

Structure of an HTML Document

HTML stands for HYPERTEXT MARKUP LANGUAGE, as its full form suggests it's not any programming language, a markup language.

So, while the execution of HTML code we can't face any such error. In real HTML code wasn't compiled or interpreted because HTML code was rendered by the browser.

Which is similar to the compilation of a program. Html content is parched through the browser to display the content of HTML.

HTML DOCUMENT'S STRUCTURE

Html used predefined tags and attributes to tell the browser how to display content, means in which format, style, font size, and images to display. Html is a case insensitive language.

Case insensitive means there is no difference in upper case and lower case (capital and small letters) both treated as the same, for r example 'D' and 'd' both are the same here.

There are generally two types of tags in HTML:

1. **Paired Tags:** These tags come in pairs. That is, they have both opening (< >) and closing (</ >) tags.
2. **Empty Tags:** These tags do not require to be closed.

Below is an example of a () tag in HTML, which tells the browser to bold the text inside it.



Features of HTML:

- It is easy to learn and easy to use.
- It is platform-independent.
- Images, videos, and audio can be added to a web page.
- Hypertext can be added to the text.
- It is a markup language.

Why learn HTML?

- It is a simple markup language. Its implementation is easy.
- It is used to create a website.
- Helps in developing fundamentals about web programming.
- Boost professional career.

Advantages:

- HTML is used to build websites.
- It is supported by all browsers.
- It can be integrated with other languages like CSS, JavaScript, etc.

Disadvantages:

- HTML can only create static web pages. For dynamic web pages, other languages have to be used.
- A large amount of code has to be written to create a simple web page.
- The security feature is not good.

Tags and attributes:

Tags are individuals of html structure; we have to open and close any tag with a forward slash like this `<h1> </h1>`.

There are some variations with the tag some of them are self-closing tag which isn't required to close and some are empty tag where we can add any attributes in it.

Attributes are additional properties of html tags that define the property of any html tags. i.e., width, height, controls, loops, input, and Autoplay.

These attributes also help us to store information in meta tags by using name, content, and type attributes.

Html documents structured mentioned below:

Structure of an HTML Document

An HTML Document is mainly divided into two parts:

- **HEAD:** This contains the information about the HTML document. For Example, the Title of the page, version of HTML, Meta Data, etc.
- **BODY:** This contains everything you want to display on the Web Page.

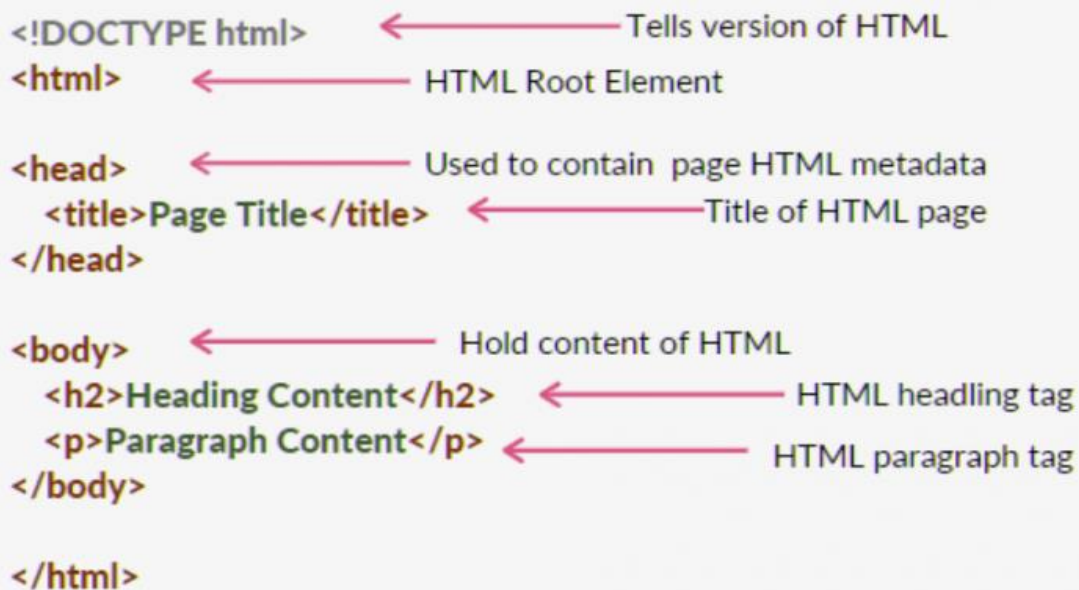
```
<!DOCTYPE html>
<html>

<head>
  <title>Page Title</title>
</head>

<body>
  <h2>Heading Content</h2>
  <p>Paragraph Content</p>
</body>

</html>
```

HTML Page Structure



The diagram illustrates the structure of an HTML document with annotations for each tag:

- `<!DOCTYPE html>` ← Tells version of HTML
- `<html>` ← HTML Root Element
- `<head>` ← Used to contain page HTML metadata
 - `<title>Page Title</title>` ← Title of HTML page
- `</head>`
- `<body>` ← Hold content of HTML
 - `<h2>Heading Content</h2>` ← HTML heading tag
 - `<p>Paragraph Content</p>` ← HTML paragraph tag
- `</body>`
- `</html>`

Information about the tags:

<!DOCTYPE html>: This tag is used to tell the HTML version. This currently tells that the version is HTML 5.0

<html> </html>: <html> is a root element of html.

It's a biggest and main element in complete html language, all the tags, elements and attributes enclosed in it or we can say wrap it, which is used to structure a web page.

<html> tag is parent tag of <head> and <body> tag, other tags enclosed within <head > and <body>.

In <html > tag we use "lang" attributes to define languages of html page such as <html lang=" en"> here en represents English language.

some of them are: es = Spanish, zh-Hans = Chinese, fr= french and el= Greek etc.

<head>: Head tag contains metadata, title, page CSS etc. Data stored in the <head> tag is not displayed to the user; it is just written for reference purposes and as a watermark of the owner.

<body>: A body tag is used to enclose all the data which a web page has from texts to links. All the content that you see rendered in the browser is contained within this element. Following tags and elements used in the body.

1. <h1>, <h2>, <h3> to <h6>
2. <p>
3. <div> and
4. , <i> and <u>
5. , and .
6. , <audio>, <video> and <iframe>
7. <table> <th>, <thead> and <tr>.
8. <form>
9. <label> and <input> and other tags as well.