

1. HTML Elements (The Building Blocks)

Definition: An HTML element is everything from the start tag to the end tag. It consists of a tag name, attributes, and the content in between.

- **Structure:** `<tagname attribute="value"> Content </tagname>`
 - **Types:**
 - * **Block-level:** Starts on a new line (e.g., `<div>`, `<h1>`, `<p>`).
 - **Inline:** Does not start on a new line (e.g., ``, `<a>`).
 - **Trends:** we focus on **Semantic HTML**—using tags like `<article>` or `<section>` instead of just `<div>` so that AI and screen readers can understand the content better.
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2. Buttons, Inputs, Headings, Paragraphs, and Forms

These are the "Interactivity" elements. They are how users talk to your website.

- **Headings (`<h1>` to `<h6>`) & Paragraphs (`<p>`):** Used for hierarchy and readability.
- **Buttons (`<button>`):** Used to trigger actions (like "Submit" or "Like").
- **Inputs (`<input>`):** Fields where users type. Types include `text`, `password`, `checkbox`, and `email`.
- **Forms (`<form>`):** A container used to collect user input and send it to a server.

Hacking Effect (Security Warning): If a developer doesn't limit the length of an `<input>` or filter the characters, a hacker can perform **Cross-Site Scripting (XSS)** by typing a `<script>` tag into a comment box.

3. Media Tags: Audio, Video, and Image

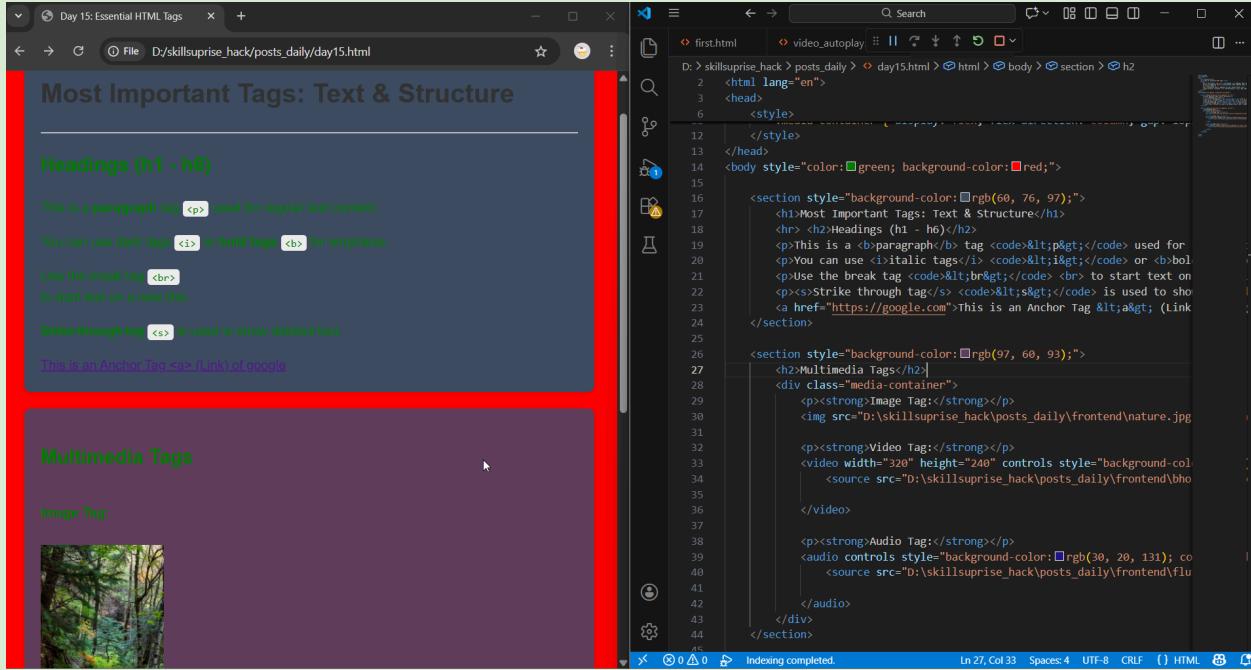
Websites are no longer just text; they are multimedia experiences.

- **Image (``):** Embeds a picture. Requires a `src` (source) and `alt` (description for blind users).
- **Video (`<video>`) & Audio (`<audio>`):** Used to play files directly in the browser without needing third-party plugins (like the old Flash Player).
- **Working Procedure:** The browser doesn't "embed" the file into the HTML; it creates a link to the file on the server and streams it.

- **Trends:** Modern sites use **Lazy Loading**, which means the image/video only loads when you scroll down to it, making the site much faster

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Basic html tags used here:

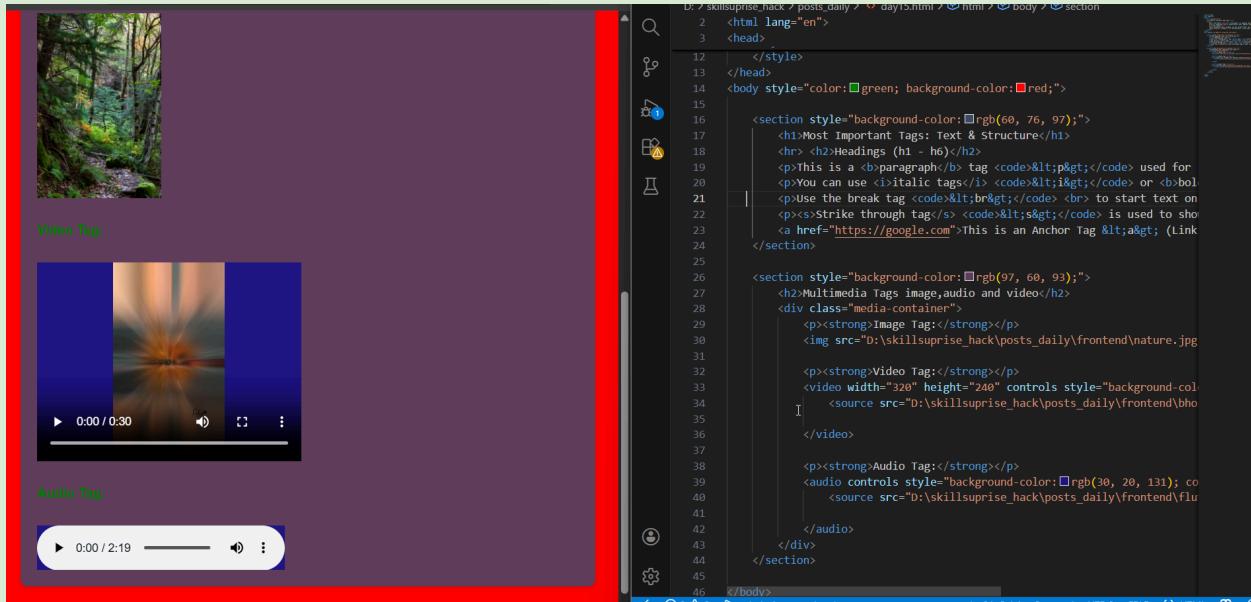


```

<html lang="en">
  <head>
    <style>
      body {
        color: green;
        background-color: red;
      }
    </style>
  </head>
  <body>
    <h1>Most Important Tags: Text & Structure</h1>
    <hr>
    <h2>Headings (h1 - h6)</h2>
    <p>This is a <b>paragraph</b> tag <code><p></p></code> used for regular text content.</p>
    <p>You can use <i>italic tags</i> or <b>bold tags</b> for emphasis.</p>
    <p>Use the break tag <br> to start text on a new line.</p>
    <p>Strike-through tag <s> is used to show deleted text.</p>
    <p>This is an Anchor Tag <a href="https://google.com">Link</a>.</p>
    <h2>Multimedia Tags</h2>
    <div class="media-container">
      <p><strong>Image Tag:</strong></p>
      
    </div>
    <p><strong>Video Tag:</strong></p>
    <video width="320" height="240" controls style="background-color: black; width: 100%; height: 100%; position: relative;">
      <source src="D:\skillsuprise_hack\posts_daily\frontend\bh.mp4" type="video/mp4"/>
    </video>
    <p><strong>Audio Tag:</strong></p>
    <audio controls style="background-color: black; width: 100%; height: 100%; position: relative;">
      <source src="D:\skillsuprise_hack\posts_daily\frontend\flu.mp3" type="audio/mpeg"/>
    </audio>
  </body>
</html>

```

.<h1>media tags like <audio></audio> and <video></video> tags used here</h1>



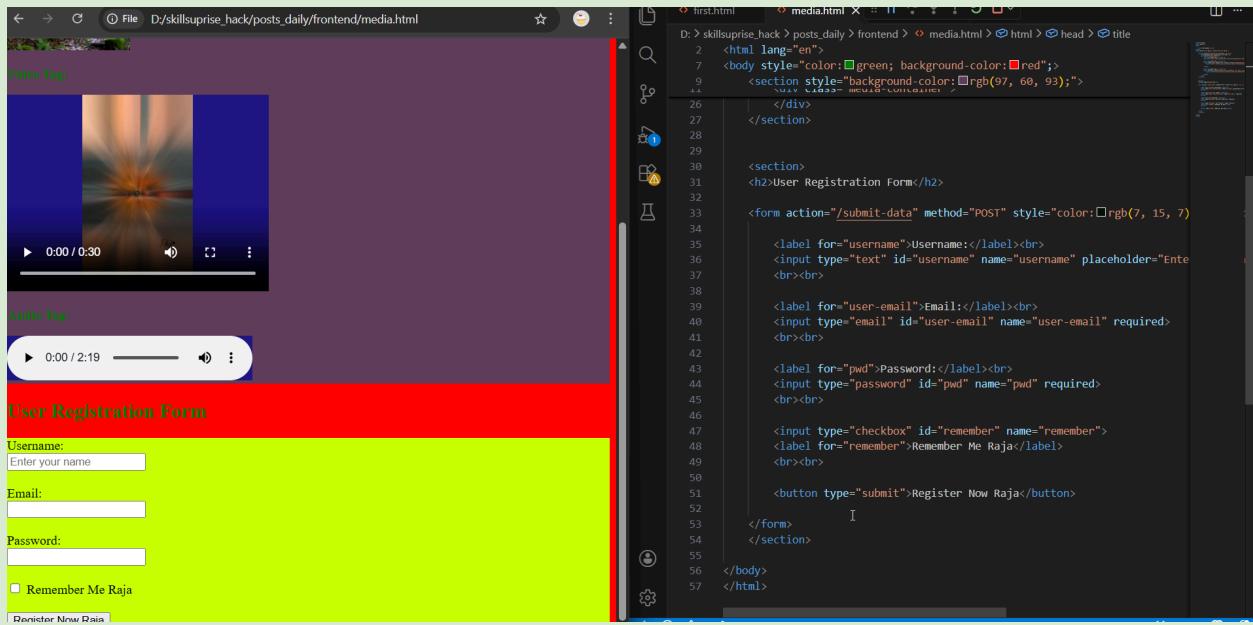
```

<html lang="en">
  <head>
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    </style>
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  <body>
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    <p>Strike-through tag <s> is used to show deleted text.</p>
    <p>This is an Anchor Tag <a href="https://google.com">Link</a>.</p>
    <h2>Multimedia Tags image, audio and video</h2>
    <div class="media-container">
      <p><strong>Image Tag:</strong></p>
      
    </div>
    <p><strong>Video Tag:</strong></p>
    <video width="320" height="240" controls style="background-color: black; width: 100%; height: 100%; position: relative;">
      <source src="D:\skillsuprise_hack\posts_daily\frontend\bh.mp4" type="video/mp4"/>
    </video>
    <p><strong>Audio Tag:</strong></p>
    <audio controls style="background-color: black; width: 100%; height: 100%; position: relative;">
      <source src="D:\skillsuprise_hack\posts_daily\frontend\flu.mp3" type="audio/mpeg"/>
    </audio>
  </body>
</html>

```

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form tag used to create a form here



The screenshot displays a web development environment with two main panes. The left pane shows a browser window with three sections: a video player, an audio player, and a "User Registration Form". The right pane shows the source code for the "media.html" file.

Browser View:

- Video Tag:** A video player showing a blurred orange and yellow scene. Below it is a control bar with a play button, time 0:00 / 0:30, and other controls.
- Audio Tag:** An audio player showing a blurred image. Below it is a control bar with a play button, time 0:00 / 2:19, and other controls.
- User Registration Form:** A red-themed form with fields for Username, Email, and Password, and a Remember Me Raja checkbox.

Code Editor (media.html):

```
D> skillsuprise.hack > posts.daily > frontend > media.html > html > head > title
2   <html lang="en">
3     <body style="color:#green; background-color:#red;">
4       <section style="background-color:#rgb(97, 60, 93);">
5         </div>
6       </section>
7
8       <h2>User Registration Form</h2>
9
10      <form action="/submit-data" method="POST" style="color:#rgb(7, 15, 7)">
11        <label for="username">Username:</label><br>
12        <input type="text" id="username" name="username" placeholder="Enter your name" required>
13        <br><br>
14
15        <label for="user_email">Email:</label><br>
16        <input type="email" id="user-email" name="user-email" required>
17        <br><br>
18
19        <label for="pwd">Password:</label><br>
20        <input type="password" id="pwd" name="pwd" required>
21        <br><br>
22
23        <input type="checkbox" id="remember" name="remember">
24        <label for="remember">Remember Me Raja</label>
25        <br><br>
26
27        <button type="submit">Register Now Raja</button>
28
29      </form>
30
31    </section>
32
33  </body>
34
35  </html>
```