

HTML Zero to Hero: The Ultimate Guide

HTML (HyperText Markup Language) is the standard markup language for creating Web pages. It describes the structure of a Web page.

1. The Basic Structure (Boilerplate)

Every HTML file follows a specific structure. This is the skeleton of a website.

```
<!DOCTYPE html>      <!-- Tells the browser this is HTML5 -->
<html lang="en">      <!-- Root element, language set to English -->
  <head>
    <meta charset="UTF-8"> <!-- Character encoding (supports emojis, etc.) -->
    <title>Page Title</title> <!-- Appears in browser tab -->
  </head>
  <body>
    <!-- All visible content goes here -->
  </body>
</html>
```

2. Text & Headings

HTML uses tags to structure text.

Headings

There are 6 levels of headings, from **<h1>** (most important) to **<h6>** (least important).

This is Heading 1

This is Heading 2

This is Heading 3

Paragraphs and Formatting

Use `<p>` for paragraphs. Use inline tags for styling:

- `` or `` : **Bold text**
- `<i>` or `` : *Italic text*
- `<u>` : Underlined text
- `<mark>` : Highlighted text
- `
` : Line break (moves text to next line)
- `<hr>` : Horizontal Rule (a line across the page)

3. Lists

There are two main types of lists in HTML.

Unordered List (Bullet Points)

```
<ul>
  <li>Apple</li>
  <li>Banana</li>
</ul>
```

- Apple
- Banana

Ordered List (Numbers)

```
<ol>
  <li>Step One</li>
  <li>Step Two</li>
</ol>
```

1. Step One
2. Step Two

4. Links and Images

The web is connected by links and visualized by images.

Anchor Tag (Links)

The **href** attribute specifies the destination URL.

```
<a href="https://google.com" target="_blank">Go to Google</a>
```

[This is a clickable link](#)

Note: **target="_blank"** opens the link in a new tab.

Images

Images do not have a closing tag. The **src** is the source file, and **alt** is text description if image fails to load.

```

```

5. Tables

Used to display data in rows and columns.

```
<table>
  <tr> <!-- Table Row -->
    <th>Name</th> <!-- Table Header -->
    <th>Age</th>
  </tr>
  <tr>
    <td>Rahul</td> <!-- Table Data -->
    <td>25</td>
  </tr>
</table>
```

Name	Age	City
Rahul	25	Delhi
Priya	22	Mumbai

6. Forms (Input & Interaction)

Forms are used to collect user input.

First Name:

Password:

Gender:

☐ Male ☐ Female

Skills:

☐ HTML ☐ CSS

City:

Delhi ▼

Common Input Types

- **type="text"** : Standard text box.
- **type="password"** : Hides characters.
- **type="email"** : Validates email format.
- **type="number"** : Only allows numbers.
- **type="date"** : Date picker.

7. HTML5 Semantic Tags

These tags give meaning to your layout, helping search engines (SEO) understand your page better.

- **<header>** : Top section of a website (Logo, Nav).
- **<nav>** : Navigation links.
- **<main>** : The dominant content of the body.
- **<section>** : A specific section of content.
- **<article>** : Independent content (like a blog post).
- **<footer>** : Bottom section (Copyright, contacts).

End of Notes. Created by your AI Assistant.