

## 1) Block-Level Elements vs Inline Elements

What's the difference?

- **Block-level elements**
  - Start on a **new line**.
  - Expand to **full available width** by default.
  - You can set **width/height/margins/padding** in all directions.
  - Common blocks: <div>, <p>, <h1>...<h6>, <ul>, <ol>, <li>, <section>, <article>, <header>, <footer>, <nav>, <blockquote>, <pre>, <table>.
- **Inline elements**
  - Stay **in the same line** as text/content.
  - Only take up as much **width as their content**.
  - **width/height** usually don't apply (except for "replaced" inlines like <img>); **vertical margins** don't push lines apart.
  - Common inlines: <a>, <span>, <strong>, <em>, <b>, <i>, <u>, <code>, <img>, <mark>, <sub>, <sup>.

Note: <img> is an **inline replaced** element (the browser treats it like an external box), so width/height work on it.

When to use which?

- Use **block** for **sections/containers** (paragraphs, headings, layout boxes).
- Use **inline** for **styling/marketing parts of text** without breaking the line.

## 2) HTML Tag vs. HTML Element

Tag

- The **markup** inside angle brackets.

Element

- The **whole thing**: start tag + (content) + end tag.

Example:

- Tags: <> and & </>;
- Element: <p>Hello world</p>

**Void (empty) elements**

- Elements that **don't** have an end tag or inner content, e.g. <img>, <br>, <hr>, <meta>, <link>, <input>.
- They're still **elements**, even though you only see one tag.

### 3) HTML Image & Link (In Detail)

#### A) Images — <img>



? src — path/URL to the image.

? alt — text shown if image can't load; used by screen readers (make it meaningful).

#### Sizing



#### Common formats

- Photos: .jpg / .jpeg, .webp (smaller, modern), .png (lossless, transparency).
- Icons/Logos: .svg (scales perfectly, tiny file size).

#### Accessibility tips

- Use **meaningful** alt text (e.g., "Instructor pointing at whiteboard").
- If purely decorative, you can use alt="".

#### Common mistakes

- Wrong file path/case (Photo.jpg ≠ photo.jpg on many servers).
- Missing alt.
- Stretching images (keep aspect ratio with height:auto when you set width).

## B) Links — <a>

- **Basic navigation**

<a href="about.html">About Us</a>      // Relative link  
<a href="/contact.html">Contact</a>      //Root-relative (from site root)  
<a href="https://example.com">External</a>      //Absolute URL

### **New tab + safety**

<a href="https://developer.mozilla.org/"  
  target="\_blank" >  
  Open MDN (new tab)  
</a>

🔗target="\_blank" → open in new tab.

## **Download a file**

<a href="files/report.pdf" download>Download Report</a>

### **Jump to a section (same page)**

<!-- Link -->  
<a href="#faq">Go to FAQ</a>

<!-- Target section -->  
<h2 id="faq">FAQ</h2>

### **Email / Phone / WhatsApp**

<a href="mailto:salmank.developer@gmail.com">Email us</a>  
<a href="tel:+923175566089">Call us</a>  
<a href="https://wa.me/923175566089">WhatsApp</a>

### **Make a whole card clickable (allowed in HTML5)**

<a href="course.html" style="display:block; padding:12px; border:1px solid #ddd;">  
  <h3>Full-Stack Course</h3>  
  <p>Learn HTML, CSS, JS, and backend basics.</p>  
</a>

## HTML Tables (Simple & Clear)

### What is a table?

Use a **table** to show data in rows and columns (like a spreadsheet).

**Don't** use tables for page layout.

### Core tags

- `<table>`: the table container
- `<tr>`: table row
- `<th>`: header cell (bold/centered by default)
- `<td>`: data cell
- (Optional) `<caption>`, `<thead>`, `<tbody>`, `<tfoot>`

Example

```
<table>
  <tr>
    <th>Name</th>
    <th>Course</th>
    <th>Score</th>
  </tr>
  <tr>
    <td>Salman</td>
    <td>HTML Basics</td>
    <td>95</td>
  </tr>
  <tr>
    <td>Bilal</td>
    <td>CSS</td>
    <td>88</td>
  </tr>
</table>
```

### With caption, head/body, and accessibility

```
<table>
  <caption>Student Scores</caption>
  <thead>
    <tr>
      <th scope="col">Name</th>
      <th scope="col">Course</th>
```

```
    <th scope="col">Score</th>
  </tr>
</thead>
<tbody>
  <tr>
    <th scope="row">Ayesha</th>
    <td>HTML Basics</td>
    <td>95</td>
  </tr>
  <tr>
    <th scope="row">Bilal</th>
    <td>CSS</td>
    <td>88</td>
  </tr>
</tbody>
</table>
```

## HTML Lists (Simple & Clear)

### Types of lists

- **Unordered list** (bullets): <ul> with <li>
- **Ordered list** (numbers/letters): <ol> with <li>
- **Description list** (terms & definitions): <dl>, <dt>, <dd>

### Unordered list

<h3>Shopping List</h3>

<ul>

<li>Milk</li>

<li>Bread</li>

<li>Eggs</li>

</ul>

### Ordered list

<h3>Steps</h3>

<ol>

<li>Install VS Code</li>

<li>Create index.html</li>

<li>Open in browser</li>

</ol>

### Nested lists (list inside list)

```
<ul>
  <li>Frontend
    <ul>
      <li>HTML</li>
      <li>CSS</li>
      <li>JavaScript</li>
    </ul>
  </li>
  <li>Backend
    <ul>
      <li>Python</li>
      <li>FastAPI</li>
    </ul>
  </li>
</ul>
```

### Small Practice

#### Tables

1. Make a table with columns: **ID, Name, Phone**.
2. Add a <caption>, use <thead>/<tbody>, and scope attributes.