

TAPAS SONI

FRONTEND:
PART-1:-HTML



Frontend: -

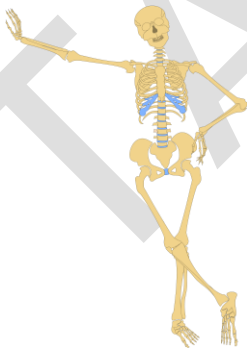
Frontend development e website ni user interface banavanu kaam chhe. Aa maate technologies jevi ke HTML, CSS, ane JavaScript no upyog thai chhe. Frontend developer nu kaam chhe ke user ne visually appealing ane user-friendly experience aape, jethi user website saathe easily interact kari sake. Frontend ma graphics, layouts, buttons, navigation, ane text design karvama aave chhe. In short, frontend e website nu je part user dekhe chhe ane te saathe interact kare chhe.

HTML: - HTML (Hypertext Markup Language) e website ni structure banavva maate nu markup language chhe. Aa ma website na elements (jeva ke headings, paragraphs, links, images, etc.) ne organize ane display karva maate use thai chhe.

CSS: - CSS (Cascading Style Sheets) e HTML elements ne style karva maate use thai chhe, jema colors, fonts, layouts, ane spacing include thay chhe. Aa website ne visually appealing banavva maate design ane presentation set karva madad kare chhe.

JavaScript: - JavaScript e programming language chhe je website ma interactivity ane dynamic content add karva maate use thai chhe. Aa user interactions, animations, and real-time updates javi functionalities banavva ma madad kare chhe.

HTML: -



CSS: -



JavaScript: -



For creating HTML File: - File_name.HTML or File_name.html.

HTML ma case-sensitive na hoy. Aa etle ke tag names, attributes, and attribute values capital letters athva small letters ma lakhay, to pan website par same prabhav padse.

BASIC STRUCTURE OF HTML: -

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

  <head>

    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Page Title</title>
  </head>

  <body>

    <h1>Hello, World! </h1>
    <p>This is a paragraph. </p>
  </body>
</html>
```

Explanation of basic structure: -

- **<!DOCTYPE html>:** Aa document ne latest HTML5 version ma defines kare chhe.
- **<html lang="en">:** Aa tag website nu entire HTML document define kare chhe, ane lang attribute language set kare chhe.
- **<head>:** Aa section ma metadata hoy, je document title ane styles include kare chhe.
- **<meta charset="UTF-8">:** Aa charset document ma characters encode karva maate UTF-8 standard set kare chhe.

- `<meta name="viewport" content="width=device-width, initial-scale=1.0">`: Aa responsive design maate viewport settings set kare chhe.
- `<title>Page Title</title>`: Aa page ni title browser tab ma display kare chhe.
- `<body>`: Aa tag ma website no main content aave chhe, je user dekhe chhe.

Basic Tags of HTML

COMMENTS IN HTML: - HTML ma comment e code ma notes add karva maate use thai chhe, je browser ma display thatu nathi. Aa developer ne code samajva ma help kare chhe ane temporary code hide karva maate pan upyogi thai shake chhe.

```
<!-- Aa Ak Comment Che -->  
<!-- ..... -->
```

HEADING TAGS: - HTML ma heading tags e headings ane subheadings banavva maate use thai chhe. Aa tags `<h1>` thi `<h6>` sudhi hoy chhe, jemathi `<h1>` highest (mota) level heading ane `<h6>` lowest (nana) level heading hoy chhe.

```
<h1>hello</h1>  
<h2>hello</h2>  
<h3>hello</h3>  
<h4>hello</h4>  
<h5>hello</h5>  
<h6>hello</h6>
```

PARAGRAPH TAG: - HTML ma <p> tag e paragraph banavva maate use thai chhe. Aa tag ma text content rakhi sakai chhe, ane aa paragraph ne separate line ma display karvama aave chhe.

<p> this is my first paragraph. </p>

ANCHOR TAG: -HTML ma <a> tag e anchor tag chhe, je hyperlinks banavva maate use thai chhe. Aa tag ni madad thi tamne ek page thi biji page, website, athva external URL ma link karva ma madad male chhe.

Visit Example Website

IMAGE TAG: - HTML ma tag e images insert karva maate use thai chhe. Aa tag image file ne web page par display karva ma madad kare chhe.

BR TAG: - HTML ma
 tag e line break inserts karva maate use thai chhe. Aa tag navi line ma text start karva ma madad kare chhe bina paragraph tag na upyog kevi rite.

<p>This is a paragraph.
And this text is on a new line within the same paragraph. </p>

BOLD, ITALIC & UNDERLINE TAG: - HTML ma text formatting maate bold, italic, ane underline tags use kari shaka chhe. Aa tags e text ni appearance change karva ma madad kare chhe.

- : Aa tag text ne bold banave chhe. It's used for strong emphasis but does not imply any specific importance or semantic meaning.
- <i>: Aa tag text ne italic banave chhe. It's used for text that should be emphasized, like foreign words or technical terms.
- <u>: Aa tag text ne underline kare chhe. Traditionally used for underlined text, but now it's better used for hyperlinks (using <a> tag) or specific emphasis.

<p>This text is bold. </p>

<p><i>This text is italic. </i></p>

<p><u>This text is underlined. </u></p>

BIG & SMALL TAG: - HTML ma <big> ane <small> tags e text ni size ne adjust karva maate use thai chhe. Aa tags e text ne comparatively mota athva nana banavva ma madad kare chhe.

<p>This is a normal text. </p>

<p><big>This text is bigger. </big></p>

<p><small>This text is smaller. </small></p>

HR TAG: - HTML ma `<hr>` tag e horizontal rule banavva maate use thai chhe. Aa tag page ma ek horizontal line create kare chhe, je content ne visually separate karva ma madad kare chhe.

`<p>`This is the first section of content. `</p>`

`<hr>`

`<p>`This is the second section of content, separated by a horizontal line. `</p>`

SUBSCRIPT & SUPERScript TAG: - HTML ma `<sub>` ane `<sup>` tags e text ne subscript ane superscript format ma display karva maate use thai chhe.

- **`<sub>`:** Aa tag text ne subscript ma display kare chhe, je line ni niche ma aave chhe. Example ma, H_2O e water ni formula chhe, jema 2 subscript ma aave chhe.
- **`<sup>`:** Aa tag text ne superscript ma display kare chhe, je line ni upar ma aave chhe. Example ma, $E = mc^2$ e Einstein ni equation chhe, jema 2 superscript ma aave chhe.

`<p>`This is normal text. `</p>`

`<p>` H_2O is the chemical formula for water. `</p>`

`<p>` $E = mc^2$ is Einstein's famous equation. `</p>`

PRE-TAG: - HTML ma `<pre>` tag e preformatted text display karva maate use thai chhe. Aa tag text ne exactly jema likhva ma aavyo chhe, te format ma display kare chhe, including spaces ane line breaks.

`<pre>`

This is preformatted text.

It retains spaces and

line breaks.

`</pre>`

MADE BY: - TAPAS SONI

SEMANTIC TAGS: - HTML ma semantic tags e page na content ne logically group karva maate use thai chhe, je website ni structure ne improve kare chhe ane accessibility ne enhance kare chhe. Semantic tags e content na meaning ne define kare chhe, jethi search engines ane screen readers ne page ni samajh vadhe chhe.

Common Semantic Tags:

1. <header>:

Purpose: Page ya section ni header section darshave chhe. Aa tag header content jevu ke site logo, navigation links, ya page title darshave chhe.

```
<header>
  <h1>Website Title</h1>
  <nav>
    <ul>
      <li><a href="#home">Home</a></li>
      <li><a href="#about">About</a></li>
      <li><a href="#contact">Contact</a></li>
    </ul>
  </nav>
</header>
```

2. <nav>:

Purpose: Navigation links group karva maate use thai chhe.

```
<nav>
  <ul>
    <li><a href="#home">Home</a></li>
    <li><a href="#services">Services</a></li>
    <li><a href="#contact">Contact</a></li>
  </ul>
</nav>
```

3. <main>:

Purpose: Page na primary content ne contain kare chhe. Aa tag site na content ma jema page na main purpose hoy te part define kare chhe.

```
<main>
  <section>
    <h2>Main Article</h2>
    <p>This is the main content of the page. </p>
  </section>
</main>
```

4. <section>:

Purpose: Page na thematic content ne section ma divides kare chhe. Each section can have its own heading.

```
<section>
  <h2>About Us</h2>
  <p>Information about the company. </p>
</section>
```

5. <article>:

Purpose: Self-contained content, jema article ya blog post, news story, etc. hoy chhe.

```
<article>
  <h2>News Title</h2>
  <p>News content goes here. </p>
</article>
```

6. <footer>:

Purpose: Page ya section na footer content darshave chhe. Aa tag contact information, copyright notice, ane additional links include kari shake chhe.

<footer>

<p>© 2024 Your Company. All rights reserved. </p>
</footer>

7. **<aside>**:

Purpose: Sidebar ya additional content jema supplementary information hoy chhe, je main content na context ma relevant hoy chhe.

<aside>

<h3>Related Links</h3>

 Related Article 1
 Related Article 2

</aside>

8. **<figure>**:

Purpose: Media content jema images, diagrams, or illustrations hoy chhe. **<figcaption>** tag content ne describe kare chhe.

<figure>

 <figcaption>Caption for the image. </figcaption>
</figure>

Benefits of Using Semantic Tags:

- **Improved Accessibility:** Screen readers ne content ni structure samajhva ma madad kare chhe.

- **Better SEO:** Search engines ne content ni meaning samajhva ma madad kare chhe.
- **Clearer Code:** HTML code ne organized ane readable banave chhe.

REVISITING ANCHOR TAG: - HTML ma <a> tag ni target="_blank" attribute e link click karva par page ne navi window ya tab ma open karva maate use thai chhe. Aa attribute user ne external links ya different pages ne alag tab ma open karva maadad kare chhe, jethi user na current page ni session intact rahe chhe.

```
<a href="https://www.example.com" target="_blank">Visit Example Website</a>
```

Clickable picture banavva maate <a> tag ne tag ni Saath use kari shakai chhe. <a> tag hyperlink banavva maate use thai chhe, ane tag image display karva maate use thai chhe.

```
<a href="https://www.example.com">  
    
</a>
```

DIV TAG: - HTML ma <div> tag e container element chhe, je page ma content ne group karva maate use thai chhe. <div> tag ni madad thi content ne logical sections ma divide kari shakai chhe, jethi layout design ane styling manage kari shakai chhe

```
<div>  
  
<h2>Section Title</h2>  
  
<p>This is a paragraph inside the div element. </p>  
  
</div>
```

SPAN TAG: - HTML ma tag e inline container element chhe, je content ne group karva maate use thai chhe, especially jema small sections of text ya elements ne style karva maate. tag inline content ma rahine text ne modify karva maate upyogi chhe, bina line breaks create kare.

<p>This is a highlighted word in a sentence. </p>

ADVANCE TAGS:

LIST IN HTML: - HTML ma lists content ne organized format ma display karva maate use thai chhe. HTML ma mukhya 3 prakar ni lists chhe:

1. Unordered List ():

Purpose: Items ne bullet points thi display kare chhe.

```
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
  <li>Item 3</li>
</ul>
```

○ Explanation:

- : Unordered list container tag.
- : List item tag, je list na each item ne define kare chhe.

2. Ordered List ():

Purpose: Items ne numbered list format ma display kare chhe.

```
<ol>
  <li>First item</li>
  <li>Second item</li>
  <li>Third item</li>
```

``

- **Explanation:**

- ``: Ordered list container tag.
- ``: List item tag, je list na each item ne define kare chhe.

3. Description List (`<dl>`):

Purpose: Terms ane te terms ni description list karva maate use thai chhe.

`<dl>`

`<dt>Term 1</dt>`

`<dd>Description of Term 1</dd>`

`<dt>Term 2</dt>`

`<dd>Description of Term 2</dd>`

`</dl>`

- **Explanation:**

- `<dl>`: Description list container tag.
- `<dt>`: Term tag, je term ne define kare chhe.
- `<dd>`: Description tag, je term ni description provide kare chhe.

TABLES IN HTML: - HTML ma `<table>` tag e tabular data ne display karva maate use thai chhe. `<table>` tag na andar mukhya 3 tags chhe: `<tr>`, `<th>`, ane `<td>`, je table na rows, headers, ane cells define kare chhe.

Basic Structure:

1. `<table>`:

- **Purpose:** Table container tag, je overall table structure define kare chhe.

2. `<tr>` (Table Row):

- **Purpose:** Table ni ek row ne define kare chhe.

3. `<th>` (Table Header):

- **Purpose:** Table na header cells ne define kare chhe. Default ma text ne bold ane center aligned banave chhe.
4. **<td>** (Table Data):
- **Purpose:** Table na data cells ne define kare chhe.

```
<table border="1">
  <thead>
    <tr>
      <th>Header 1</th>
      <th>Header 2</th>
      <th>Header 3</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>Row 1, Cell 1</td>
      <td>Row 1, Cell 2</td>
      <td>Row 1, Cell 3</td>
    </tr>
    <tr>
      <td>Row 2, Cell 1</td>
      <td>Row 2, Cell 2</td>
      <td>Row 2, Cell 3</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td>Footer 1</td>
      <td>Footer 2</td>
      <td>Footer 3</td>
    </tr>
  </tfoot>
</table>
```

Additional Attributes:

- **colspan**: Single cell ne multiple columns ma extends karva maate use thai chhe.

`<td colspan="2">This cell spans two columns</td>`

- **rowspan**: Single cell ne multiple rows ma extends karva maate use thai chhe.

`<td rowspan="2">This cell spans two rows</td>`

CAPTION IN TABLES: -HTML ma `<caption>` tag e table ni ek descriptive title provide kare chhe. Aa tag table ne clearly identify karva maate use thai chhe, ane user ne table na content na samajhva ma madad kare chhe.

```
<table border="1">
  <caption>Monthly Sales Report</caption>
  <thead>
    <tr>
      <th>Month</th>
      <th>Sales</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>January</td>
      <td>5000</td>
    </tr>
    <tr>
      <td>February</td>
      <td>6000</td>
    </tr>
  </tbody>
</table>
```

CLASS & ID: - HTML ma class ane id attributes e elements ne uniquely identify karva ane style karva maate use thai chhe. Ahiya inna pramukh features ane differences chhe:

class Attribute

Purpose:

- class attribute e multiple elements ne same class assign kari shakai chhe, je thi common styling ya JavaScript functionality apply kari shakai chhe.

Usage:

- Ekathi vadhu elements ma common style ya behavior apply karva maate use thai chhe.

Syntax:

```
<tag class="class-name">Content</tag>
```

id Attribute

Purpose:

- id attribute e unique identifier provide kare chhe, je ek page ma unique hovu joiye. Aa attribute ne CSS ya JavaScript ma specific element select karva maate use kari shakai chhe.

Usage:

- Ek page ma ekaj element ne unique style ya behavior apply karva maate use thai chhe.

Syntax:

```
<tag id="unique id">Content</tag>
```

FORM IN HTML: - HTML ma <form> tag e user input capture karva maate use thai chhe. Form e text fields, buttons, checkboxes, radio buttons, and other controls include kari ne user na data ne server ma submit karva maate interface provide kare chhe.

Basic Structure:

4. <form>:

- **Purpose:** Form container tag je user input fields ne enclose kare chhe.
- **Attributes:**

- action: Form data ne submit karva maate URL specify kare chhe.
- method: Data submit karva ni method specify kare chhe (GET ya POST).

5. Form Elements:

- **<input>**: Various types of user inputs capture karva maate use thai chhe.
- **<textarea>**: Multi-line text input capture karva maate use thai chhe.
- **<select>**: Drop-down list create karva maate use thai chhe.
- **<button>**: Button create karva maate use thai chhe.

```
<form action="/submit-form" method="post">
  <label for="name">Name:</label>
  <input type="text" id="name" name="name" required>
  <br><br>

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

  <label for="message">Message:</label>
  <textarea id="message" name="message" rows="4" cols="50"
required></textarea>
  <br><br>

  <label for="gender">Gender:</label>
  <input type="radio" id="male" name="gender" value="male">
  <label for="male">Male</label>
  <input type="radio" id="female" name="gender" value="female">
  <label for="female">Female</label>
  <br><br>

  <label for="newsletter">Subscribe to newsletter:</label>
  <input type="checkbox" id="newsletter" name="newsletter"
value="yes">
  <br><br>

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

Explanation:

- **<form action="/submit-form" method="post">**: Form tag, jema action attribute e form data submit karva na URL specify kare chhe, ane method attribute e data submit karva ni method (POST) specify kare chhe.
- **<label for="name">Name:</label>**: Label tag e input field ne describe kare chhe. for attribute e input field, no id specifies kare chhe.
- **<input type="text" id="name" name="name" required>**: Text input field, je user ni name capture kare chhe. required attribute e field mandatory banave chhe.
- **<textarea id="message" name="message" rows="4" cols="50" required></textarea>**: Multi-line text input field, je user ni message capture kare chhe.
- **<input type="radio" id="male" name="gender" value="male"> Male**: Radio buttons, je user na gender select karva maate use thai chhe.
- **<input type="checkbox" id="newsletter" name="newsletter" value="yes">**: Checkbox, je user ne newsletter subscribe karva maate option provide kare chhe.
- **<input type="submit" value="Submit">**: Submit button, je form data ne server ma submit kare chhe.

Additional Attributes:

- **action**: Form data ne submit karva ni URL specify kare chhe.
- **method**: Data submit karva ni method specify kare chhe (GET or POST).

Form Submission Methods:

- **GET**: Data URL ma append thai ne send thase, je form data ne URL parameter ma include kare chhe. Limited size data submit kari shakai chhe.
- **POST**: Data HTTP request body ma submit thase, je large amount of data send karva maate use thai chhe.

IFRAME TAGS: - HTML ma <iframe> tag e ek webpage ne anya webpage ni andar embed karva maate use thai chhe. Aa tag e external content ne apna page par display karva maate, jaise ke video, maps, ya anya web content, use kari shakai chhe.

Basic Structure:

```
<iframe src="URL" width="width" height="height" frameborder="border" allowfullscreen></iframe>
```

Attributes:

1. src:

- **Purpose:** Embed karva maate je URL specify kare chhe. Aa URL external content no address chhe je iframe ma display karva maate chhe.
- **Example:**

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

2. width:

- **Purpose:** Iframe ni width specify kare chhe.
- **Example:**

```
<iframe src="https://www.example.com" width="600"></iframe>
```

3. height:

- **Purpose:** Iframe ni height specify kare chhe.
- **Example:**

```
<iframe src="https://www.example.com" height="400"></iframe>
```

4. frameborder:

- **Purpose:** Iframe ni border display karva maate use thai chhe. (HTML5 ma outdated chhe; CSS thi border styling kari shakai chhe.)
- **Example:**

```
<iframe src="https://www.example.com" frameborder="0"></iframe>
```

5. **allowfullscreen:**

- **Purpose:** Iframe ne fullscreen mode ma enter karva maate allow kare chhe.
- **Example:**
-

```
<iframe src="https://www.example.com" allowfullscreen></iframe>
```

6. **title:**

- **Purpose:** Iframe na content ne describe karva maate use thai chhe, accessibility improve karva maate.
- **Example:**

```
<iframe src="https://www.example.com" title="Example Website"></iframe>
```

Example:

```
<iframe src="https://www.example.com" width="800" height="600" frameborder="0" allowfullscreen title="Example Website"></iframe>
```

Explanation:

- **src="https://www.example.com":** Embed karva maate URL specify kare chhe.
- **width="800":** Iframe ni width 800 pixels chhe.
- **height="600":** Iframe ni height 600 pixels chhe.
- **frameborder="0":** Iframe na border ne remove kare chhe.
- **allowfullscreen:** Fullscreen mode ma enter karva ni suvidha provide kare chhe.
- **title="Example Website":** Iframe na content ne describe kare chhe, accessibility improve karva maate.

Usage:

- **Embedding Videos:**

```
<iframe src="https://www.youtube.com/embed/dQw4w9WgXcQ" width="560" height="315" frameborder="0" allowfullscreen></iframe>
```

- Embedding Maps:

```
<iframe  
src="https://www.google.com/maps/embed?pb=!1m18!1m12!1m3!1d3153.117108  
646165!2d-  
122.0842493846816!3d37.42199977982503!2m3!1f0!2f0!3f0!3m2!1i1024!2i768  
!4f13.1!3m3!1m2!1s0x808fb7d2c5c6c9b1%3A0x7f47d7a8b5ad05dc!2sGoogleplex  
!5e0!3m2!1sen!2sus!4v1631541234567" width="600" height="450"  
frameborder="0" allowfullscreen></iframe>
```

VIDEO TAG:- HTML ma <video> tag e webpage par video content display karva maate use thai chhe. Aa tag e user ne video play karva na controls provide kare chhe, jaise ke play, pause, volume control, ane fullscreen option.

Basic Structure:

```
<video src="video-file.mp4" width="640" height="360" controls>  
Your browser does not support the video tag.  
</video>
```

Attributes:

1. src:

- **Purpose:** Video file no URL specify kare chhe.
- **Example:**

```
<video src="example.mp4"></video>
```

2. width:

- **Purpose:** Video player ni width specify kare chhe.
- **Example:**

`<video src="example.mp4" width="800"></video>`

3. height:

- **Purpose:** Video player ni height specify kare chhe.
- **Example:**

`<video src="example.mp4" height="600"></video>`

4. controls:

- **Purpose:** Video player ma play, pause, volume, ane fullscreen controls display kare chhe.
- **Example:**

`<video src="example.mp4" controls></video>`

5. autoplay:

- **Purpose:** Page load thaya pachhi video automatically play thase.
- **Example:**

`<video src="example.mp4" autoplay></video>`

6. loop:

- **Purpose:** Video complete thaya pachhi automatic loop ma replay thase.
- **Example:**

`<video src="example.mp4" loop></video>`

7. muted:

- **Purpose:** Video play thaya pachhi sound mute rahe chhe.
- **Example:**

```
<video src="example.mp4" muted></video>
```

8. poster:

- **Purpose:** Video load thaya pachhi display thava mate default image specify kare chhe.
- **Example:**

```
<video src="example.mp4" poster="poster-image.jpg" controls></video>
```

Example:

```
<video src="example.mp4" width="800" height="450" controls autoplay loop muted  
poster="poster-image.jpg">
```

Your browser does not support the video tag.

```
</video>
```

Explanation:

- **src="example.mp4":** Video file na URL specify kare chhe.
- **width="800":** Video player ni width 800 pixels chhe.
- **height="450":** Video player ni height 450 pixels chhe.
- **controls:** Video player ma controls display kare chhe.
- **autoplay:** Page load thaya pachhi video automatically play thase.
- **loop:** Video complete thaya pachhi automatic loop ma replay thase.
- **muted:** Video play thaya pachhi sound mute rahe chhe.
- **poster="poster-image.jpg":** Video load thaya pachhi default image display thase.

Multiple Sources:

Purpose: Different formats specify kari ne ensure kari shakai chhe ke video sabhi browsers ma compatible chhe.

```
<video width="640" height="360" controls>  
  <source src="video.mp4" type="video/mp4">
```

```
<source src="video.webm" type="video/webm">
```

```
<source src="video.ogv" type="video/ogg">
```

Your browser does not support the video tag.

```
</video>
```

Explanation:

- **<source>**: Different formats specify karva maate use thai chhe. Browser pehli compatible format play kare chhe.