**Introduction to HTML:**

HTML (HyperText Markup Language) is the standard language used to create web pages. It is a markup language, which means that it consists of a series of tags and attributes that are used to define the structure of and layout of a web page. HTML is used to create the basic structure of a web page, including headings, paragraphs, lists, images, links and more. It is written in plain text and can be created using any text editor.

**HTML Elements:**

**<html>:**

The <html> HTML element, is the first element in every html document. This element defines the boilerplate of html. The <html> represents the root (top level element) of an HTML document, so it is also referred to as the root element. All the other elements must be descendants of this element.

**<head>:**

The <head> HTML element contains the machine-readable information (metadata) about the document, like its title, scripts and style sheets.

**<body>:**

The <body> HTML element contains the content or information, which would be visible to the user. There can be only one <body> element in a document.

**Document Metadata:**

Metadata contains information about the page. This includes information about styles, scripts and data to help software use and render the page. Meta tags are defined inside <head> element. Metadata HTML elements are:

**<base>:**

The <base> element specifies the base URL to use for all relative URLs in a document. There can be only one <base> element in a document.

**<link>:**

The <link> element specifies the relationship between the current document and an external resource. This element is used to link CSS files, and also for site icons for the home screen and apps on mobile devices.

**<meta>:**

The <meta> HTML element contains information about the document. It represents metadata that cannot be represented by other HTML meta-related elements, like base, link, script, style or title.

**<style>:**

The <style> HTML element contains style sheet information for a document, or part of a document. It contains CSS, which is applied to the contents of the document containing the <style> element.

**<title>:**

The <title> HTML element defines the document’s title that is shown in a browser’s title bar or a page’s tab. It only contains text, tags within the element are ignored.

**Content Sectioning:**

Content section is the main part of a HTML file, which contains the data of the website that is going to render. It is written inside the <body> tag, it allows to organize the document content into logical pieces. The sectioning elements used to create a broad outline for page content, including header and footer navigation, and heading elements to identify sections of content. Sectioning elements are:

**<h1>, <h2>, <h3>,..... <h6>:**

The <h1> to <h6> HTML elements represent six levels of section headings. <h1> is the highest section level and <h6> is the lowest level.

**<address>:**

The <address> HTML element indicates that the enclosed HTML provides contact information for a person or people, or for an organization.

**<article>:**

The <article> HTML element represents a self-contained composition in a document, page, application, or site, which is intended to be independently distributable or reusable. Examples are: a forum post, a magazine article or newspaper article, or a blog entry, a product card, a user-submitted comment, an interactive widget or gadget, or any other independent item of content.

**<aside>:**

The <aside> HTML element represents a portion of a document whose content is only indirectly related to the document’s main content. Aside are frequently presented as sidebars or call-out boxes.

**<footer>:**

The <footer> HTML element contains information about the author of the section, copyright data or links to related documents. It represents a footer for its nearest ancestor sectioning content or sectioning root element.

**<header>:**

The <header> HTML element represents the introductory section of a webpage, typically a group of introductory or navigational aids. It may contain heading elements, a logo, a search form, an author name, and other elements.

**<main>:**

The <main> HTML element represents the dominant content of the body of a document. The main content area consists of content that is directly related to or expands upon the central topic of a document, or the central content functionality of an application.

**<nav>:**

The <nav> HTML element represents a section, for the purpose of providing navigation links, either within the current document or to other documents. Common examples of navigation sections are menus, tables of contents, and indexes.

**<section>:**

The <section> HTML element, is a standalone section of a document, which doesn’t have a more specific semantic element to represent it. Sections should always have a heading, with very few exceptions.

**Text Content:**

Text content HTML elements used to organize blocks or sections of content placed between the opening and closing <body> tags.

**<blockquote>:**

The <blockquote> HTML element used to enclose text in quotation. Usually, this is rendered visually by indentation.

**<dd>:**

The <dd> HTML element provides the description, definition, or value for the proceeding term (dt) in a description list (d1).

**<div>:**

The <div> HTML element used to make different sections inside a page, which allows writing different types of content inside a single page, such as description, table, form, contact section, or a feedback section.

**<dl>:**

The <dl> HTML element represents a description list. This element contains a list of groups of terms (specified using the dt element) and description (provided by dd elements). Common uses of this element are to implement a glossary or to display metadata.

**<dt>:**

The <dt> HTML element specifies a term in a description or definition list, and as such must be used inside a dl element.

**<figcaption>:**

The <figcaption> element used for caption or legend describing the rest of the content of its parent <figure> element.

**<figure>:**

The <figure> element represents self-contained content, potentially with an optional caption, which is specified using the <figcaption> element. The figure, its caption, and its contents are referenced as a single unit.

**<hr>:**

The <hr> element used to create a horizontal line between two sections.

**<ol> and <ul>:**

These elements are used to create a list of data, <ol> refers to an ordered list, and <ul> refers to an unordered list.

**<li>:**

The <li> element used to store list items. This element is used inside <ol>, or <ul> tags, which are used to create lists.

**<menu>:**

The <menu> element is an alternative option to create an unordered list. Although in some cases use of <menu> element is more preferred than <ul> element.

**<p>:**

The <p> element used to write simple paragraphs. Paragraphs are usually represented in visual media as blocks of text separated from adjacent blocks by blank lines or first-line indentation.

**<pre>:**

The <pre> element represents preformatted text, which is to be presented exactly as written in the HTML file. The text is typically rendered using a non-proportional, or monospaced font. Whitespace inside this element is displayed as written.