaded or for accessibility purposes.

So always try to use meaning image name in the alt text.

you can use height and width attributes also to define the height and width of the image.

--------------------Topic End--------------------

HTML – Tables

HTML table is used to create tables. It helps you to arrange the data in the rows and columns

Table Example :

HTML Table

Food	Price	Quantity
Burger	240	1
Maggi	30	Full
Dosa	80	1
Pasta	150	Full

In the above table, first row in the table header. And rest of the row and column come under table body.

Now we will see all HTML tags and all HTML table attributes.

All HTML Table tags

> **<table>**   Used to create table.

> **<th>**   Used for header cell in the table.

> **<tr>**   Used for creating row in the table.

> **<td>**   Used for creating column in the table

> **<caption>**   Used for table caption

> **<colgroup>**   Group of one or more columns in a table for formatting.

> **<col>**   Column properties for each column within a <colgroup> element

> **<thead>**   Used to create header content in the table.

> **<tbody>**   Used for grouping body content of the table.

> **<tfoot>**   Used for table footer.

All HTML Table Attributes

> **border** — Used to add border in the table

> **cellpadding** — Specifies the space between the cell content and the cell borders.

> **cellspacing** — Specifies the space between cells

> **width** — Used to adjust the width of the table.

> **height** — Used to adjust the height of the table.

> **summary** — Provides a summary or description of the table's purpose and structure

> **align** — Specifies the horizontal alignment of the table on the page

> **bgcolor** — Sets the background color of the table.

> **colspan** — Specifies the number of columns a cell should span.

> **rowspan** — Specifies the number of rows a cell should span.

Table Hierarchy:

```
<table>
    <thead>
        <tr>
            <th> </th>
            <th> </th>
        </tr>
    </thead>
    <tbody>
        <tr>
            <td>
                <table>
                    <tr>
                        <td> </td>
                    </tr>
                </table>
            </td>
            <td> </td>
        </tr>
    </tbody>
</table>
```
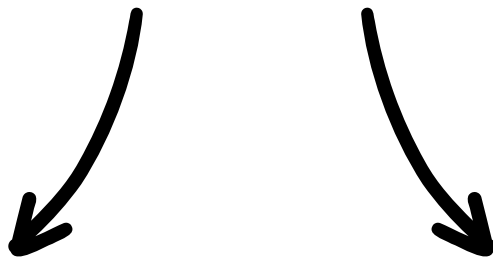
-------------------*Topic End*-------------------

HTML – List

List is a way to organize and display a collection of related items.

There are two types of HTML lists.

HTML – List

Ordered List

Example:

1. Item one
2. Item two
3. Item three

Unordered List

Example:

- Item one
- Item two
- Item three

Now we will see both lists in detail.

Unordered HTML List

It uses <ul> tag. Each item list uses <li> tag

The list items will be marked with bullets

Code Example:

```
<ul>
    <li>Designwithrehana</li>
    <li>Rehana ka drama</li>
    <li>mixedprism</li>
</ul>
```

Output:

- Designwithrehana
- Rehana ka drama
- mixedprism

Note: If you want you can customise the list also

Ordered HTML List

It uses <ol> tag. Each item list uses <li> tag

The list items will be marked with numbers

Code Example:

```
<ol>
    <li>Designwithrehana</li>
    <li>Rehana ka drama</li>
    <li>mixedprism</li>
</ol>
```

Output:

1. Designwithrehana
2. Rehana ka drama
3. mixedprism

Note: If you want you can customise the list also

HTML Description Lists

It is a list with a description. It uses <dl>, <dt> and <dd>

The main tag is <dl> then items are wrapped with <dt> tag. <dd> tag is used for description.

Code Example:

```
<dl>
   <dt>Designwithrehana</dt>
   <dd>Description 1</dd>

   <dt>Rehana ka drama</dt>
   <dd>Description 2</dd>

   <dt>mixedprism</dt>
   <dd>Description 3</dd>
</dl>
```
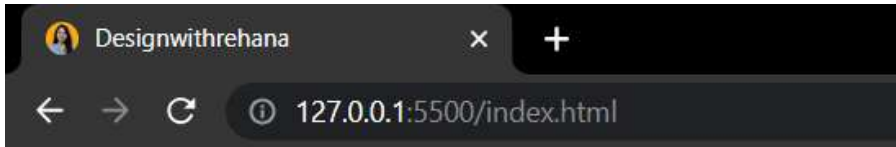
Output:

Designwithrehana
        Description 1
Rehana ka drama
        Description 2
mixedprism
        Description 3

HTML - Favicon

It is small image on the title bar of the browser.

Example:

DesignWithRehana

Image for Favicon

you can simply use any image as per your choice. Or if you want to create your own favicon using the below site.

https://www.favicon.cc

In the HTML head section, through link you can add fav icon.

See the below code:

```
index.html  X

index.html > html
1    <!DOCTYPE html>
2    <html lang="en">
3    <head>
4        <title>Designwithrehana</title>
5        <link rel="icon" type="image" href="fav-image.png">
6    </head>
7    <body>
8        <h2>DesignWithRehana</h2>
9    </body>
10   </html>
```

--------------------Topic End--------------------

HTML Page Title

The HTML page title is a text that appears in the title bar or tab of a web browser when a web page is opened.

It is defined within the <title> element, which is placed within the <head> section of an HTML document.

Code Example:

```
<!DOCTYPE html>
<html>
   <head>
  <title>Designwithrehana</title>
   </head>
   <body>
     <!-- add content here-->
   </body>
</html>
```

Kisi bhi website ke upr name likh kr aa raha hai jaise yahan pe **Designwithrehana** aa raha usi trh hai wo page title hota hai

Page title

Designwithrehana

127.0.0.1:5500/index.html

-------------------Topic End-------------------

HTML Block and Inline Elements

The HTML , all elements have default value how they display

There are two display values:

Inline element   **block element**

Inline element: <span>, <a>, <strong>, <em>, <img>, <input>, <br>, and <button>.

Block element: <div>, <p>, <h1> to <h6>, <ul>, <ol>, <li>, <header>, <footer>, <nav>, <section>, and <article>.

Now we will see both elements in detail

Inline element:

Inline elements do not start on a new line

They occupy only the space necessary to display their content.

Code Example:

```
<!DOCTYPE html>
<html>
<body>

    <span> Designwithrehana </span>
    <span> Rehanakadrama </span>
    <span> Mixedprism </span>

</body>
</html>
```

Output:

Designwithrehana Rehanakadrama Mixedprism

line break nahi hui
utna hi space liya hai
jitna content hai

Block element:

Block-level elements start on a new line

It take up the full available width of their parent container.

Code Example:

```
<!DOCTYPE html>
<html>
<body>

    <p> Designwithrehana </p>
    <p> Rehanakadrama </p>
    <p> Mixedprism </p>


</body>
</html>
```

Output:

Designwithrehana
Rehanakadrama
Mixedprism

hmesha new line se start hota hai agr dusra tag use krte hai. Full width cover krta hai default spacing bhi add hoti hai

-------------------Topic End-------------------

HTML class Attribute

Class attribute is used to give class name to any element to group element together and apply CSS and JavaScript.

Syntax:

class ="class-name"

You can use multiple class names for one element

Example :

<div class="container banner-section div-space"></div>

you can reuse class names if you want to repeat any functionality and style.

Example :

<div class="div-space"></div>
<p class="div-space"></p>

Note: The class name is case sensitive!

The Syntax For Class

To create a class; write a period (.) character, followed by a class name. Then, define the CSS properties within curly braces {}

Code Example:

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      .heading_color {
        color: Red;
      }
    </style>
  </head>
  <body>

    <h2 class="heading_color">Designwithrehana</h2>
    <p>If you are interested in frontend development then you are at right place.
</p>
  </body>
</html>
```

Output:

Designwithrehana

If you are interested in frontend development then you are at right place.

--------------------Topic End--------------------

HTML id Attribute

The HTML id attribute is used to uniquely identify an element within an HTML document.

Syntax:

id ="id-name"

You cannot have more than one element with the same id in an HTML document.

Using the id Attribute

To create a id; write a period (#), followed by a class id. Then, define the CSS properties within curly braces {}

Example:

#banner-section{
 background-color:red;
}

Code Example:

```html
<!DOCTYPE html>
<html>
    <head>
        <style>
            #heading {
                color: Red;
            }
        </style>
    </head>
    <body>

        <h2 id="heading">Designwithrehana</h2>
        <p>If you are interested in frontend development then you are at right place.
</p>
    </body>
</html>
```

Output:

Designwithrehana

If you are interested in frontend development then you are at right place.

--------------------*Topic End*--------------------

HTML - Forms

HTML forms are very important part of web development, allowing users to input and submit data to a server.

They are used for a wide range of purposes, such as user registration, contact forms, search boxes, and more.

Syntax:

```
<form action="">


</form>
```

Inside the <form>

We have some elements -

Label   Input
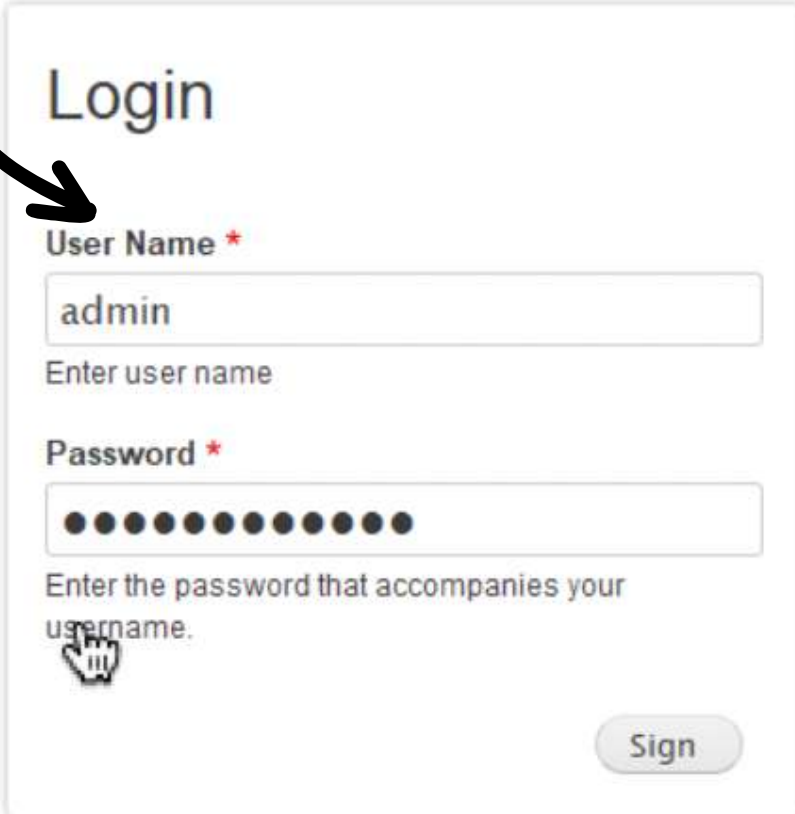
Label

The <label> element, which provides a text description for the input field.

Syntax:

<label> .... </label>

Label
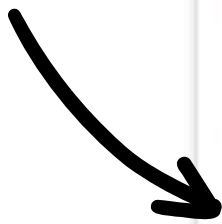
Input

The <input> element is used so that user can enter information. Input filed is created using tag. It is self closing tag

Input

Login

User Name *

admin

Enter user name

Password *

●●●●●●●●●●●●●

Enter the password that accompanies your username.

Sign

NOTE: *The <form> element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.*

Form attributes

Action   Method

Action:

The action attribute specifies the URL or server-side script to which the form data should be submitted when the user clicks the submit button.

The value of the action attribute is typically a URL or a relative path.

Example :

```
<form action="/submit_form" >
```

Method:

Defines the HTTP method to be used when submitting the form data to the server.

It can be either **"GET" or "POST"**

GET

When the method is set to "GET", the form data is appended to the URL as query parameters and sent as part of the URL string. In this method, form data is visible in the URL.

Example :

```
<form action="/action_page.php" method="GET">
  <label for="name">Name:</label>
  <input type="text" id="name" name="name">

  <label for="email">Email:</label>
  <input type="email" id="email"
name="email">
  <input type="submit" value="Submit">
</form>
```

POST

When the method is set to "POST", the form data is sent in the body of the HTTP request. This method is suitable for sending sensitive or large amounts of data that should not be exposed in the URL.

It is commonly used for submitting forms that create, update, or delete data on the server.

Example :

```
<form action="/action_page.php" method="POST">
  <label for="name">Name:</label>
  <input type="text" id="name" name="name">

  <label for="email">Email:</label>
  <input type="email" id="email" name="email">

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

The HTML <form> Elements

> **<form>** — Used for HTML form for user input

> **<input>** — Used for input control

> **<textarea>** — Used for multiline input control (text area)

> **<label>** — Used for label for an <input> element

> **<fieldset>** — Groups related elements in a form

> **<legend>** — Used for caption for a <fieldset> element

> **<select>** — Used for drop-down list

> **<optgroup>** — a group of related options in a drop-down list

> **<option>** — Used for option in a drop-down list

> **<button>** — Used for clickable button

> **<datalist>** — Used for list of pre-defined options for input controls

> **<output>** — Used for result of a calculation.

HTML Input Types

`<input type="button">`

Button

`<input type="checkbox">`

☑ Are you agree?

`<input type="color">`

`<input type="date">`

Meeting : dd/mm/yyyy   Submit

`<input type="email">`

Enter you emai...

`<input type="file">`

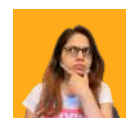Select a file : Choose file No file chosen

`<input type="hidden">`

The hidden field is not shown to the user.

But we can save data of the user

`<input type="image">`

`<input type="month">`

Meeting (month & Year) : ---------- ----   Submit

`<input type="number">`

1   Submit

`<input type="password">`

●●●●●●●●●

`<input type="radio">`	◯ **Do you Like my Content**
`<input type="range">`	▬▬▬▬●▬▬▬▬
`<input type="reset">`	**Reset**
`<input type="search">`	[🔍]
`<input type="submit">`	**SUBMIT**
`<input type="tel">`	**133-291 032**
`<input type="text">`	Name...
`<input type="time">`	Select time : --:-- -- 🕐 Submit
`<input type="url">`	Type URL...
`<input type="week">`	Select a week :: Week --, ---- 🗓 Submit

Above are all input types with output examples.

For practice, you can create some input types to check the output. Then you will understand more.

Jaldi se implement karooooo abhiii

HTML – Head

Head element is a container for all meta tags. It contains -

<title>, <style>, <meta>, <link>, <script>, and <base>.

```html
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <meta name="description" content="Frontend Dev">
  <meta name="keywords" content="HTML, CSS, JavaScript">
  <meta name="author" content="Designwithrehana">
  <link rel="stylesheet" href="styles.css">
  <style>
  body {

      background-color: #f0f0f0;
  }
  </style>

</head>
```

--------------------Topic End--------------------

HTML Semantic Elements

Element + Meaning of the element

HTML semantic elements are special elements introduced in HTML5 that provide meaningful structure to web pages.

Here are some commonly used HTML semantic elements:

\<header\>   container for a group of introductory content at the top of a section.

\<nav\>   Used for the navigation section

\<main\>   Specifies the main content of a document and it is unique.

\<table\>   Used to create tables

\<form\>   used to create forms

\<article\>   Defines independent, self-contained content. Used for blogs, new articles, etc.

\<section\>   Defines a standalone section of content within a document

\<aside\>   used for sidebar content

\<footer\>   Used to create footer

HTML Non-Semantic Elements

These non-semantic elements are often employed for styling purposes or to achieve a specific visual layout.

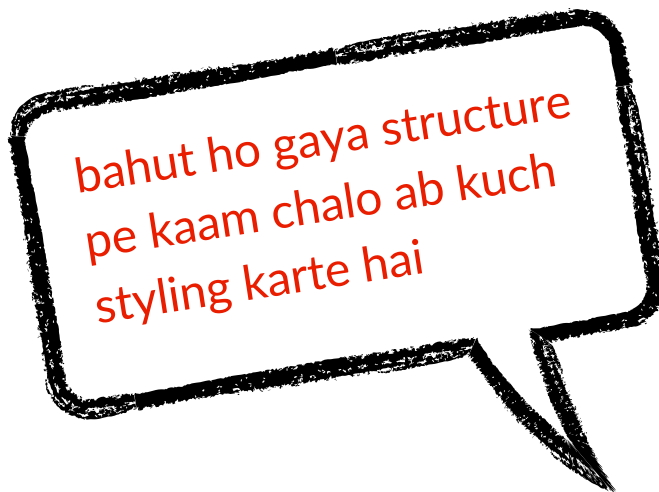Here are some commonly used HTML non-semantic elements:

<div> A generic container that is used to group and style other elements

<span> It is an inline container used for styling or targeting specific parts of the text within a larger block of content.

**
** this tag is used to break the line.

<b> Used to make the text bold

<i> used to make the italic

bahut ho gaya structure pe kaam chalo ab kuch styling karte hai

HTML – Style

HTML style is used to add style to the element like, font-size, color, text-decoration, etc.

Syntax: *<tagname style="property:value;">*

background-color:

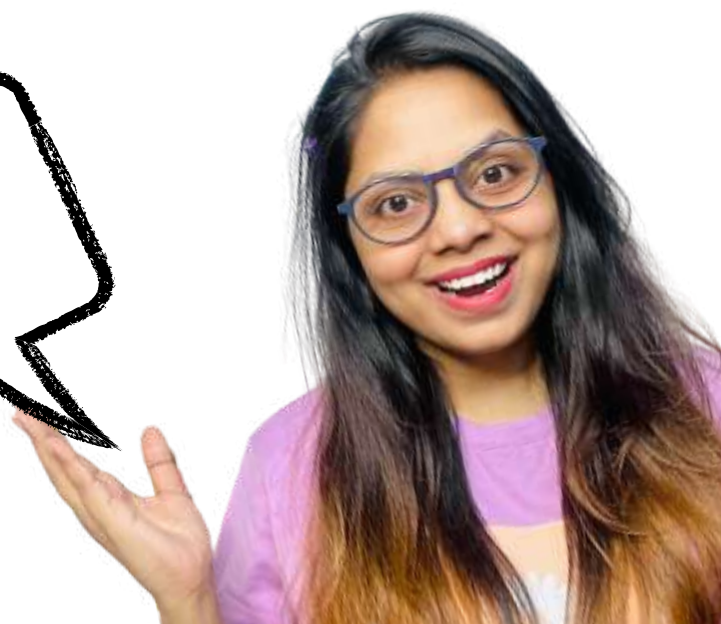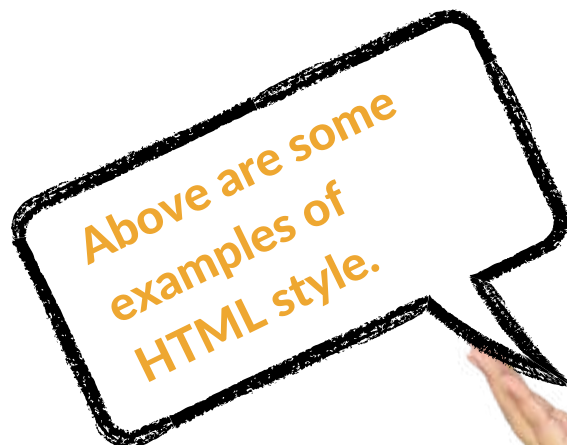Background color is used to set the background color of any element.

Example:

<div style="background-color:blue;"></div>

Font Size

font-size is used to increase or decrease the size of the font.

Example:

<div style="font-size:20px;"></div>

Above are some examples of HTML style.

HTML Media

These are the elements which allow you to include images, audio files, videos, and other multimedia elements within your HTML documents.

Multimedia files have formats and different extensions like: .wav, .mp3, .mp4, .mpg, .wmv, and .avi.

HTML Media

Video

audio files

Here are HTML media elements:

HTML Video

HTML video element is used to show the video on the web page.

For this `<video>` tag is used.

Example:

```
<!DOCTYPE html>
<html lang="en">

<body>
    <video width="320" height="240" autoplay muted controls>
        <source src="/movie.mp4" type="video/mp4">
    </video>
</body>

</html>
```

How it Works

Controls: With the help of control you can add play, pause and volume.,

Height: It is used to set the height of the element

Width: It is used to set the width of the element

`<source>` It allows you to provide multiple sources for the media
            content, allowing the browser to choose the most
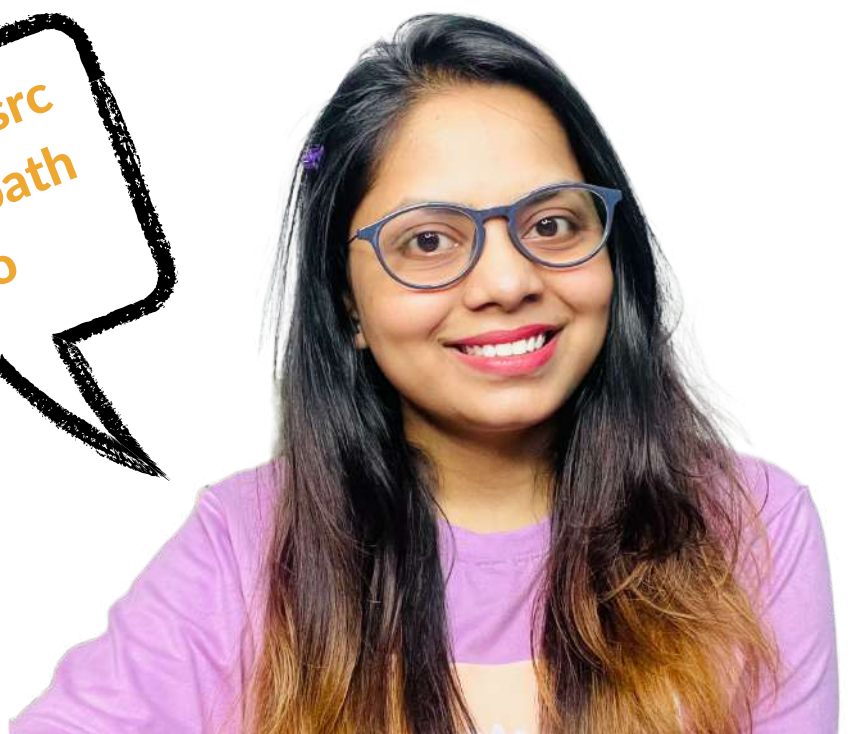   appropriate source based on its supported formats.

Add **muted** after **autoplay** to your video to start playing video automatically but the video will be muted.

Output Example:

Upar wale code pe src pe apne video ka path laga kr check karo

HTML Audio:

HTML video element is used to show the audio file on the web page.

For this <audio> tag is used.

Example:

```
<!DOCTYPE html>
<html>
<body>

    <audio controls autoplay muted>
        <source src="dwr.ogg" type="audio/ogg">
    </audio>

</body>
</html>
```
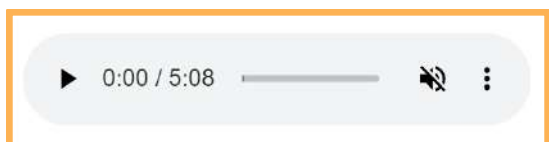
How it Works

Controls: With the help of control you can add play, pause and volume.,

<source> It allows you to provide multiple sources for the media content, allowing the browser to choose the most appropriate source based on its supported formats.

Add **muted** after **autoplay** to your audio to start playing audio automatically but the video will be muted.

Output Example:

```
▶  0:00 / 5:08  ━━━━━━━━━━━━       🔇  ⋮
```

HTML Iframe

- The <iframe> is an Inline Frame.
- This element in HTML is used to embed content from another source within a web page.
- It creates a window or frame within the current document where external content can be displayed, such as a webpage, video, map, or document.

Syntax:

```
<iframe src="url" title="description"></iframe>
```

iframe Attributes -

height: It is used to set the height of the element

hidth: It is used to set the width of the element

src: It is used to add the file path

title: Used to define the content the content of the iframe and it is used by the reader.

frameborder: Used to add the border to the iframe

style: Used to add the style to the iframe.

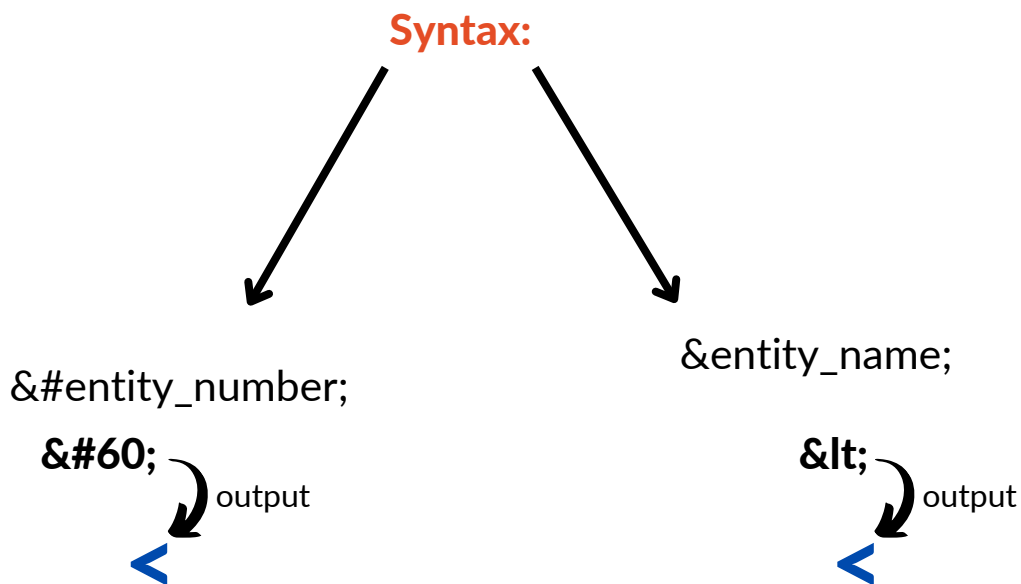--------------------*Topic End*--------------------

HTML Entities

HTML entities are special character codes used to represent reserved characters and symbols in HTML.

If you use < or > sign so may be borwser will treat them as aa tag.

These entities are used to ensure proper rendering

HTML entities start with an "**&**" and ends with a semicolon "**;**"

Syntax:

&#entity_number;

<

output

<

&entity_name;

<

output

<

Itni saari entities yaad kaise hongi

No Need to worry. Itni saari entities kisi ko yaad nahi hoti. Whenever you want to use just google it

Here are a few commonly used HTML entities:

<	less-than sign (<) - &#60
>	greater-than sign (>) - &#62
&	ampersand (&) - &#38
"	double quotation mark (") - &#34
'	single quotation mark (') - &#39
	non-breaking space - &#160
©	copyright symbol (©) - &#169
®	registered trademark symbol (®) - &#174
™	trademark symbol (™) - &#8482
°	degree symbol (°) - &#176
µ	micro symbol (µ) - &#181
£	pound sterling symbol (£) - &#163
€	euro symbol (€) - &#8364
¥	yen symbol (¥) - &#165
¢	cent symbol (¢) - &#162
$	dollar sign ($) - &#36
✓	checkmark symbol (✓) - &#10003
✗	cross mark symbol (✗) - &#10007
§	section symbol (§) - &#167
¶	paragraph symbol (¶) - &#182

Example:

```
<h2>Here is register mark &reg;
</h2>
```

Output:

Here is register mark ®

--------------------*Topic End*--------------------
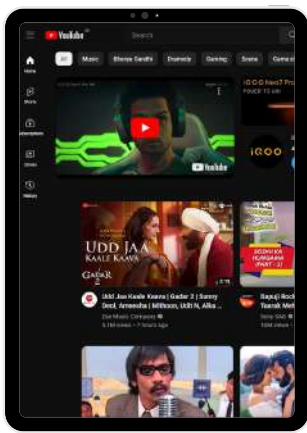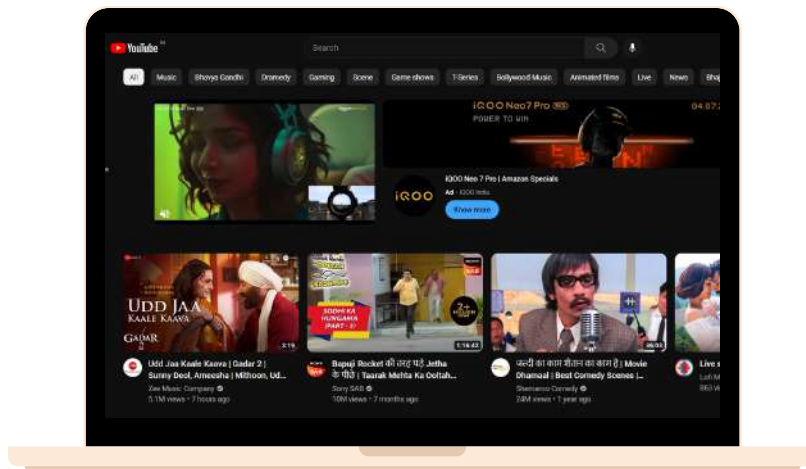
HTML Responsive Web Design

Responsive design means creating web pages in such a way which looks good in all devices like desktop, laptop, tab,mobile.

Web pages will automatically adjust on all the devices once you open a web page on different devices with different screen size.

Tablet   **Laptop**   **Mobile**

To achieve responsive web design, several techniques and features are commonly used:

Most important and first thing to remember is -

Viewport Meta Tag

Add the below line in <meta> tag to all your web pages

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

To achieve responsive web design, several techniques and features are commonly used:

Fluid Grid Layout

Use width in percentage instead for a fixed value. That will adjust with all the screensize.

Flexible Images and Media

Images and media elements, such as videos or embedded content, should also be responsive. They can be styled using CSS to ensure they resize and adapt based on the available screen space.

Media Queries

By using media queries, you can create specific CSS styles for different screen sizes or devices.

/* Media queries for different screen sizes */

@media (min-width: 600px) {

.

Add your CSS here

}

--------------------Topic End--------------------

ohh so you reached to the last page amazingggggggg 😋

Thank You

Rate and Review:

Don't forget to drop lovely review for my motivation. So that I can come up with CSS course too.

⭐⭐⭐⭐⭐

Follow me on:

Sharing some reference website for frontend developer:

https://www.theodinproject.com/
https://www.30secondsofcode.org/
https://www.colorsandfonts.com/
https://www.frontendmentor.io/
https://codemyui.com/
https://100dayscss.com/
https://www.mygreatlearning.com/
https://www.freecodecamp.org/
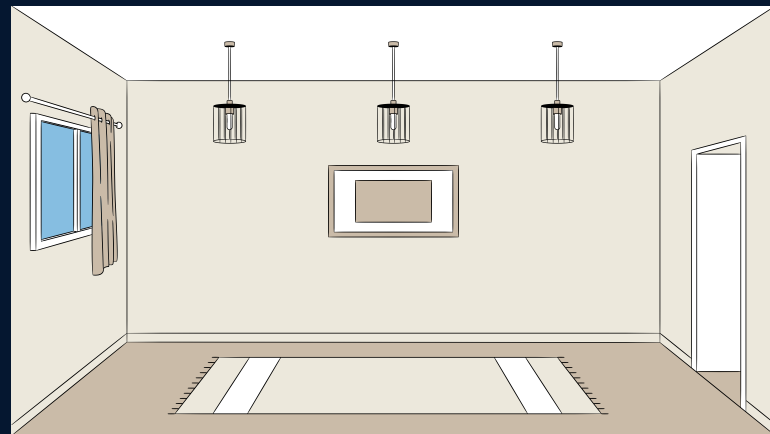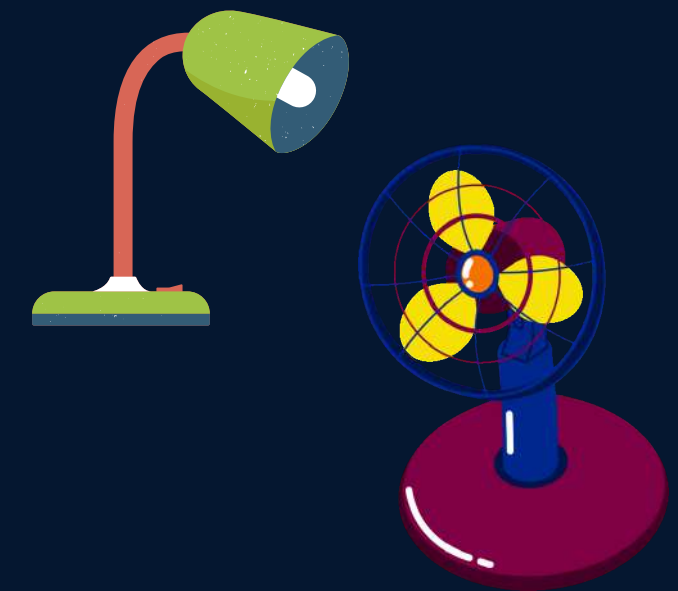
The End

HTML

Structure/layout

CSS

Style

JS

Logic

Level **1**

HTML

Hyper Text Markup Language

HTML is the code that is used to structure a web page and its content.

The component used to design the structure of websites are called HTML tags.

First HTML File

index.html

It is the default name for a website's homepage

HTML Tag

A container for some content or other HTML tags

`<p>` **This is a paragraph** `</p>`

Content

Element

Basic HTML Page

```html
<!DOCTYPE html>          tells browser you are using HTML5

<html>                   root of an html document

    <head>               container for metadata

        <title>My First Page</title>     page title

    </head>

    <body>               contains all data rendered by the browser

        <p>hello world</p>    paragraph tag

    </body>

</html>
```

Quick Points 🚀

Html tag is parent of head & body tag

Most of html elements have opening & closing tags
with content in between

Some tags have no content in between, eg -

We can use inspect element/view page source to edit html

Comments in HTML

This is part of code that should not be parsed.

`<!--` This is an HTML Comment `-->`
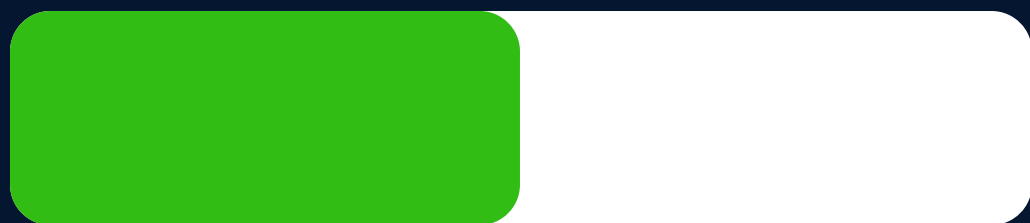
HTML is NOT case sensitive

\<html\> = \<HTML\>

\<p\> = \<P\>

\<head\> = \<HEAD\>

\<body\> = \<BODY\>

Level 2

Basic HTML Tags

HTML Attributes

Attributes are used to add more information to the tag

```
<html lang="en">
```

Heading Tag

Used to display headings in HTML

h1   **(most important)**

h2

h3

h4

h5

h6   **(least important)**

Paragraph Tag

Used to add paragraphs in HTML

<p> This is a sample paragraph </p>

Anchor Tag

Used to add links to your page

`<a href="https://google.com"> Google </a>`

Image Tag

Used to add images to your page

```
<img src="/image.png" alt="Random Image">
```

relative url

Br Tag

Used to add next line(line breaks) to your page

`<br>`

Bold, Italic & Underline Tags

Used to highlight text in your page

** Bold **

<i> Italic </i>

<u> Underline </u>

Big & Small Tags

Used to display big & small text on your page

<big> Big </big>

<small> Small </small>

Hr Tag

Used to display a horizontal ruler, used to separate content

`<hr>`

Subscript & Superscript Tag

Used to display a horizontal ruler, used to separate content
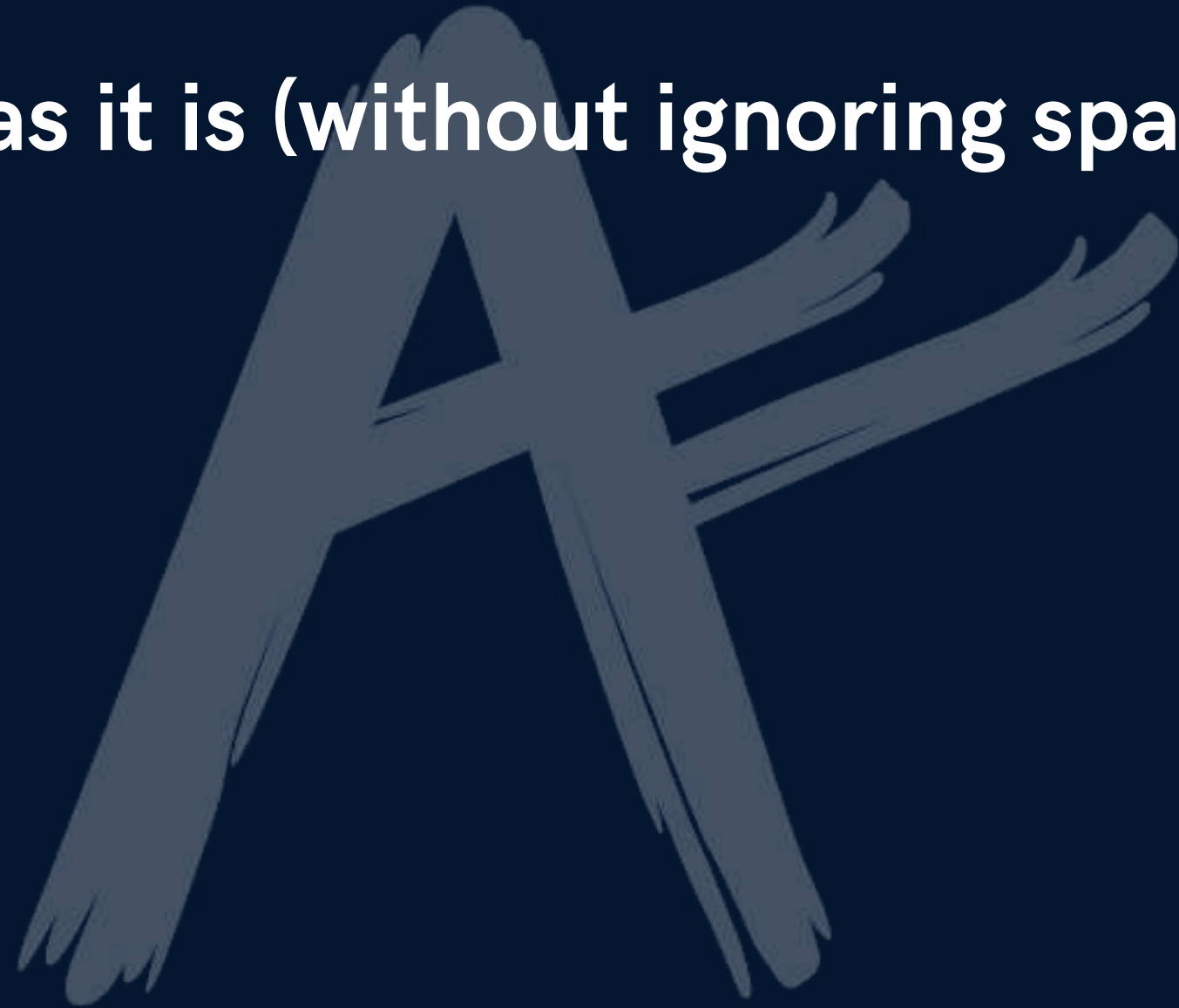
_{subscript}

$$H_2O$$

^{superscript}

$$A^n + B$$

Pre Tag

Used to display text as it is (without ignoring spaces & next line)

\<pre\> This

is a sample

text.

\</pre\>

Level 3

Page Layout Techniques

using Semantic tags for layout

using the Right Tags

<header>

<main>

<footer>

Inside Main Tag

Section Tag   For a section on your page

 <section>

Article Tag   For an article on your page

 <article>

Aside Tag   For content aside main content(ads)

 <aside>

Revisiting Anchor Tag

`<a href="https://google.com" target="_main"> Google </a>`

↑
for new tab

`<a href="https://google.com"> <img src="link"> </a>`

↑
clickable pic

Revisiting Image Tag

`<img src="link" height=50px >`

↑

set height

`<img src="link" width=50px >`

↑

set width

Div Tag

Div is a container used for other HTML elements

Block Element (takes full width)

List : Div Tags

<address>

<article>

<aside>

<blockquote>

<canvas>

<dd>

<div>

<dl>

<dt>

<fieldset>

<figcaption>

<figure>

<footer>

<form>

<h1>-<h6>

<header>

<hr>

<main>

<nav>

<noscript>

<p>

<pre>

<section>

<table>

<tfoot>

<video>

Span Tag

Span is also a container used for other HTML elements

Inline Element (takes width as per size)

List : Span Tags

<a>

<abbr>

<acronym>

<b>

<bdo>

<big>

<button>

<cite>

<code>

<dfn>

<em>

<i>

<input>

<kbd>

<label>

<map>

<object>

<tt>

<var>

<q>

<samp>

<script>

<select>

<small>

<span>

<strong>

<sub>

<sup>

<textarea>

<time>

Level **Pro**

List in HTML

Lists are used to represent real life list data.

unordered

ordered

```
<ul>

  <li> Apple </li>

  <li> Mango </li>

</ul>
```

```
<ol>

  <li> Apple </li>

  <li> Mango </li>

</ol>
```

Tables in HTML

Tables are used to represent real life table data.

\<tr\>   used to display table row

\<td\>   used to display table data

\<th\>   used to display table header

Tables in HTML

Name	Roll No
Shradha	1664

```
<table>

    <tr>

        <th> Name </th>
        <th> Roll No </th>
    </tr>

    <tr>

        <td> Shradha </th>
        <th> 1664 </th>
    </tr>

</table>
```

Caption in Tables
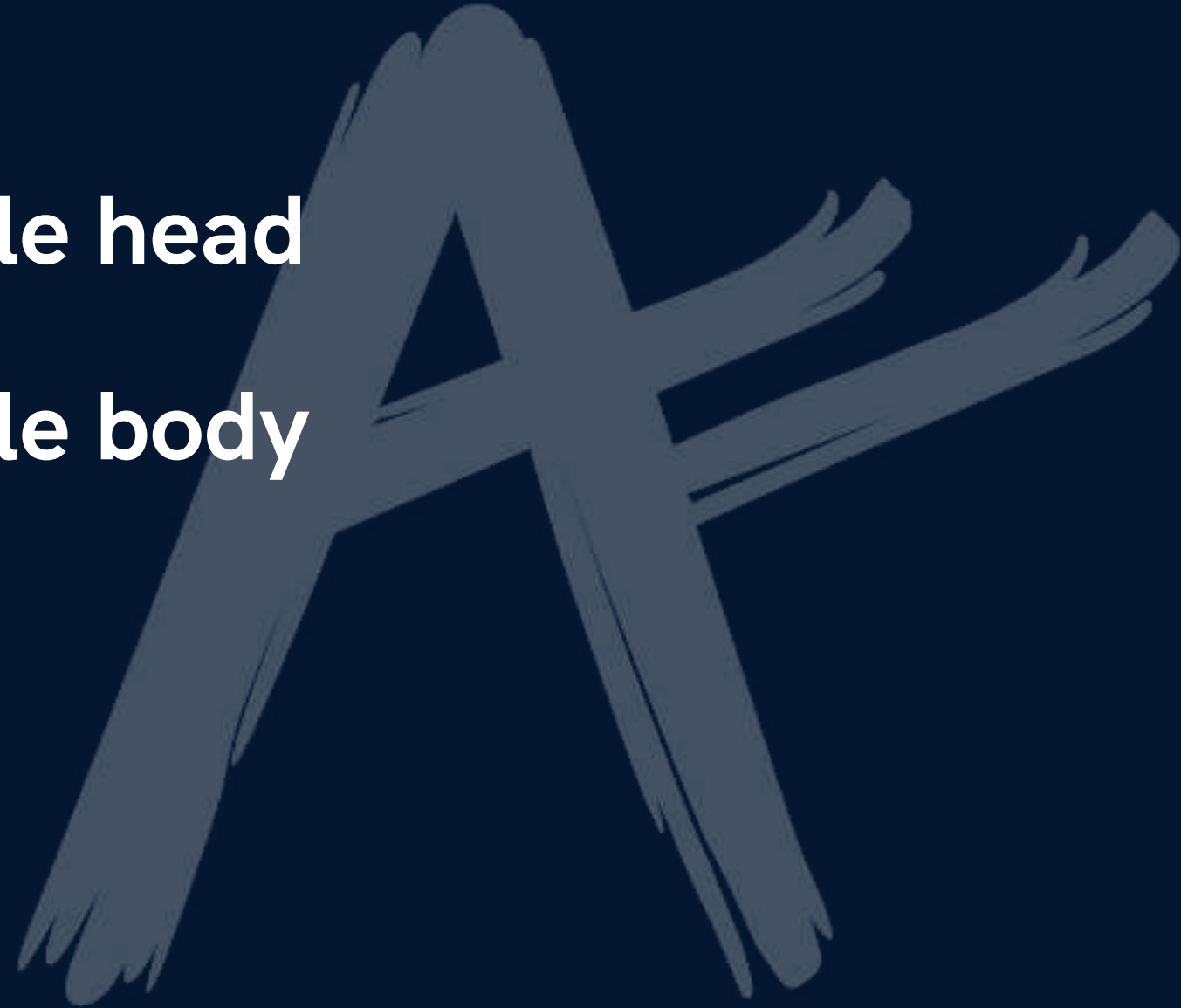
`<caption>` Student Data `</caption>`

Student Data

Name	Roll No
Shradha	1664

thead & tbody in Tables

\<thead\> to wrap table head

\<tbody\> to wrap table body

colspan attribute

colspan="n"

used to create cells which spans over multiple columns

Data	
Shradha	1664
Aman	1890

Form in HTML

Forms are used to collect data from the user

Eg- sign up/login/help requests/contact me

```
<form>


form content


</form>
```

Action in Form

Action attribute is used to define what action needs to be performed when a form is submitted

`<form action="/action.php" >`

Form Element : Input

```
<input type="text" placeholder="Enter Name">
```

Label

```html
<label for="id1">

    <input type="radio" value="class X" name="class" id="id1">

</label>


<label for="id2">

    <input type="radio" value="class X" name="class" id="id2">

</label>
```

Class & Id

```
<div id="id1" class="group1">

</div>



<div id="id2"> class="group1">

</div>
```

Checkbox

```html
<label for="id1">

    <input type="checkbox" value="class X" name="class" id="id1">

</label>


<label for="id2">

    <input type="checkbox" value="class X" name="class" id="id2">

</label>
```

Textarea

```
<textarea name="feedback" id="feedback" placeholder="Please add Feedback">

</textarea>
```

Select

```
<select name="city" id="city">

    <option value="Delhi">  Delhi </option>

    <option value="Mumbai">  Delhi </option>

    <option value="Banglore">  Delhi </option>

</select>
```

iframe Tag

website inside website

`<iframe src="link">  Link </option>`

Video Tag

`<video` `src="myVid.mp4">` `My Video </video>`

Attributes

- controls

- height

- width

- loop

- autoplay

All the very best in your future journey :)

- Aman bhaiya & Shradha didi