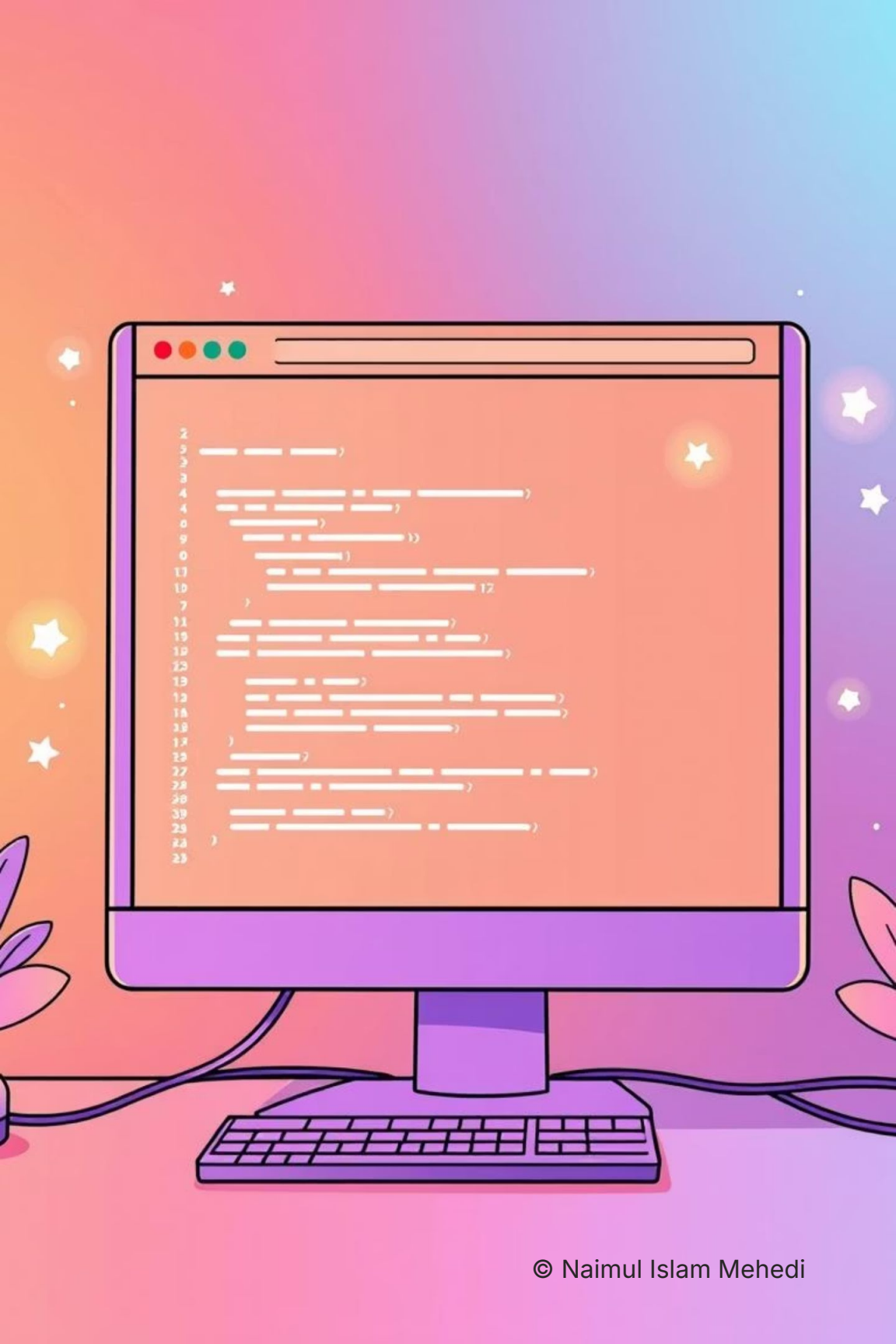


Introduction to HTML: Building the Web's Foundation

Welcome to the foundational journey into web development! This presentation will guide you through the essentials of HTML, the language that structures every website you visit. Get ready to understand the building blocks of the internet.



What is HTML?

HTML, or [HyperText Markup Language](#), is the standard language for creating web content. It's the skeleton of any webpage, providing the structure that browsers read and display. Think of it as the blueprint of a house: it defines the walls, rooms, and overall layout. Without HTML, other technologies like CSS (for styling) and JavaScript (for interactivity) would have nothing to build upon.



HTML
the structural layer



CSS
the presentational layer

The Anatomy of an HTML Element

Most content on a webpage is made of **HTML elements**. Understanding their structure is key to writing effective HTML.

Each element typically has three parts:



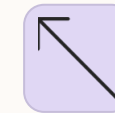
Opening Tag

Marks the beginning, e.g., `<p>`.



Content

The actual text, image, or other information within the element.



Closing Tag

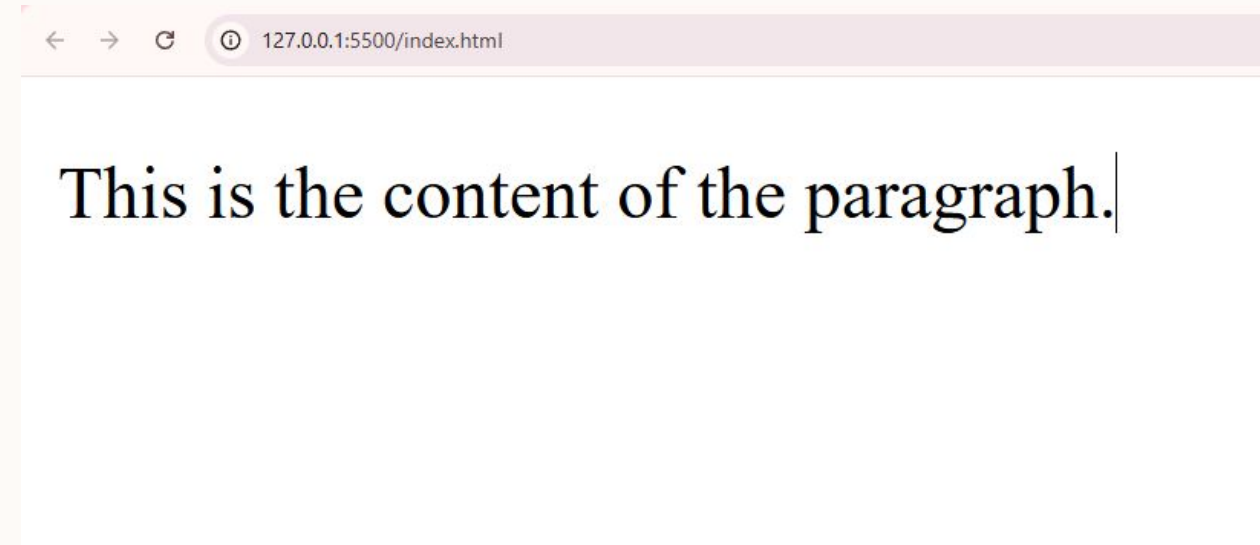
Marks the end, e.g., `</p>`, with a forward slash.

Visualizing an HTML Element

Let's break down a simple paragraph element to see its components in action:

```
<p>This is the content of the paragraph.</p>
```

Here, `<p>` is the opening tag, `</p>` is the closing tag, and "This is the content of the paragraph." is the content.



Attributes: Adding Information

Elements can have **attributes** that provide additional information or modify their behavior. Attributes are always placed within the opening tag and follow a `name="value"` format.

 **Key Idea:** Attributes give specific instructions to an HTML element, making it more dynamic or functional. Without them, many elements would be quite basic.

Example: The Anchor Tag (<a>)

A common example is the `<a>` (anchor) element, used to create hyperlinks. It uses the `href` (hypertext reference) attribute to specify the URL the link points to:

```
<a href="https://www.google.com">This is a link to Google</a>
```

In this example:

- **Element:** `<a>`
- **Attribute Name:** `href`
- **Attribute Value:** `"https://www.google.com"`

Chapter Break

Understanding the Standard HTML Document Structure



Basic HTML Document Structure

Every HTML document adheres to a standard structure, crucial for browsers to interpret and display content correctly. Here are the core components:

<!DOCTYPE html>

The very first line, declaring the document as HTML5.

<html>

The root element, encompassing all other elements on the page.

<head>

Contains meta-information not displayed on the page, like the title or character set.

<body>

Holds all the visible content—headings, paragraphs, images, links, and more.

A Complete Basic HTML Example

Putting it all together, here's what a simple, functional HTML document looks like:

```
5 index.html >  html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Learn HTML</title>
7  </head>
8  <body>
9      <p>This is the content of the paragraph.</p>
10 </body>
11 </html>
```

This foundational code creates a basic webpage with a title, a main heading, and a paragraph.



Key Takeaways & Next Steps

Key Takeaways

- HTML is the **structural backbone** of all webpages.
- Elements consist of **opening tags, content, and closing tags**.
- **Attributes** provide additional information to elements.
- Every HTML document follows a **standard structure** with `<!DOCTYPE>`, `<html>`, `<head>`, and `<body>`.

Next Steps

- Practice creating your own basic HTML files.
- Experiment with different HTML elements like `` and ``.
- Explore how CSS can bring visual style to your structured HTML.
- Start building small, simple webpages!