HTML Part-1

INTRODUCTION TO HTML

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Browser

- A web **browser** is a software application that allows users to access, view, and interact with websites on the internet. It renders **HTML**, **CSS**, and **JavaScript** code to display web pages and execute their functionality. Popular web browsers include **Google Chrome**, **Mozilla Firefox**, **Safari**, **Microsoft Edge**, and **Opera**.

- Web developers use web **browsers** to test and debug their websites during development and ensure they work correctly across different browsers.

Google Chrome   **Mozilla Firefox**   **Safari**   **Opera**
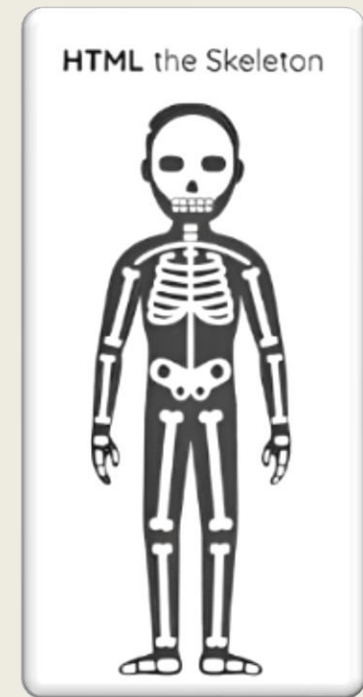
Web Editor

- A web editor, also known as a code editor or an **integrated development environment** (IDE), is a software tool used by web developers to write and edit **web** code. It provides features that make **coding** easier and more efficient, such as syntax **highlighting**, **auto-completion**, code **formatting**, and **debugging** capabilities.

- Web editors are specialized for working with various web technologies, including **HTML**, **CSS**, **JavaScript**, and **server-side** languages like **PHP** or **Python**. Popular web editors include **Visual Studio Code**, **Sublime Text**, **Atom.**

What is HTML?

- **HTML** stands for Hypertext Markup Language. It is the standard **markup** language used to create the **structure** and **content** of web pages on the **World Wide Web**. **HTML** uses a set of **tags** and **elements** to define the various components of a web page, such as **headings**, **paragraphs**, **images**, **links**, **tables**, **forms**, and **more**.

- Here are a few reasons why we use HTML in websites:
  - ✓ **Structure**
  - ✓ **Content Display**
  - ✓ **Hyperlinks**
  - ✓ **Images and Media**
  - ✓ **Forms and User Input**

HTML the Skeleton

HTML TAGS

< Opening Tag >

"Content Here "

</ Closing Tag>

<p>

Paragraph

</p>

- In HTML, tags are used to define elements that structure and format the content of a webpage. **Tags** are written using angle **brackets** (< and >) and are placed around the content they affect. Tags are paired, consisting of an **opening tag** and a **closing tag**, with the content in between.

- HTML **tags** are used to define various elements such as **headings**, **paragraphs**, **links**, **images**, **lists**, **tables**, **forms**, and more. Each element has its own specific purpose and structure defined by its corresponding tags.

Basic Structure Of HTML

```
<html>
<head>
          <title> My Web Page </title>
</head>
<body>
          <!— Content Here -->

</body>
</html>
```

- **<html>**: This is the root element of an HTML document. It wraps all the content on the page.

- **<head>:**This element contains metadata and additional information about the web page, such as the title that appears in the browser's title bar.

- **<title>**: This element sets the title of the web page, which is displayed in the browser's title bar or tab.

- **<body>:** This element contains the visible content of the web page.

Declare <doctype html>

```
<!DOCTYPE html>

<html>

<head>

        <title> My Web Page </title>

</head>

<body>

        <!– Content Here -->

</body>

</html>
```

- The **DOCTYPE** declaration helps the browser understand how to interpret and render the **HTML** code correctly.

- In this example, **<!DOCTYPE html>** declares that the document type is HTML5. It is a simplified DOCTYPE declaration used for HTML5 documents.

HTML HEADING

```
<body>

    <h1>Heading Level 1</h1>

    <h2>Heading Level 2</h2>

    <h3>Heading Level 3</h3>

    <h4>Heading Level 4</h4>

    <h5>Heading Level 5</h5>

    <h6>Heading Level 6</h6>

</body>
```

- Headings provide a way to indicate the importance and organization of different sections of the content.

- HTML offers six levels of headings, ranging from **<h1>** to **<h6>**, with **<h1>** being the highest level of importance and **<h6>** being the lowest.

- It's good practice to use headings in a hierarchical manner, starting with **<h1>** as the main heading and proceeding down to lower levels for subheadings and sub-sections. This helps in maintaining a well-structured and accessible web page.

HTML PARAGRAPH TAG

```
<body>

    <p>Paragraph 1</p>

    <p>Paragraph 2</p>

</body>
```

- In HTML, the **<p>** tag is used to define a paragraph of text. It is commonly used to structure and format blocks of textual content on a webpage.

HTML LINKS

```
<a href="url"> Content Here </a>
————————————————————————————————
<body>
        <a href="https://www.example.com">
        Visit Example Website
        </a>
</body>
```

- In HTML, you can create links using the **<a>** (anchor) tag. Links allow users to navigate to different web pages, sections within the same page, or external resources.

- In this example, the **<a>** tag is used to create the link. The **href** attribute specifies the URL or destination where the link should point to. In this case, it's set to **"https://www.example.com"**, but you can replace it with the desired URL.

- "/" is used for go forward and ".." is used for backwards.

HTML IMAGE TAG

```
<img src="img url" alt="write alternative text">


Example:

        <body>

        <img src="image/car.png" alt="Car" />

        </body>
```

- In HTML, you can insert images using the **<img>** tag. The **<img>** tag is a self-closing tag, meaning it doesn't require a closing tag. It is used to display images on a webpage.

- The **src** attribute specifies the source or URL of the image file.

- The **alt** attribute provides alternative text for the image, which is displayed if the image cannot be loaded or for accessibility purposes.

HTML BUTTON

```
<button> Click Me! </button>


Example:

<button type="button"
onclick="alert('Button Clicked!')">

Click Me!

</button>
```

- In HTML, you can create buttons using the **<button>** tag. Buttons allow users to perform actions or trigger events when clicked.

- In this modified example, the type attribute is set to "**button**" to explicitly define the button type. The onclick attribute specifies a **JavaScript** function to be executed when the button is clicked. In this case, an **alert** message will be displayed saying "Button Clicked!".

LIST IN HTML

In HTML, there are three types of lists you can create: unordered lists, ordered lists, and definition lists.

1. **Unordered List (<ul>):** An unordered list represents a collection of items without any particular order. Each item is displayed with a bullet point or a similar marker.

2. **Ordered List (<ol>):** An ordered list represents a collection of items in a specific order. Each item is displayed with a sequential number or letter.

3. **Definition List (<dl>):** A definition list represents a list of terms and their corresponding definitions.

LIST EXAMPLE

Un-order List Example

```
<ul>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 3</li>
</ul>
```

Order List Example

```
<ol>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 3</li>
</ol>
```

LIST EXAMPLE

Description List Example

```
<dl>
    <dt>Term 1</dt>
    <dd>Definition 1</dd>
    <dt>Term 2</dt>
    <dd>Definition 2</dd>
</dl>
```

- In HTML, the **<dd>** tag is used to define the description or definition of a term within a definition list (**<dl>**).

- It is used in conjunction with the **<dt>** tag, which represents the term or the name of the definition.

End

I HOPE THIS SLIDE WILL HELP YOU TO CLEAR YOUR IDEA