**Introduction to HTML:**

→ HTML stands for HyperText Markup Language.It is the standard language used to create and structure content on the web. It tells the web browser how to display text, links, images, and other forms of multimedia on a webpage. HTML sets up the basic structure of a website, and then CSS and JavaScript add style and interactivity to make it look and function better.

**Elements and Tags :**

Elements: The fundamental building blocks of HTML, representing different types of content (text, images, headings, etc.).

Tags: Enclosed in angle brackets (< >), tags define the beginning and end of an element.

Opening Tag: Marks the start of an element (e.g., <p>).

Closing Tag: Marks the end of an element, usually with a forward slash before the element name (e.g., </p>).

Empty Elements: Some elements, like <br> (line break), do not have closing tags.

HTML5 is the fifth version of Hypertext Markup Language (HTML), a standard language used to structure web pages. It defines how content on a webpage should be structured and displayed. Here are some key points of HTML5

Multimedia Support: Embeds audio and video without plugins.

New Form Controls: Includes input types like date and email.

Web Storage: Stores data offline for better performance.

Semantic Elements: Uses tags like <header> and <footer> for better structure.

Improved Performance: Faster and more efficient, especially on mobile.

**HTML Document Structure and Tags :**

HTML syntax is based on elements, which consist of tags that define the structure and content of a web page.

→ Each element has an opening tag and closing tag.

Eg : <h1> Hello World..! </h1>

→ HTML including a <!DOCTYPE html > declaration.

→ <html> is a root element.

→ < head > is used for metadata.

→ < body > is for visible content.

**Meta Data Tags :**

The <meta> 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).

**Headings and Paragraphs :**

HTML has six types of headings, from <h1> to <h6>. The <h1> tag is used for the main heading and is the largest. <h6> is the smallest.

Paragraphs are created using the <p> tag and are used for writing regular text on the webpage.

**Text Formatting Tags :**

1. <b> - Bold text
2. <strong> - Important text
3. <i> - Italic text
4. <em> - Emphasized text
5. <mark> - Marked text
6. <small> - Smaller text
7. <del> - Deleted text
8. <ins> - Inserted text
9. <sub> - Subscript text
10. <sup> - Superscript text

**Hyperlink tag :**

<a href= “[www.google.com](http://www.google.com)” > Click here </a>

We can add links to images and buttons .

**Lists: Ordered and Unordered :**

Unordered lists use bullet points and are made when the order of items doesn't matter, like listing topics or tools.

Ordered lists use numbers and are used when the order is important, like steps in a process or a ranking.

Each item in both types of lists is marked using <li>, which stands for "list item".

**<ul style="list-style-type: upper-roman;">**

**<dt>Intern Names</dt>**

**<li>Dileep</li>**

**<li>Naveen</li>**

**<li>Gnani</li>**

**</ul>**

**<ul style="list-style-type: square;">**

**<dt>Intern Names</dt>**

**<dd><li>Dileep</li>**

**<li>Naveen</li>**

**<li>Gnani</li></dd>**

**</ul>**

**<ol type="A">**

**<dt>Intern list</dt>**

**<li>Dileep</li>**

**<li>Naveen</li>**

**<li>Gnani</li>**

**</ol>**

**<ol start="50">**

**<dt>Intern list</dt>**

**<li>Dileep</li>**

**<li>Naveen</li>**

**<li>Gnani</li>**

**</ol>**

**Tables :**

Tables are used to display data in rows and columns. The main components are:

<table> to start the table

<tr> for each row

<th> for header cells (usually bold)

<td> for normal data cells

This is useful when you want to show structured data, like a schedule or a student record.

<table>

<tr>

<td>Roll Number</td><td>: 34000564321351</td>

</tr>

<tr>

<td>Name</td><td>: R Dileep Kumar</td>

</tr>

<tr>

<td>Father's Name</td><td>: Satyanaraya </td>

</tr>

<tr>

<td>Mother's Name</td><td>: Nagamani</td>

</tr>

</table>

**Forms :**

Forms allow users to input data on a webpage, like names, emails, or passwords.

They often use fields such as:

<input> for single-line input fields (like text or number)

<textarea> for multi-line input

<select> for dropdown menus

<button> to submit the form

Labels are often included to describe each field, making it easier for users to understand what information to provide.

<form>

<label for="firstName">First Name</label>

<input type="text" placeholder="Enter your first name" required=""><br><br>

<label for="lastName ">Last Name</label>

<input type="text" placeholder="Enter your last name" required=""><br><br>

<label for="email">E-mail</label>

<input type="email" placeholder="Enter your e-mail" required=""><br><br>

<label for="Date of Birth"> Date of Birth </label>

<input type="date" max="2002-01-01" required=""><br><br>

<label for="username">Username</label>

<input type="text" placeholder="Enter user name" required=""><br><br>

<label for="Password">Password</label>

<input type="password" placeholder="Enter your password" required=""><br><br>

<label for="gender">Gender</label><br>

<input type="radio" name="gender" value="Male" required="">

<label for="male">Male</label><br>

<input type="radio" name="gender" value="Female" required="">

<label for="female">Female</label><br>

<input type="radio" name="gender" value="Others" required="">

<label for="others">Others</label><br><br>

<label for="Course" required=""> Course</label>

<select >

<option value="" disabled selected>Select your Course</option>

<option>

Front-end

</option>

<option>

Back-end

</option>

<option>

Full Satck

</option>

</select>

<br><br>

<input type="submit">

</form>

**Div and Span :**

These are general-purpose tags used mostly for layout and styling.

<div> is a block-level element, used to group large sections of content or other elements together.

<span> is an inline element, useful for applying styles or scripts to a small portion of text inside a paragraph.

**Emphasizing Text :**

To highlight parts of your text, you can use:

<em> to emphasize text, usually shown in italics

<strong> to make text bold and indicate importance

**Semantic HTML Tags :**

Semantic tags make your HTML more meaningful and easier to read, both for developers and search engines.

<header> – for the top section of the page, usually with a logo or title

<nav> – for navigation links

<main> – for the main content of the page

<section> – for dividing the content into logical parts