

Introduction

to

HTML

Lesson: Introduction to HTML - Building the Web's Skeleton

1. Objectives:

- Understand what HTML stands for and its primary purpose.
- Identify the basic structure of an HTML document (<!DOCTYPE>, <html>, <head>,
 <body>).
- Recognize and use fundamental HTML tags for headings (<h1>-<h6>), paragraphs (), links (<a>), and images ().
- Understand the concept of HTML elements (opening tag, content, closing tag).
- Understand the concept of attributes (like href for links or src for images).
- Create a very simple HTML file and view it in a web browser.

2. Target Audience:

• Absolute beginners with no prior web development or coding experience.

3. Estimated Duration:

• 45 - 60 minutes

4. Materials Needed:

- A computer (Windows, Mac, or Linux).
- A simple text editor (like Notepad on Windows, TextEdit on Mac, or more advanced editors like VS Code, Sublime Text, Atom but Notepad/TextEdit is enough to start).
- A web browser (like Chrome, Firefox, Edge, Safari).

5. Lesson Content & Procedure:

Part A: What is HTML? (5-10 minutes)

- Analogy: Think of a webpage like a human body. HTML is the skeleton. It provides the
 structure and defines the different parts (head, arms, legs, etc.). Other technologies like
 CSS (styling the clothes/skin) and JavaScript (interactivity the muscles/actions) build
 upon this structure, but HTML comes first.
- **Definition:** HTML stands for **HyperText Markup Language**.
 - **HyperText:** Means text that contains links to other texts (or resources). This is the foundation of how we navigate the web!
 - Markup Language: Means it uses special markers called tags to describe the structure and content of a document, telling the browser how to display things (like "this is a heading," "this is a paragraph," "this is an image").
- **Key Point:** HTML is *not* a programming language. It doesn't perform complex logic; it structures content.

Part B: The Basic Structure (10 minutes)

Every HTML document follows a basic template. Let's look at the essential parts:

- Explanation:
 - <!DOCTYPE html>: This declaration tells the browser which version of HTML is being used (in this case, HTML5, the modern standard). It should always be the very first line.
 - <html> ... </html>: This is the root element. Everything else in the document goes inside these tags.
 - <head> . . . </head>: This section contains meta-information about the HTML document. This information isn't displayed directly on the page itself (except for the title). Examples include:
 - <title> ... </title>: Defines the title that appears in the browser tab or window title bar.
 - Links to CSS stylesheets or JavaScript files (we won't cover these today).
 - **<body>** ... **</body>**: This section contains the **actual content** that will be visible to the user on the webpage text, images, links, tables, etc.

Part C: HTML Elements and Tags (15 minutes)

• HTML uses **tags** to mark up content. Most tags come in pairs:

An opening tag: <tagname>

The **content**: Text or other HTML elements.

A closing tag: </tagname> (Note the forward slash /)

• The entire structure (<tagname>Content</tagname>) is called an HTML element.

• Common Tags for Content:

Headings: Used for titles and subtitles. They range from **<h1>** (most important/largest) to **<h6>** (least important/smallest).

```
HTML

<h1>This is a Main Heading</h1>
<h2>This is a Subheading</h2>
```

• Paragraphs: Used for blocks of text.

```
HTML

This is a paragraph of text. It can contain multiple sentences.
This is another paragraph.
```

• Links (Anchors): Used to create hyperlinks to other pages or resources. Uses the <a> tag and requires an attribute.

```
HTML

<a href="https://www.google.com">Click here to visit Google</a>
```

• Images: Used to embed images. Uses the tag. This is an empty tag (doesn't have a closing tag) and requires attributes.

```
HTML

<img src="image_url_here.jpg" alt="Description of the image">
```

Part D: Attributes (5 minutes)

- Attributes provide **additional information** about an HTML element.
- They are always included in the **opening tag**.
- They usually come in name/value pairs: name="value".

- Examples we saw:
 - In <a>: The href attribute specifies the URL (Hypertext Reference) the link points to.
 - In :
 - The **src** attribute specifies the URL (Source) of the image file.
 - The alt attribute provides alternative text for the image. This is crucial for accessibility (screen readers for visually impaired users) and if the image fails to load.
- 6. Activity: Create Your First Web Page! (10-15 minutes)
 - a. Open your text editor (Notepad, TextEdit, etc.).
 - b. Type (or copy/paste) the basic HTML structure:

- c. Inside the <body> tags, add some content:
 - Add a main heading: <h1>Welcome to My Page!</h1>
 - Add a paragraph: This is my very first webpage. I learned how to make it today!
 - Add a link: Learn something
 on Wikipedia
 - Add an image (you can use a link to an online image for now): (This placeholder service is handy for testing).

Your complete **<body>** might look like this:

HTML

<body>

- <h1>Welcome to My Page!</h1>
- This is my very first webpage. I learned how to make it today!
- Learn something on Wikipedia
-

 </body>

d. Save the file:

- Go to File > Save As...
- Choose a location (like your Desktop).
- Crucially: Name the file with an .html extension (e.g., mypage.html).
- Make sure the "Save as type" or "Format" is set to "All Files" or "Plain Text" if necessary, to avoid saving it as .txt.

e. Open the file in your web browser:

- Find the saved **mypage.html** file on your computer.
- Double-click it, or right-click and choose "Open With" your preferred browser.
- You should see your heading, paragraph, link, and image displayed!

7. Review & Recap (5 minutes)

- What does HTML stand for? (HyperText Markup Language)
- What is its main purpose? (To structure web content)
- What are the 4 essential parts of the basic HTML structure? (<!DOCTYPE html>,
 html>, <head>, <body>)
- What do tags do? (Mark up content, e.g., for paragraph)
- What are attributes? (Provide extra info in the opening tag, e.g., href in <a>)
- What section holds the visible content? (**<body>**)
- What section holds meta-info like the title? (<head>)

8. Next Steps & Further Learning:

- Explore more HTML tags (lists , , ; tables , , ; formatting , , etc.).
- Learn about CSS (Cascading Style Sheets) to add colors, layouts, and styles to your HTML structure.
- Explore online resources like:
 - MDN Web Docs (Mozilla Developer Network) Excellent reference
 - freeCodeCamp Interactive tutorials
 - W3Schools Tutorials and examples