**HTML Notes**

**Introduction**

HTML stands for **HyperText Markup Language**.

It is the standard markup language used to **structure web pages**.

Every webpage on the internet uses HTML to give **basic structure** before adding styles (CSS) and interactivity (JavaScript).

It converts **unstructured information** into a structured document that browsers can read and display.

HTML works with **tags and elements**.

* **Tag**: A keyword wrapped in < >.
* **Element**: Opening tag + content + closing tag.

Example: <p>Hello World</p>

**Basic Structure (DOCTYPE, html, head, body)**

An HTML document always follows a fixed structure:

<!DOCTYPE html>

<html>

  <head>

    <title>Page Title</title>

  </head>

  <body>

    <h1>Heading</h1>

    <p>Paragraph text</p>

  </body>

</html>

* <!DOCTYPE html> → Defines the document type and version (HTML5).
* <html> → The root element of the page.
* <head> → Contains metadata about the document (title, meta tags, links to CSS/JS).
* <body> → Contains visible page content (headings, text, images, links, etc.).

We do not put all content inside <head> because it is only meant for **metadata**. All **visible content** should go inside <body>.

**Root Elements**

Root elements are the **foundation of the HTML page**. They appear **only once** in a document.

* <html> → Defines the start and end of the HTML document.
* <head> → Contains metadata, title, scripts, and links.
* <body> → Holds the actual page content that is shown in the browser.

**Container Elements**

Container elements are used to **group or wrap other elements**. They provide structure and hierarchy.

**Child Elements**

Child elements are **nested inside parent elements**.

 <body> is the parent element.

 <h1> and <p> are child elements of <body>.

 <title> is a child of <head>.