



● Topics

- HTML 5 Document Structure & Syntax (section, article, aside, header, footer, nav, dialog)
 - Attributes of HTML 5
 - Web Form (datetime, date, month, week, time, number, range, email, url)
- Audio / Video

● HTML 5 Document Structure & Syntax (section, article, aside, header, footer, nav, dialog) :

- The basic structure of an HTML (Hypertext Markup Language) document refers to the overall organization and syntax of an HTML file.
- It consists of several elements that provide information about the web page's content, structure, and formatting.

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>My Web Page</title>
5     <meta charset="UTF-8">
6     <link rel="stylesheet" href="styles.css">
7     <script src="script.js"></script>
8   </head>
9   <body>
10    <h1>Welcome to my web page!</h1>
11    <p>This is the content of my web page.</p>
12  </body>
13 </html>
14
```





● Structure Explan

- **DOCTYPE Declaration:** `<!DOCTYPE html>` indicates the document type and version (HTML5).
- **HTML Tag:** `<html>` is the root element of the page
- **Head Section:** The `<head>` contains meta-information about the document:
 - `<title>`: Sets the title of the page displayed in the browser tab.
 - `<meta charset="UTF-8">`: Specifies the character encoding for the document (UTF-8).
 - `<link rel="stylesheet" href="styles.css">`: Links to an external CSS file for styling.
 - `<script src="script.js"></script>`: Links to an external JavaScript file for functionality.
- **Body Section:** The `<body>` contains the content visible to users:
- `<h1>`: A main heading welcoming visitors.
- `<p>`: A paragraph providing additional content.

● HTML5 Syntax Rules

- **Elements:** Enclosed in angle brackets (e.g., `<element>`). Most elements have opening and closing tags, though some (like `` and `
`) are self-closing.
- **Attributes:** Provide additional information about elements. Defined within the opening tag (e.g., ``).
- **Nesting:** Elements can be nested inside one another, but must be properly closed in reverse order (e.g., `<div><p></p></div>`).
- **Comments:** Added using `<!-- Comment here -->`.





❖ Tags

- Section
- Article
- Aside
- Header
- Footer
- Nav
- Dialog

❖ Section Tag

- The `<section>` tag defines a section in a document.
- Use `<section>` to wrap related content, such as different topics on a webpage, parts of an article, or distinct areas of a report.
- Helps screen readers and other assistive technologies understand the structure of the content, making it easier to navigate.

▪ Example

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <title>Example of Section Tag</title>
6   </head>
7   <body>
8     <h1>My Blog</h1>
9
10    <section>
11      <h2>Introduction</h2>
12      <p>This section introduces the main topics of the blog.</p>
13    </section>
14
15    <section>
16      <h2>Topic 1</h2>
17      <p>This section discusses the first topic in detail.</p>
18    </section>
19
20    <section>
21      <h2>Topic 2</h2>
22      <p>This section covers the second topic with examples.</p>
23    </section>
24  </body>
25 </html>
```

Run





❖ Article Tag

- The HTML <article> tag defines an independent self-contained content in a document, page, application or a site.
- Example

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <title>Artical Tag</title>
6   </head>
7   <body>
8     <article>
9       <h2>Narendra Modi</h2>
10      <i>(Naam to suna hi hoga) </i>
11      <p>
12        Narendra DamodarDas Modi is the 15th and current Prime Minister of
13        India, Modi, a leader of the Bharatiya Janata Party (BJP), previously
14        served as the Chief Minister of Gujarat state from 2001 to 2014. He is
15        currently the Member of Parliament (MP) from Varanasi.
16      </p>
17    </article>
18  </body>
19 </html>
```

Run

❖ Aside tag

- 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.
- The <aside> tag in HTML is used to represent content that is tangentially related to the main content of a document.





➤ Example

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <title>Artical Tag</title>
6   </head>
7   <body>
8     <article>
9       <h1>Main Article Title</h1>
10      <p>This is the main content of the article.</p>
11
12      <aside>
13        <h2>Related Information</h2>
14        <p>
15          This content is related to the main article but not essential to its
16          main point.
17        </p>
18      </aside>
19    </article>
20  </body>
21 </html>
```

Run

❖ Header Tag And Nav Tag

❖ **<header>** Tag

- **Purpose:** The **<header>** tag is used to define the introductory content of a document or a section. It typically contains elements such as the site title, logo, and sometimes a tagline or introductory information.
- **Placement:** It can be used at the top of the page or within any section or article.
- **Content:** Common elements within a **<header>** include headings (**<h1>** to **<h6>**), logos (****), and navigation links (**<nav>**).





❖ <nav> Tag

- **Purpose:** The <nav> tag is specifically designed for navigation links. It helps search engines and assistive technologies understand that the links within it are for navigating the site.
- **Placement:** It's commonly placed within the <header> but can appear anywhere in the document where navigation is necessary.
- **Content:** The <nav> tag typically contains lists of links (often using and elements).

❖ Example

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <title>Artical Tag</title>
6   </head>
7   <body>
8     <header>
9       <h1>My Website</h1>
10      <nav>
11        <ul>
12          <li><a href="#home">Home</a></li>
13          <li><a href="#about">About</a></li>
14          <li><a href="#services">Services</a></li>
15          <li><a href="#contact">Contact</a></li>
16        </ul>
17      </nav>
18    </header>
19  </body>
20 </html>
21
```

Run





❖ Footer

- The `<footer>` tag defines a footer for a document or section.
- A `<footer>` element typically contains:
 - copyright information
 - contact information
 - sitemap
 - back to top links
 - related documents

● Example

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <title>Footer Tag</title>
6   </head>
7   <body>
8     <footer>
9       <p>Author: Rohan Makvana</p>
10      <p><a href="https://www.google.co.in/">Google</a></p>
11    </footer>
12  </body>
13 </html>
14
```

❖ Dialog Tag

- 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.





Attributes

Attribute	Value	Description
open	open	Specifies that the dialog element is active and that the user can interact with it

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8" />
5     <title>Footer Tag</title>
6   </head>
7   <body>
8     <p>This is some text.</p>
9
10    <dialog open>This is an open dialog window</dialog>
11  </body>
12 </html>
13
```





❖ HTML5 Attributes

1. Global Attributes

```
1 <section
2   id="example"
3   class="container"
4   style="color: blue"
5   title="This is a tooltip"
6 >
7   Hello, World!
8 </section>
```

- **id**: Unique identifier for the element.
- **class**: Class names for styling.
- **style**: Inline CSS for styling.
- **title**: Tooltip text.

2. Input Attributes

```
1 <form>
2   <input type="text" placeholder="Enter your name" required />
3   <input
4     type="email"
5     placeholder="Enter your email"
6     pattern=".+@.+\..+"
7     required
8   />
9   <input type="submit" value="Submit" />
10 </form>
11
```





- **placeholder**: Hints at the expected input.
- **required**: Makes the field mandatory.
- **pattern**: Specifies a regex for validation.

3. Media Attributes

```
1 <audio width="320" height="240" controls autoplay muted>
2   <source src="movie.mp4" type="video/mp3" />
3   Your browser does not support the video tag.
4 </audio>
5
```

- **controls**: Shows playback controls.
- **autoplay**: Plays automatically.
- **muted**: Starts muted

4. Data Attributes

```
1 <h1 data-user-id="12345" data-role="admin">User Info</h1>
2
```

- **data-***: Custom data attributes.





❖ Web Form (datetime, date, month, week, time, number ,range, email, url)

- Here's an overview of various HTML5 input types related to dates, times, numbers, and other forms, along with examples for each.

1. Datetime

- **Note:** The datetime input type has been deprecated. Use datetime-local instead.
- **Example :**

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>DateTime</title>
5   </head>
6   <body>
7     <label for="datetime">Select a date and time:</label>
8     <input type="datetime-local" id="datetime" name=
  "datetime" />
9   </body>
10 </html>
```

2. Date

- **Description :** Allows users to select a date.
- **Example :**





```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>DateTime</title>
5   </head>
6   <body>
7     <label for="date">Select a date:</label>
8     <input type="date" id="date" name="date" />
9   </body>
10 </html>
```

3. Month

- **Description** : Allows users to select a month and year.
- **Example**

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>Month</title>
5   </head>
6   <body>
7     <label for="month">Select a month:</label>
8     <input type="month" name="month" />
9   </body>
10 </html>
```





4. Week

- **Description** : Allows users to select a specific week in a year.
- **Example**

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>Month</title>
5   </head>
6   <body>
7     <label for="week">Select a week:</label>
8     <input type="week" id="week" name="week" />
9   </body>
10 </html>
```

5. Time

- **Description** :Allows users to select a specific time (hours and minutes).
- **Example**

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>Time</title>
5   </head>
6   <body>
7     <label for="time">Select a time:</label>
8     <input type="time" id="time" name="time" />
9   </body>
10 </html>
```





6. Number

- **Description** : Allows users to enter a number.
- **Example**

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <title>Number</title>
5   </head>
6   <body>
7     <label for="number">Enter a number:</label>
8     <input type="number" id="number" name="number" />
9   </body>
10 </html>
11
```

