### **Sure Trust**

*FSD-27*

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### **Day 1**

1. **Introduction to HTML**
   * What is HTML?

🡪html-hyper text mark up language

🡪html used to design structure or it creats web pages

* + Role of HTML in web development

🡪 The role of HTML in web development is to provide the backbone and structure of a web page.

🡪 It defines the layout and organization of content on a web page by using a ranked structure of elements. HTML tags allow developers to specify the type of content being displayed and how it should be presented.

* + Difference between HTML, CSS, and JavaScript

🡪 HTML is used to make a website structure, CSS is used to design(paint) that structure while JavaScript is used to add behaviour..

1. **Basic Structure of an HTML Document**
   * <!DOCTYPE html> declaration🡪
   * <html>, <head>, <body> tags
   * Metadata using <title>, <meta>, <link>
2. **Common HTML Elements**
   * Headings (<h1> to <h6>)
   * Paragraphs (<p>)
   * Line breaks (<br>) and horizontal lines (<hr>)
3. **Text Formatting Tags**
   * Bold (<b>), Italic (<i>), Underline (<u>)
   * Strong (<strong>), Emphasis (<em>)
   * Superscript (<sup>) and Subscript (<sub>)
4. **Lists in HTML**
   * Ordered Lists (<ol> with <li>)
   * Unordered Lists (<ul> with <li>)
   * Description Lists (<dl>, <dt>, <dd>)
5. **HTML Links and Anchor Tags**
   * Creating hyperlinks using <a>
   * Absolute vs. relative URLs
   * Opening links in a new tab (target="\_blank")
6. **HTML Images**
   * Inserting images using <img>
   * src, alt, width, and height attributes

### **Example Code with Explanation**

#### **1. Basic HTML Document Structure**

html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>My First Webpage</title>

</head>

<body>

<h1>Welcome to HTML</h1>

<p>This is my first webpage.</p>

</body>

</html>

✅ **Explanation:**

* <!DOCTYPE html> declares the document as HTML5.
* <html lang="en"> specifies the document's language.
* <head> contains metadata like <meta> and <title>.
* <body> contains the visible content of the page.

#### **2. Headings and Paragraphs**

html

<h1>Main Heading</h1>

<h2>Subheading</h2>

<p>This is a paragraph explaining something important.</p>

<p>This is another paragraph with a <br> line break.</p>

<hr>

<p>This paragraph appears after a horizontal line.</p>

✅ **Explanation:**

* Headings <h1> to <h6> define different levels of titles.
* <p> defines paragraphs.
* <br> adds a line break, and <hr> creates a horizontal divider.

#### **3. Text Formatting**

html

<p><b>Bold Text</b>, <i>Italic Text</i>, <u>Underlined Text</u></p>

<p><strong>Strong (Important)</strong> and <em>Emphasized</em> text</p>

<p>H<sub>2</sub>O (Water) and E = mc<sup>2</sup> (Einstein's Formula)</p>

✅ **Explanation:**

* <b> makes text bold, <i> italicizes, and <u> underlines.
* <strong> and <em> provide semantic meaning (important/emphasized).
* <sub> (subscript) and <sup> (superscript) are useful for formulas.

#### **4. Ordered and Unordered Lists**

html

<h2>Shopping List</h2>

<ul>

<li>Milk</li>

<li>Bread</li>

<li>Eggs</li>

</ul>

<h2>Steps to Make Tea</h2>

<ol>

<li>Boil water</li>

<li>Add tea leaves</li>

<li>Pour in a cup</li>

</ol>

✅ **Explanation:**

* <ul> creates an unordered list (bullets).
* <ol> creates an ordered list (numbered).
* <li> defines list items.

#### **5. Links and Anchor Tags**

html

<a href="https://www.google.com" target="\_blank">Visit Google</a>

<a href="about.html">Go to About Page</a>

✅ **Explanation:**

* <a> creates a hyperlink.
* href specifies the URL (external or internal).
* target="\_blank" opens the link in a new tab.

#### **6. Adding Images**

html

<img src="image.jpg" alt="A beautiful scenery" width="300">

✅ **Explanation:**

* src defines the image path.
* alt provides alternative text if the image doesn't load.
* width and height control the image size.

### **Assignment for Students**

1. Create a simple webpage with a title, heading, and paragraph.
2. Add an ordered list of your favorite movies.
3. Insert an image from the internet using the <img> tag.
4. Create a hyperlink to your favorite website.