

Your First Web Page Starts Here

A Beginner's Guide to Writing HTML from Scratch

```
<h1>Hello World</h1>
```

The Trinity of the Modern Web

Before we write a single line of code, let's understand the three core languages that build almost every website you use. Think of a website like a human body:



HTML: The Skeleton

Provides the fundamental **structure** and content of the page. It answers the question, "WHAT is on this page?" (e.g., a heading, a paragraph, an image).



CSS: The Appearance

Controls the **styling** and presentation. It handles colors, fonts, layout, and animations, making the structure look good.

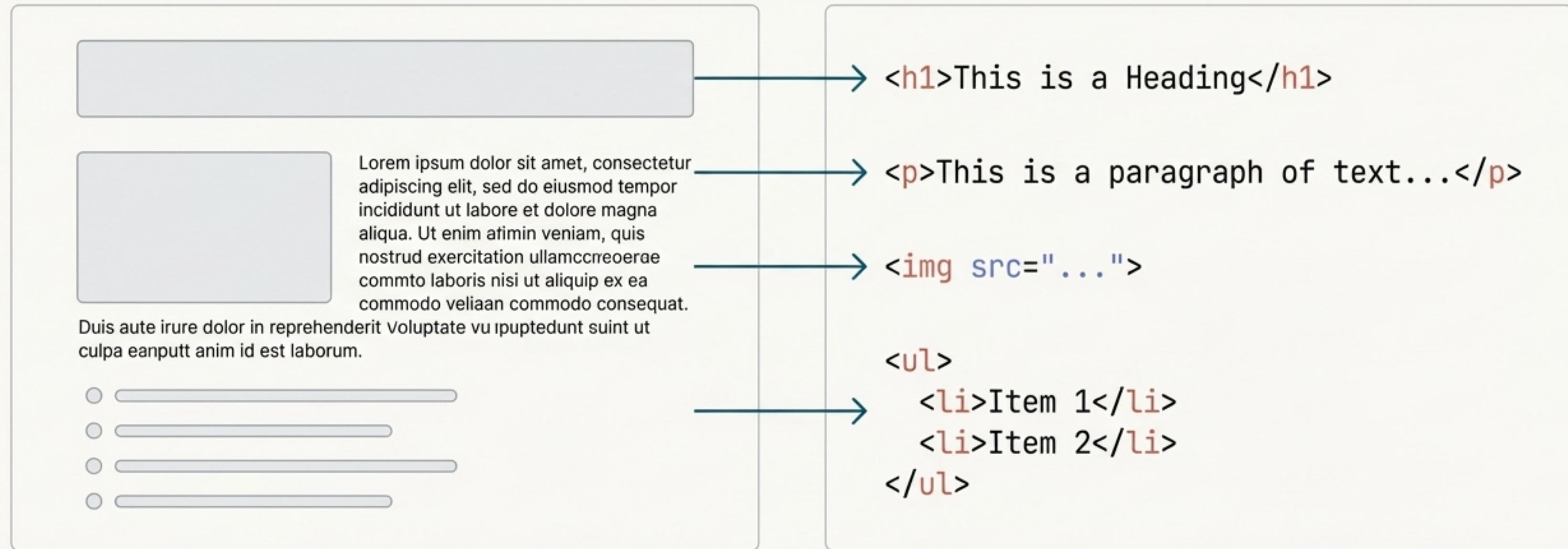


JS: The Brain

Adds **logic** and interactivity. It manages behavior, like what happens when you click a button or submit a form.

HTML's Core Job is Labeling

HTML isn't a traditional programming language; it's a “**markup**” language. Its main purpose is to “**mark up**” or label different parts of your content to tell the browser what each part is.

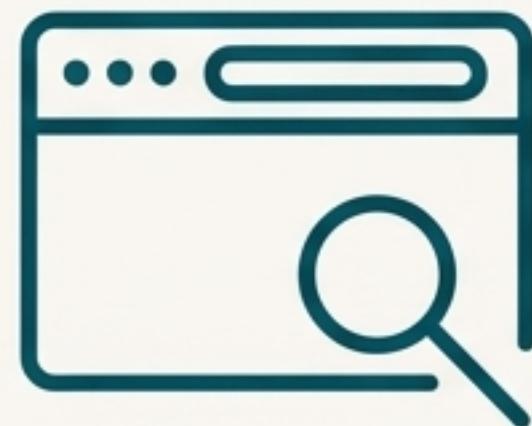


- By labeling content, HTML creates a meaningful structure that browsers can understand and display correctly.

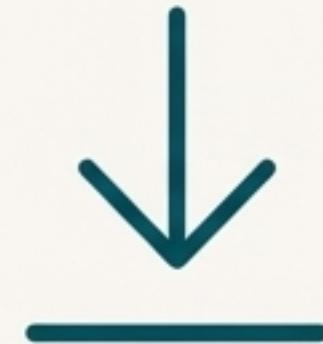
Forging Your Tools: Setting Up Visual Studio Code

We need a place to write our code. Visual Studio Code (VS Code) is a professional, free, and popular code editor. Let's get it installed.

1.



2.



3.



Visit code.visualstudio.com

Download the installer for
your operating system
(Windows or Mac).

Run the installer. Simply click
'Next' through the prompts to
complete the installation.

Essential Power-Ups for VS Code

To make our lives easier, we'll install two key extensions directly within VS Code. Go to the Extensions Tab (the icon with four squares) on the left sidebar.

Prettier



The Code Beautifier

Automatically formats your code to be clean and readable every time you save. No more worrying about messy indentation. Click "Install".

Live Server



The Instant Preview

Lets you see your webpage update live in the browser as you code. This is a game-changer for speed. Click "Install".

Your First Project: “Hello Duniya”

Now, let's create the container for our first web page.



Step 1: Create Your Workspace

On your computer, create a new folder. You can name it Project 1. Open this folder in VS Code.



Step 2: Create Your HTML File

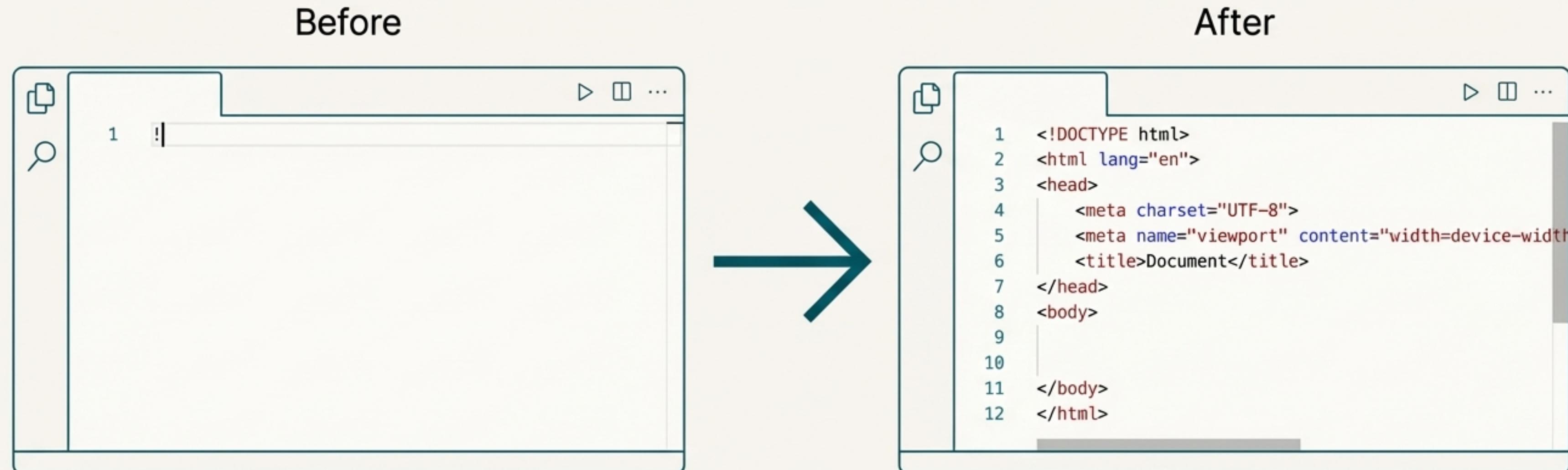
Inside VS Code, create a new file and name it `index.html`.

The `.html` extension is non-negotiable. It's how the browser knows to interpret this file as a web page. While you can use other names, `index.html` is the standard name for a project's homepage.

The Magic Incantation for a Blank Canvas

Every HTML page needs a basic starting structure. Instead of typing it all out, VS Code has a powerful built-in shortcut called Emmet.

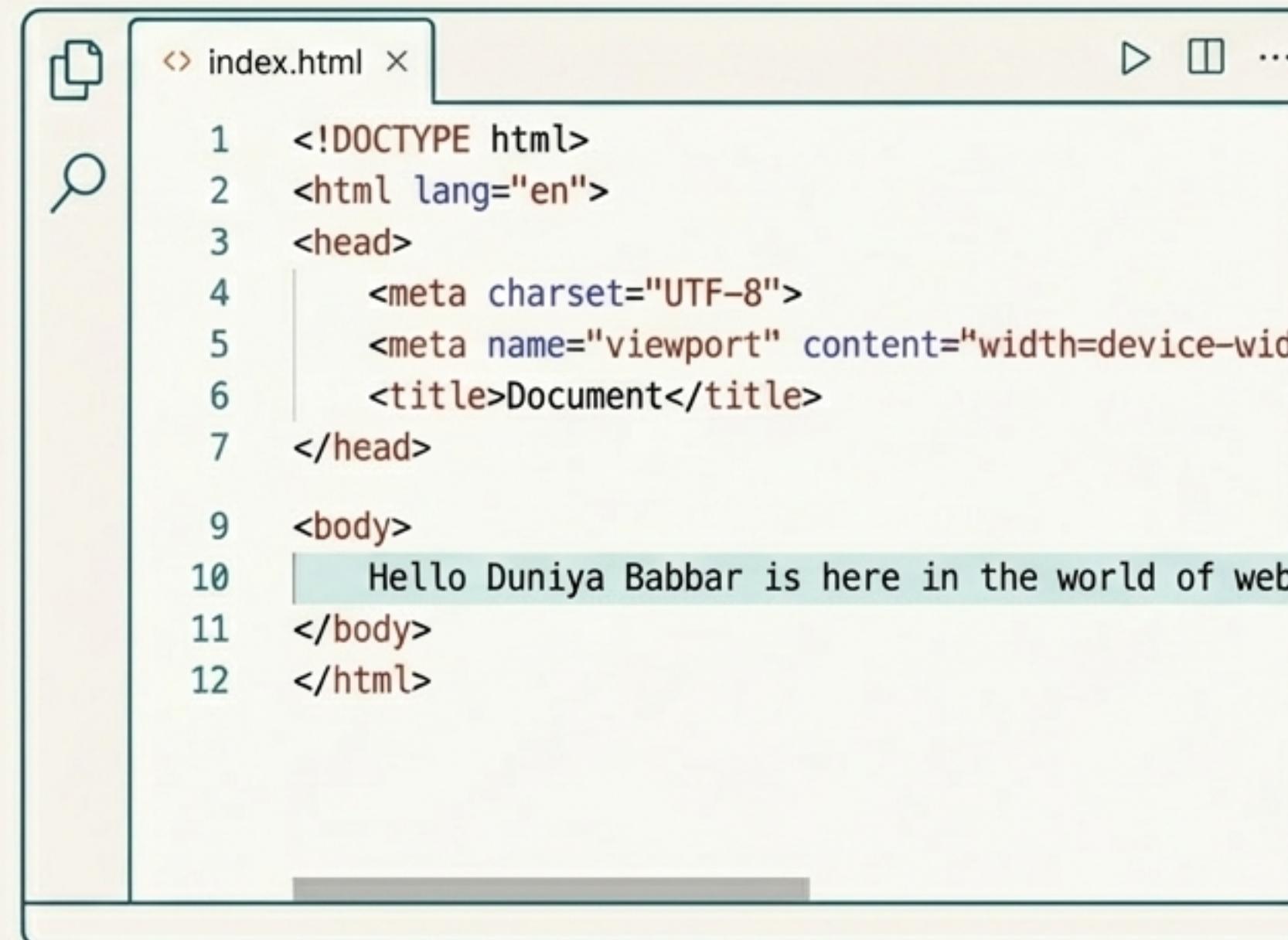
In your empty `index.html` file, simply type an exclamation mark `!` and then press the Tab or Enter key.



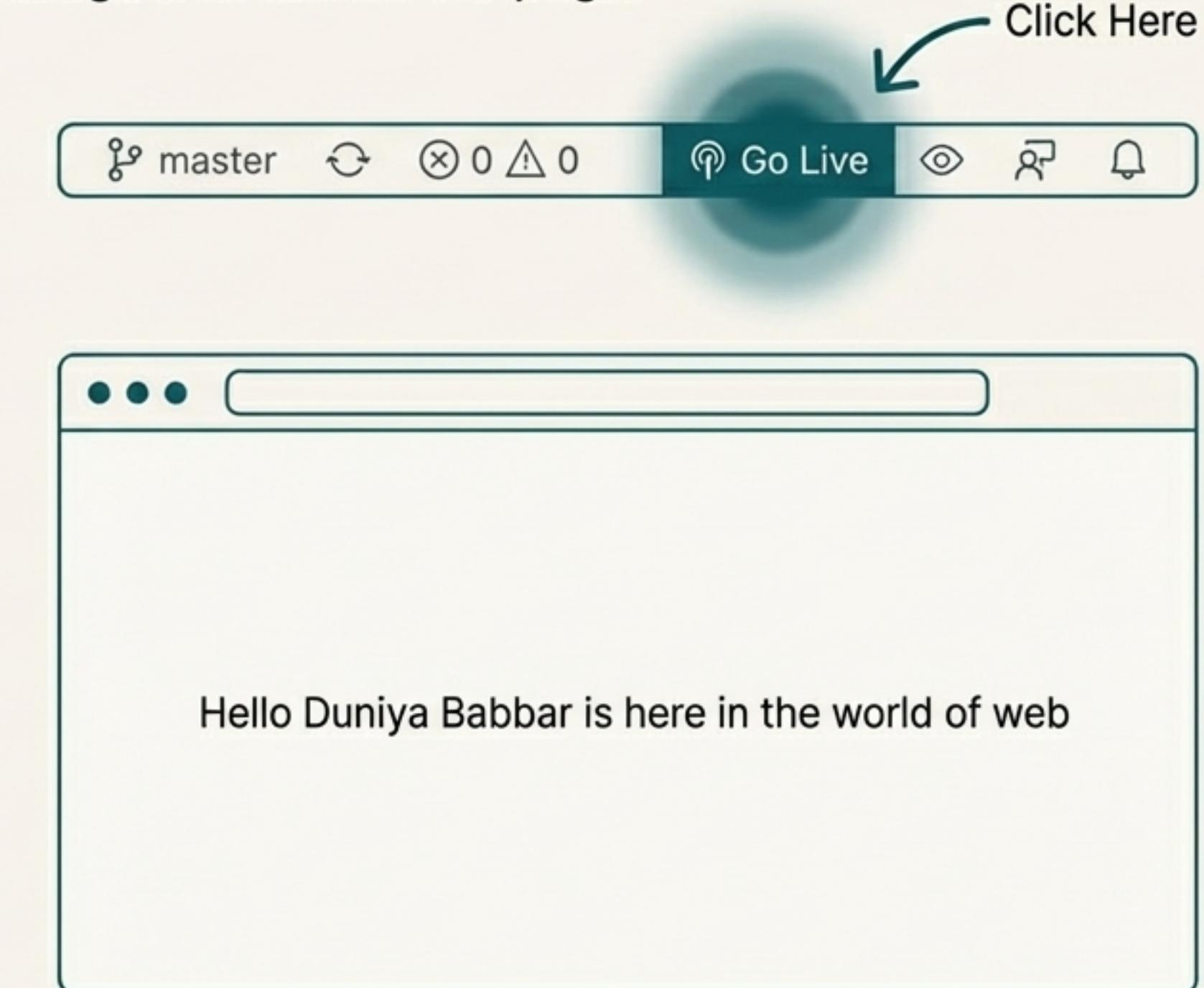
This “spell” summons the essential skeleton of any web page. We’ll break down what it all means shortly.

Bringing Your Code to Life

You've summoned the structure. Now, let's add our message and launch the page.



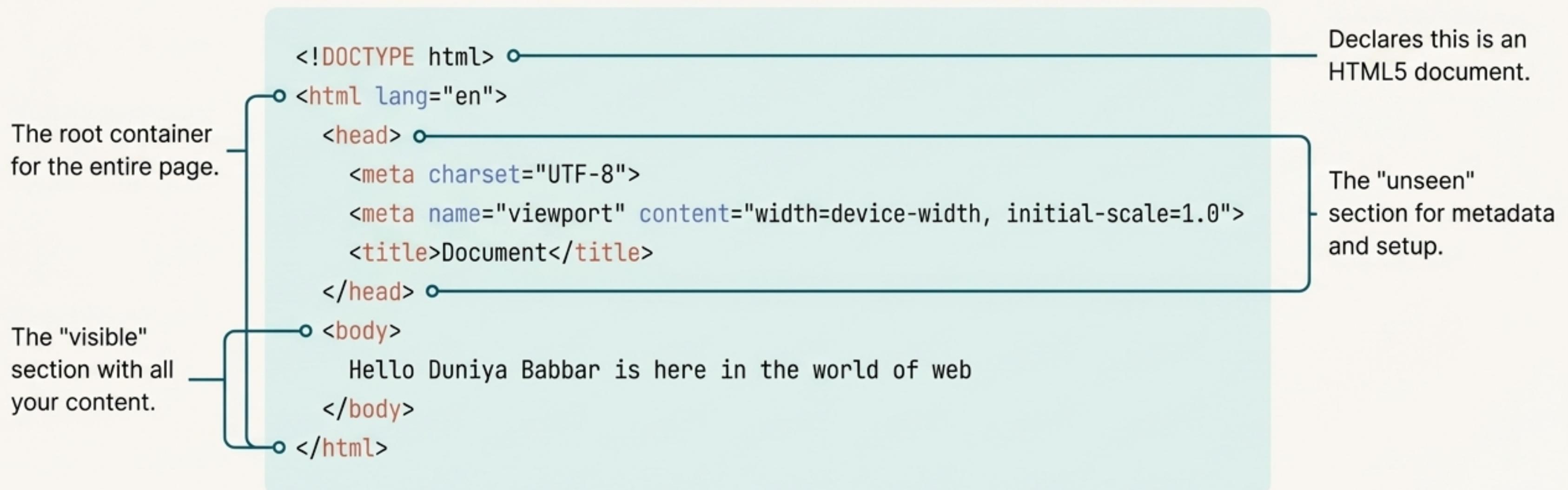
```
index.html > □ ...  
1 <!DOCTYPE html>  
2 <html lang="en">  
3 <head>  
4   <meta charset="UTF-8">  
5   <meta name="viewport" content="width=device-width, height=device-height, initial-scale=1.0, maximum-scale=1.0, user-scalable=no">  
6   <title>Document</title>  
7 </head>  
  
9 <body>  
10  Hello Duniya Babbar is here in the world of web  
11 </body>  
12 </html>
```



Congratulations! You have just created and launched your very first web page.

Anatomy of an HTML Page

That code might look complex, but it's just a few key parts working together. Let's dissect the structure you just created.



The Foundation: The `<html> Root Element

The `<html>` tag acts as the ultimate parent container; all other page content lives inside it. This introduces two key terms:



Tag

A special keyword in angle brackets ('<>') that marks the start or end of an element. Most have an opening and a closing tag.

Element

The complete unit, consisting of the opening tag, the content, and the closing tag.

Key Insight: The `<html>` element is the “root element” because it’s the ancestor of everything else on the page.

The Unseen Brain: The <head> Element

The <head> section contains crucial information **about** the web page that isn't displayed directly. This includes the page title, character set, and data for search engines (SEO).

Code to Reality

The Code

```
1 <head>
2 ...
3   <title>CodeHelp - by Babbar</title>
4   <meta name="description" content="Learn
5     Full Stack Web Development. Master Course
6     on Dynamic Programming...">
7 ...
8 </head>
```

The Reality

Google

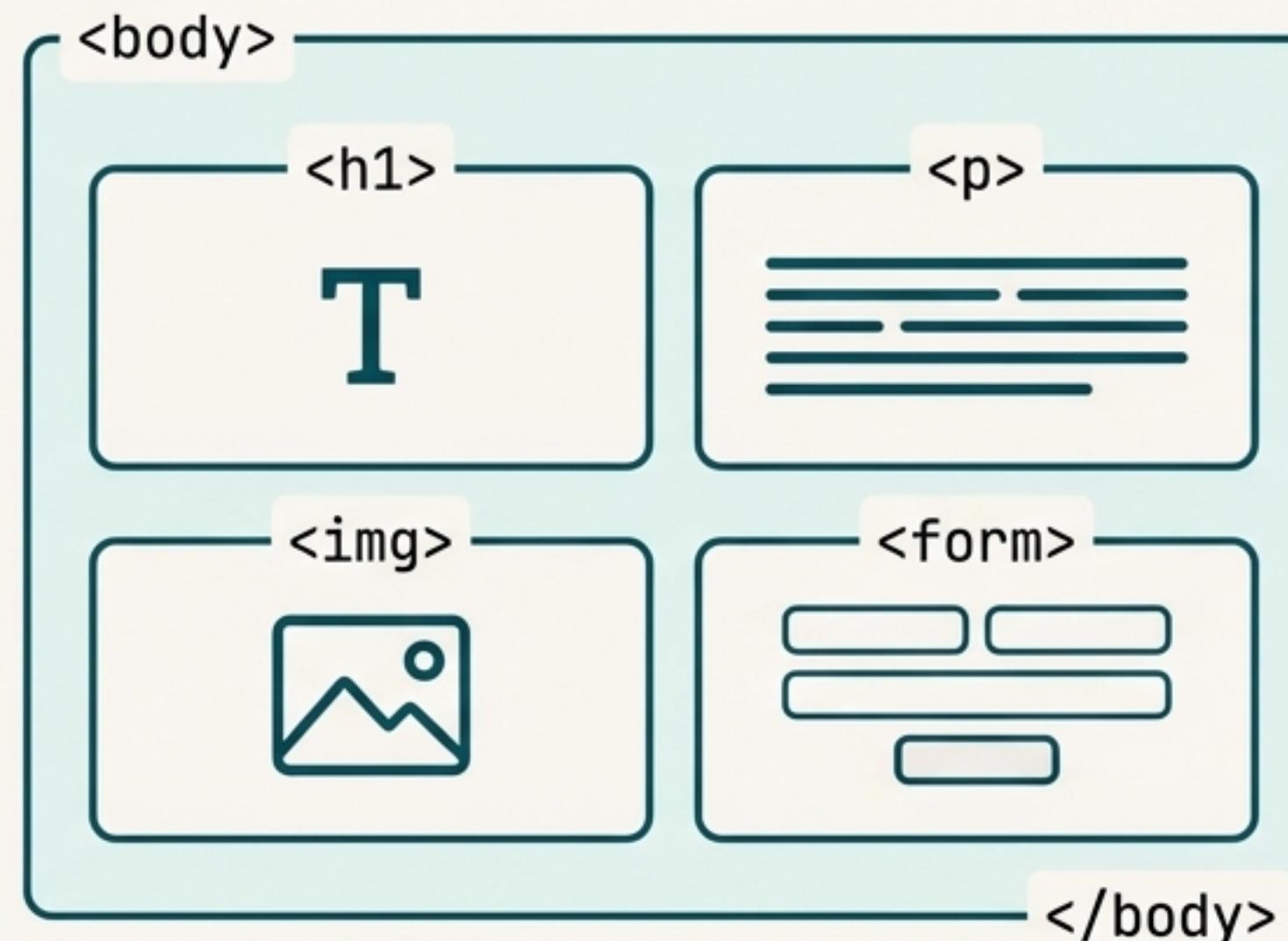
CodeHelp - by Babbar

Learn Full Stack Web Development. Master Course
on Dynamic Programming...

The content inside <head> tells browsers, search engines, and other services essential information about your page.

The Visible Body: The <body> Element

If the <head> is the brain, the <body> is the skeleton and everything built upon it. **All visible content**—headings, paragraphs, images, videos, links, and forms—goes inside the <body> element.



The structure you define inside the <body> is what your users **will see and interact with on the page**. This is where you build the user experience.

Developer's Notes: Leaving Comments

Sometimes you want to leave notes in your code for yourself or other developers. HTML comments allow you to write text that the browser will completely ignore.

Comments start with ``.

```
1  <!-- This is the main heading of the page -->
2  <h1>Welcome to My Site</h1>
3
4  <p>This is the first paragraph.</p>
5
6  <!-- TODO: Add another section here later -->
```

Pro-Tip: You can quickly comment out a line in VS Code by selecting it and pressing `Ctrl + /` (Windows) or `Cmd + /` (Mac). This is great for temporarily hiding code without deleting it.

Your Path Forward: Essential Field Guides

Your journey has just begun. As a developer, learning to read official documentation is the most important skill you can build. Here are the two best resources to rely on:



The Gold Standard. Mozilla Developer Network is the comprehensive encyclopedia for all web technologies. When you need the most accurate, in-depth information, start here.



The Quick Reference. Excellent for quick examples, interactive tutorials, and getting a fast understanding of a concept.

Whenever you learn a new tag or concept, make a habit of looking it up in these resources to deepen your understanding.

From Zero to a Live Web Page

Let's recap what you just accomplished. You have:

-  Set up a professional coding environment.
-  Created and launched your first project from scratch.
-  Deconstructed the core anatomy of every web page.

You've taken the most important step: turning the abstract idea of "code" into a tangible result you can see and share. The entire web is built on the foundation you learned today. Now, keep building.