**Assignment – 1**

# Question 1:-Explain the structure of an HTML document and the purpose of doctype

Ans:-

**HTML Document Structure**:

An HTML document consists of the following basic structure:

<!DOCTYPE html>

<html>

<head>

<!-- metadata, links, and scripts go here -->

</head>

<body>

<!-- content goes here -->

</body>

</html>

**Brake it Down :-**

**. <!DOCTYPE html>: The document type declaration, which we'll discuss below.**

**2. <html>: The root element of the HTML document, containing all the other elements.**

**3. <head>: The head section, which contains metadata, links to external stylesheets or scripts, and other information about the document.**

**4. <body>: The body section, which contains the actual content of the HTML document.**

**Purpose of DOCTYPE:-**

**Answer**:- The <!DOCTYPE> declaration, also known as the document type declaration, serves several purposes:

1. Specifies the document type: It tells the browser that the document is written in HTML (or another markup language, like XHTML).

2. Determines the parsing mode: The DOCTYPE declaration determines how the browser parses the HTML document. For example, <!DOCTYPE html> triggers standards mode, which ensures that the browser follows the HTML5 specification.

3. Validates the document: The DOCTYPE declaration helps validate the HTML document against a specific Document Type Definition (DTD). Although HTML5 doesn't require a DTD, older HTML versions (like HTML 4.01) do.

4. Ensures compatibility: By specifying the DOCTYPE, you ensure that your HTML document is compatible with different browsers and devices.

In the case of HTML5, the <!DOCTYPE html> declaration is simple and straightforward. It tells the browser to use the HTML5 specification and standards mode, ensuring that your document is rendered correctly and consistently across different browsers.

# **QUESTION 2;-list and explain at list five common html tags used in website design**

Ans:-

1**.<h1> - <h6> Tags**

The <h1> to <h6> tags are used to define headings of different levels. <h1> is the most important heading, while <h6> is the least important.

Example:

<h1>Main Heading</h1>

<h2>Subheading</h2>

<h3>Sub-subheading</h3>

These tags are essential building blocks for creating structured and semantic HTML content.

2. **<p> Tag**

The <p> tag is used to define a paragraph of text. It is a block-level element, which means it starts on a new line and takes up the full width of its parent element.

Example: <p>This is a paragraph of text.</p>

3**. <img> Tag**

The <img> tag is used to embed an image in an HTML document. It requires a src attribute to specify the URL of the image and an alt attribute to provide alternative text for accessibility.

**Example**: <img src="image.jpg" alt="An example image">

4**. <a> Tag**

The <a> tag is used to define a hyperlink. It requires an href attribute to specify the URL of the linked resource.

**Example**: <a href="https://www.example.com">Visit Example.com</a>

5. **The <li> tag!**

The <li> tag is used to define a list item in HTML. It's a crucial element for creating ordered (numbered) or unordered (bulleted) lists.

Key characteristics:

1. List item: <li> represents a single item in a list.

2. Parent element: <li> must be nested within a parent element, such as <ul> (unordered list) or <ol> (ordered list).

Common use cases:

1. Unordered lists: Use <ul> and <li> to create bulleted lists.

2. Ordered lists: Use <ol> and <li> to create numbered lists.

**Examples:**

Unordered list:

<ul>

<li>Item 1</li>

<li>Item 2</li>

<li>Item 3</li>

</ul>

Ordered list:

<ol>

<li>Item 1</li>

<li>Item 2</li>

<li>Item 3</li>

</ol>

Description list:

<dl>

<dt>chai</dt>

<dd>green tea</dd>

<dd>ice tea</dd>

<dt>coffe</dt>

<dd>cold coffe</dd>

<dd>hot coffe</dd>

    </dl>

Nasted list:

<ul>

<li>Item 1</li>

<li>Item 2

<ul>

<li>Subitem 2.1</li>

<li>Subitem 2.2</li>

</ul>

</li>

<li>Item 3</li>

</ul>

# **QUESTION 3:-Description the difference between block-level an inline elements in HTML**

ANS:-

**Block-Level Element:**

Block-level elements are HTML elements that:

- Occupy the full width of their parent element

- Start on a new line

- Can contain other block-level elements or inline elements

- Typically represent a block of content, such as a paragraph or heading

**Examples:**

- <div>

- <p>

- <h1>-<h6>

- <ul>, <ol>, <li>

**Inline Elements:**

Inline elements are HTML elements that:

- Occupy only the space needed for their content

- Do not start on a new line

- Typically represent a small portion of content, such as a word or phrase

- Can contain other inline elements or text

**Examples:**

- <span>

- <a>

- <img>