

What is HTML?

- **HTML stands for Hyper Text Markup Language**
- **HTML is the standard markup language for creating Web pages**
- **HTML describes the structure of a Web page**
- **HTML consists of a series of elements**
- **HTML elements tell the browser how to display the content**
- **HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.**

A Simple HTML Document

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

Example Explained

- The `<!DOCTYPE html>` declaration defines that this document is an HTML5 document
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the HTML page
- The `<title>` element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The `<body>` element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The `<h1>` element defines a large heading
- The `<p>` element defines a paragraph

What is an HTML Element?

An HTML element is defined by a start tag, some content, and an end tag:

`<tagname>` Content goes here... `</tagname>`

The HTML **element** is everything from the start tag to the end tag:

`<h1>My First Heading</h1>`

`<p>My first paragraph.</p>`

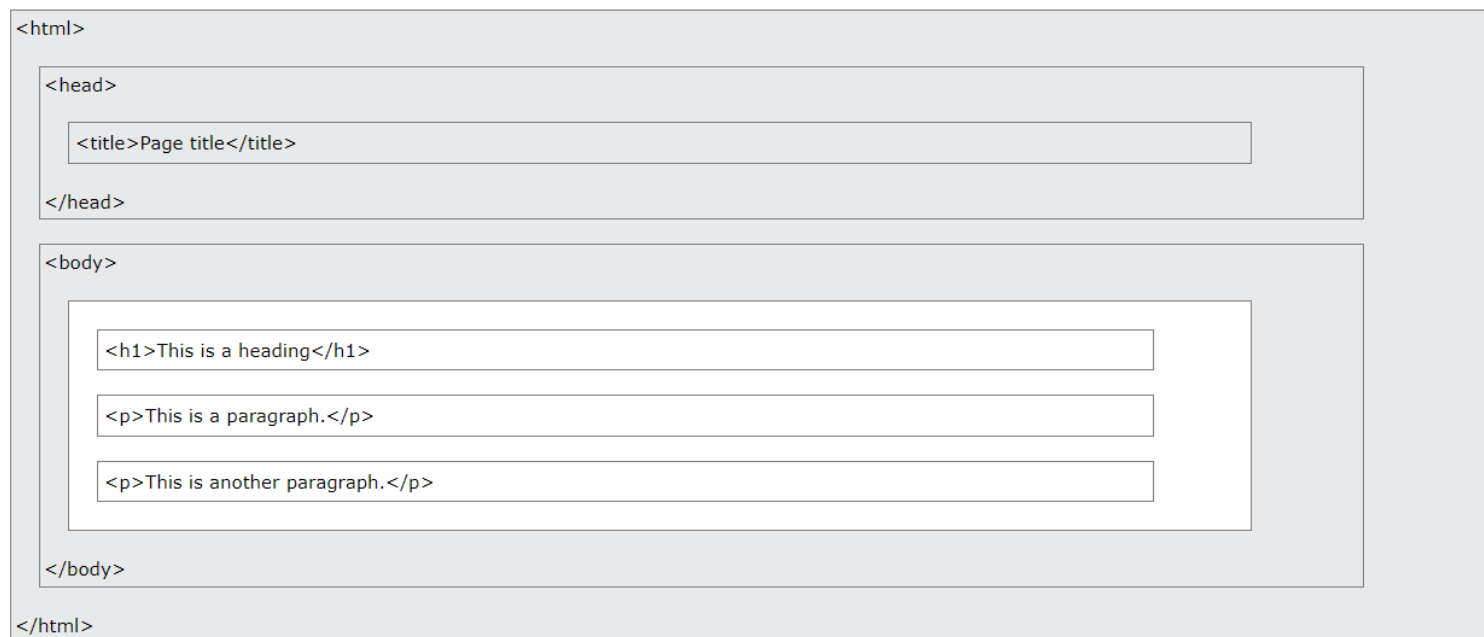
Start tag	Element content	End tag
<h1>	My First Heading	</h1>
<p>	My first paragraph.	</p>
 	<i>none</i>	<i>none</i>

What is HTML used for?

- Structuring web pages. With tags and elements, we can define the headings, paragraphs, and other contents of a web page. ...
- Navigating the internet. ...
- Embedding images and videos. ...
- Improving client-side data storage and offline capabilities. ...
- Game development. ...
- Interacting with native APIs.

HTML Page Structure

Below is a visualization of an HTML page structure:



CSS is the acronym of “**Cascading Style Sheets**”. CSS is a computer language for laying out and structuring web pages (HTML or XML). This language contains coding elements and is composed of these “cascading style sheets” which are equally called CSS files (.css).

What is CSS vs HTML?

HTML is a markup language used to create static web pages and web applications. CSS is a style sheet language responsible for the presentation of documents written in a markup language. background-color: green; HTML cannot be used in a CSS file.^{17 Feb}

What is CSS used to do?

CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.

What are the 3 types of CSS?

The three types of CSS are external, internal, and inline. External CSS is a file that HTML files will link to. Internal CSS is specified at the beginning of an HTML document. Inline CSS is written for a specific element in the HTML document.

Is CSS a programming?

The main reason why HTML and CSS aren't considered programming languages is because they only determine the structure and the style of the webpage you're building.^{3 Jun 2021}

CSS Example

```
body {  
  background-color: lightblue;  
}  
  
h1 {  
  color: white;  
  text-align: center;  
}  
  
p {  
  font-family: verdana;  
  font-size: 20px;  
}
```

What is the JavaScript used for?

JavaScript is a scripting language used to develop web pages. Developed in Netscape, JS allows developers to create a dynamic and interactive web page to interact with visitors and execute complex actions. It also enables users to load content into a document without reloading the entire page.^{7 Aug 2023}

What is the basic of JavaScript?

JavaScript is a scripting language used to create and control dynamic website content, i.e. anything that moves, refreshes, or otherwise changes on your screen without requiring you to manually reload a web page. Features like: animated graphics. photo slideshows.

Is JavaScript free to use?

JavaScript is already running in your browser on your computer, on your tablet, and on your smart-phone. JavaScript is free to use for everyone.

Is JavaScript backend or frontend?

The visual aspects of the website that can be seen and experienced by users are frontend. On the other hand, everything that happens in the background can be attributed to the backend. Languages used for the front end are HTML, CSS, and JavaScript while those used for the back end include Java, Ruby, Python, and . Net.

Why learn JavaScript?

Its developers define it as a “scripting or programming language that allows you to implement complex things on web pages.” JavaScript makes web pages more dynamic and user-friendly so that they respond to visitors' actions. Or, to put it another way, JavaScript makes web pages interactive.23 Jan 2024

```
<!DOCTYPE html>
<html>
<body>
<h2>What Can JavaScript Do?</h2>
<p id="demo">JavaScript can change HTML content.</p>
<button type="button" onclick='document.getElementById("demo").innerHTML = "Hello
JavaScript!'">Click Me!</button>
</body>
</html>
```

Example 2

```
<!DOCTYPE html>
<html>
<body>
<p id="demo">Click the button to display the cookies associated with this document.</p>
<button onclick="myFunction()">Try it</button>
<script>
function myFunction() {
  document.getElementById("demo").innerHTML =
  "Cookies associated with this document: " + document.cookie;
} </script>
```

```
</body>
</html>
```

What is Bootstrap used for?

What is Bootstrap? Bootstrap is a free, open source front-end development framework for the creation of websites and web apps. Designed to enable responsive development of mobile-first websites, Bootstrap provides a collection of syntax for template designs.

What is the main advantage of Bootstrap?

Bootstrap offers a wide range of pre-built components, such as navigation bars, forms, buttons, and more, saving you time and effort in coding from scratch. Bootstrap is easy to learn and implement, making it accessible to both beginners and experienced developers

Why bootstrap not css

Bootstrap works as promised, the CSS and JS code are well-tested, and it can save a lot of time in overall development. For some projects, Bootstrap may be less suitable, its grid may be insufficiently flexible for the design, or the overhead of the entire framework may be unnecessary.

Bootstrap Example

```
<div class="jumbotron text-center">
  <h1>My First Bootstrap Page</h1>
  <p>Resize this responsive page to see the effect!</p>
</div>
```

```
<div class="container">
  <div class="row">
    <div class="col-sm-4">
      <h3>Column 1</h3>
      <p>Lorem ipsum dolor..</p>
    </div>
    <div class="col-sm-4">
      <h3>Column 2</h3>
      <p>Lorem ipsum dolor..</p>
    </div>
    <div class="col-sm-4">
      <h3>Column 3</h3>
      <p>Lorem ipsum dolor..</p>
    </div>
  </div>
</div>
```

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

What is a Tailwind CSS example?

Tailwind CSS is a utility-first CSS (Cascading Style Sheets) framework with predefined classes that you can use to build and design web pages directly in your markup. It lets you write CSS in your HTML in the form of predefined classes.

Is Tailwind CSS for beginners?

Tailwind CSS is super easy for beginners. It gives you a bunch of ready-made classes, so you don't have to write CSS from scratch. This means you can quickly design your website by just adding these classes to your HTML

Is tailwind better than Bootstrap?

Tailwind gives you more freedom to design things your way, while Bootstrap has lots of ready-to-use parts that make building websites quicker. If you really care about making your site look just right, Tailwind might be better. But if you need to get a website up fast, Bootstrap could save you a lot of time.

