
HTML

—

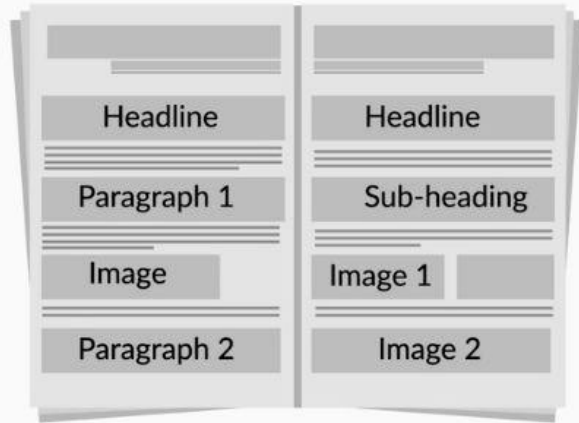
Now, let's find out more about HTML. What does the acronym stand for? How do you write the structure of an HTML page?

You must now have a basic understanding of front-end and the technologies involved in it, namely:

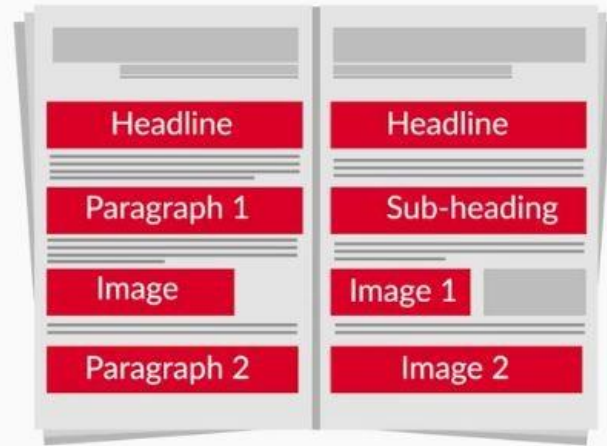
- **HTML:** It forms the basic structure of a web page.
- **CSS:** It deals with adding styles and making a web page look good.
- **JS:** It adds interactive functionalities to the elements present on a web page.

Example :

HTML - A MARKUP LANGUAGE



HTML - A MARKUP LANGUAGE



● Structure of HTML and tags in HTML

In this segment, you will see a deeper explanation, of the structure of a basic HTML page. You will also be introduced to the various tags and elements in HTML.

Now, let's learn about HTML tags in further detail.

```
<!DOCTYPE>  
<html> ← Root Element or Parent element  
<head>  
<title>  
</title>  
<body> ← Main Element  
</body>  
</html>
```

Follow the link to know more about [<!DOCTYPE>](#)

TAGS

```
<!DOCTYPE html>  
<html>  
<head>  
    <title></title>  
</head>  
<body>  
    ← Content to be added here  
</body>  
</html>
```

● Summary:

● What are tags?

- A tag is a closing and an opening entity
- E.g. `<body>`, `</body>`, `<h1>`, `</h1>`, `<p>`, `</p>`, etc.
- Here `<body>` tag is an opening body tag and `</body>` is a closing body tag
- How we can comment any tag. Two ways- single line comment and multi line comment

● What are elements?

Elements are a combination of —

- `<opening tag> + content + <closing tag>`
 - Eg. `<p> I am a paragraph </p>`

Various tags in HTML

- E.g. `<title></title>`, `<meta>`, `<script></script>`, `<style></style>`, `<p></p>`, ``, etc.
- The two types of tags
 - Tags that require a closing tag: e.g. `<p></p>`, `<h1></h1>`, etc.
 - Tags that do not require a closing tag or that are otherwise known as self-closing tags:
 - e.g. `
`, `<meta>`, ``, etc.

● Inline and Block Elements

- Now in HTML, you will come across two types of elements:
 - Inline
 - Block
- What are these elements, and how are they different from each other?

Inline Elements

These are elements that take up only the space they require. There are no line breaks before or after them.

Some inline elements are — `<a>`, `<button>`, ``, `<input>`, `<script>`, `<select>`, ``, `<textarea>`

Block level Elements

Block Elements

These are elements that have a line break before and after them such that they take up the entire horizontal width of a row.

Some block elements are — `<aside>`, `<header>` `<main>`, `<footer>`, `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`, ``, ``, ``, `<p>`, `<section>`

inline element 1

inline element 2

inline element 3

inline element 4

inline element 5

inline element 6

block element 1

block element 2

block element 3

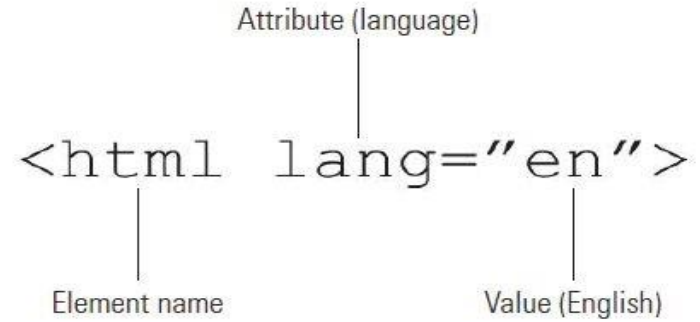
block element 4

● Tags in HTML

It's now time to learn about more tags that can be used to enhance the look and feel of your web pages.

● What are attributes?

- Attributes in HTML provide additional information about a tag. An attribute is a property of a tag; a tag can have many attributes, and different tags may have different attributes.
- Example: '`<a>`' is called an 'anchor' tag. It can be used to create links on a web page. With it, you specify an attribute called 'href', and you assign a value to it, which is the link it should go to. Here, "href" becomes the key; the link becomes the value, and both of them form an attribute together.



● Grouping in HTML

Sometimes, you want to group individual elements in HTML together. This is done mainly when you want to apply similar CSS properties (style, colour, height etc) to a group of elements so that you don't have to apply them individually to each one. It can also be done to give structure to your HTML code, to keep it neat. `<div>` and `` tags are used for this purpose.

Difference between `<div>` and ``

Div	Span
Div is a block element, which means it has a line break before and after it.	Span is an inline element, which means it only takes up the space it requires. And there are no line breaks before or after it.

Popular HTML5 Tags

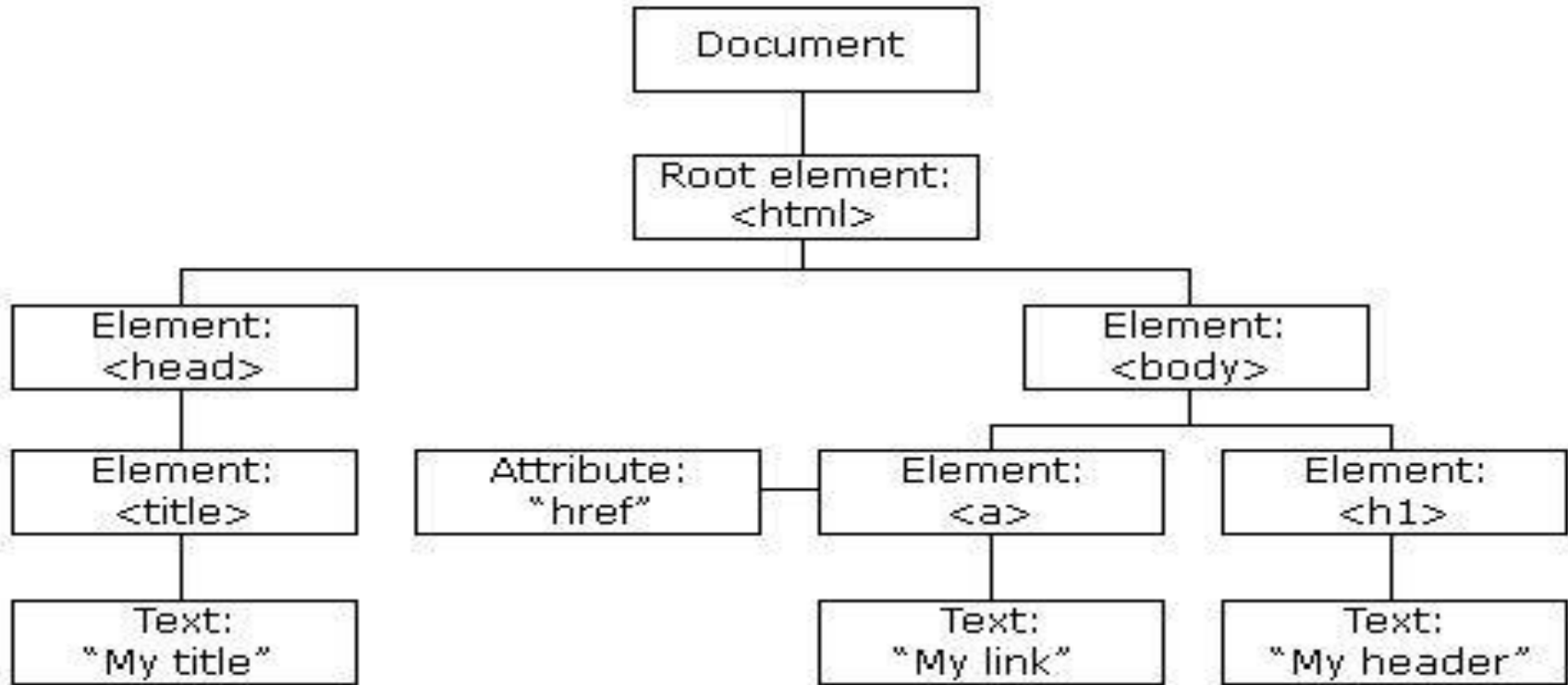
► Tags which are used to create inline elements: -

- `<a>` - used to create anchor (hyperlink)
- `` - used to write bold text
- `
` - used to break line
- `` - used to write italic text
- `<i>` - represent a range of text that is set off from the normal text.
- `` - element embeds an image into the document.
- `<textarea>` - element represents a multi-line plain-text editing control

► Tags which are used to create Block elements: -

- `<div>` - represent a division in document.
- `` - ordered list
- `` - unordered list
- `<p>` - represents a paragraph
- `` - list items
- `<table>` - represents table in a document
- `<hr>` - represents a horizontal rule (dividing line)

HTML TREE



HTML Table

Table - HTML tables allow web developer to arrange data into rows and columns.

Basic syntax-

```
<table>  
  <tr>  
    <th>Table Head 1</th>  
    <th>Table Head 2</th>  
  </tr>  
  <tr>  
    <td>Table Head 1</td>  
    <td>Table Head 2</td>  
  </tr>  
</table>
```

Other Attributes

Of Table

- **colspan** -attribute to make a cell span many columns.
- **rowspan** - attribute to make a cell span many rows

HTML Lists

List - HTML lists allow web developers to group a set of related items in lists.

There are three types of lists in HTML -

1. Unordered list
2. Ordered list
3. Nested lists

Unordered List

- Write
- Correct
- Research
- Asssess

ordered List

1. Write
2. Correct
3. Research
4. Assess

Basic Syntax of Lists

Ordered List -An unordered list starts with the `` tag. Each list item starts with the `` tag.

Ex:-

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

Unordered List - An ordered list starts with the `` tag. Each list item starts with the `` tag.

Ex:-

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


HTML Image

Images - In HTML, images are defined with the `` tag.

- The `` tag is empty, it contains attributes only, and does not have a closing tag. It is self closing tag.
- The `src` attribute specifies the URL (web address or local path) of the image:

Ex: - ``

Image Attributes : -

- Alt
- Width
- Height

HTML Inputs

Inputs -The `<input>` **tag** specifies an input field where the user can enter data.

`<input>` elements are used within a `<form>` element to declare input controls that allow users to input data.

Note : - The `<input>` element is empty, it contains attributes only.

Tip : - Always use the `<label>` tag to define labels for `<input type="text">`, `<input type="checkbox">`, `<input type="radio">`, `<input type="file">`, and `<input type="password">`.

Basic Syntax of Inputs

`<form>`

`<label> Username </label>`

`<input type="text">`

`</form>`

Attributes -

- Placeholder
- Type - button, text, password, checkbox, Radio, color, date, and many more
- Value
- Autocomplete
- Autofocus
- Disabled
- Name
- Checked

HTML5 Featured Elements

- ▶ **Semantic Elements** - A semantic element clearly describes its meaning to both the browser and the developer.

elements: `<div>` and `` -
Tells nothing about its content.

- ▶ Examples of non-semantic

```
<div>  
dhjkgghdasajfhdsjk  
</div>
```

elements: `<form>`, `<table>`,
and `<Footer>` - Clearly
defines its content.

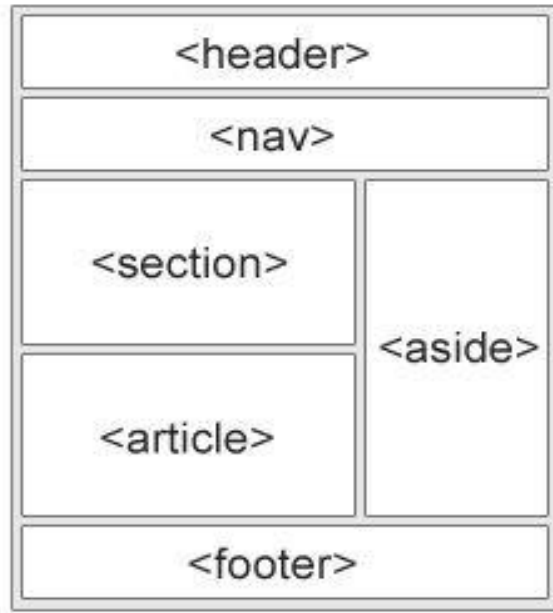
EXAMPLES OF SEMANTIC

```
<Footer>  
hsdjhgfkjdshfdsh  
</Footer>
```

Semantic Elements

Elements :-

- `<header>`
- `<nav>`
- `<section>`
- `<article>`
- `<aside>`
- `<footer>`



Thank you

The background features a light gray gradient on the left side, transitioning into a complex geometric pattern of overlapping translucent blue shapes on the right. These shapes include various polygons and lines, creating a modern, abstract design.