Hypertext Markup Language

HTML stands for **HyperText Markup Language**. It is a standard markup language for web page creation. It allows the creation and structure of sections, paragraphs, and links using HTML elements (the building blocks of a web page) such as tags and attributes.

HTML has a lot of use cases, namely:

- **Web development**. Developers use HTML code to design how a browser displays web page elements, such as text, hyperlinks, and media files.

- **Internet navigation**. Users can easily navigate and insert links between related pages and websites as HTML is heavily used to embed hyperlinks.

- **Web documentation**. HTML makes it possible to organize and format documents, similarly to Microsoft Word.

HTML Basic Structure of Web Page

The basic structure of an HTML page is laid out below. It contains the essential building-block elements (i.e. doctype declaration, HTML, head, title, and body elements) upon which all web pages are created.

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
    <title>Document</title>
</head>
<body>
</body>
</html>
```

HTML Basic Tags

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<DOCTYPE! html> – A doctype or document type declaration is an instruction that tells the web browser about the markup language in which the current page is written. It is not an element or tag. The doctype declaration is not case-sensitive.

<html> – This tag is used to define the root element of HTML document. This tag tells the browser that it is an HTML document. It is the second outer container element that contains all other elements within it.

<head> – This tag is used to define the head portion of the HTML document that contains information related to the document. Elements within the head tag are not visible on the front-end of a webpage.

<body> – The body tag is used to enclose all the visible content of a webpage. In other words, the body content is what the browser will show on the front end.

<meta> -The tag defines metadata about an HTML document. Metadata is data (information) about data.

<meta> tags always go inside the <head> element, and are typically used to specify character set, page description, keywords, author of the document, and viewport settings.

Metadata will not be displayed on the page, but is machine parsable.

Metadata is used by browsers (how to display content or reload page), search engines (keywords), and other web services.

There is a method to let web designers take control over the viewport (the user's visible area of a web page), through the **<meta>** tag (See "Setting The Viewport" example below).

HTML Editors

HTML text editors are used to create and modify web pages. HTML codes can be written in any text editor

HTML text editors are given below:

- Notepad
- Notepad++
- Sublime Text 3
- Atom
- VSCODE

HTML Headings:

These tags help us to give headings to the content of a webpage. These tags are mainly written inside the body tag. HTML provides us with six heading tags from **<h1>** to **<h6>**. Every tag displays the heading in a different style and font size.

```html
<!DOCTYPE html>
<html>

<head>
    <title>LARA TECH</title>
</head>

<body>
    <h1>Hello Lara Tech</h1>
    <h2>Hello Lara Tech</h2>
    <h3>Hello Lara Tech</h3>
    <h4>Hello Lara Tech</h4>
    <h5>Hello Lara Tech</h5>
    <h6>Hello Lara Tech</h6>
</body>
 </html>
```

HTML Paragraph:

These tags help us to write paragraph statements on a webpage. They start with the **<p>** tag and ends with **</p>**.

HTML Break:

These tags are used for inserting a single line type break. It does not have any closing tag. In HTML the break tag is written as **
.**

HTML Horizontal Line:

 The <hr> tag is used to break the page into various parts, creating horizontal margins with help of a horizontal line running from the left to right-hand side of the page. This is also an empty tag and doesn't take any additional statement

HTML Images:

The image tag is used to insert an image into our web page. The HTML <img> tag is used to embed an image in a web page.

Images are not technically inserted into a web page; images are linked to web pages.
The <img> tag creates a holding space for the referenced image.

The <img> tag is empty, it contains attributes only, and does not have a closing tag.

The <img> tag has two required attributes:

- src - Specifies the path to the image
- alt - Specifies an alternate text for the image
- <img title="" src="path of the iamge" alt="some_textfor the image" width="" height="">

HTML Text Formatting

HTML facilitates the ability for formatting text just like we do in MS Word or any text editing software.

HTML Formatting Elements

Formatting elements were designed to display special types of text:

- <b> - Bold text
- <strong> - Important text
- <i> - Italic text

- <em> - Emphasized text
- <mark> - Marked text
- <small> - Smaller text
- <del> - Deleted text
- <ins> - Inserted text
- <sub> - Subscript text
- <sup> - Superscript text

HTML Lists

HTML Lists are used to specify lists of information. All lists may contain one or more list elements. There are three different types of HTML lists: