ALL HTML TAGS EXPLAINED

Lesson - 2

HTML ke types -

1. HTML 4 Doctypes (3 types)

A. HTML 4.01 Strict

Clean aur standard HTML ke liye. Old/deprecated tags (jaise , <center>) allow nahi karta.

Syntax : <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

B. HTML 4.01 Transitional

Old HTML tags ko support karta hai (jaise tag). Jab log purani websites ko upgrade kar rahe the.

C. HTML 4.01 Frameset

Jab web pages mein <frameset> ka use hota tha. Frames ab out of trend hain.

Syntax : <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN" "http://www.w3.org/TR/html4/frameset.dtd">

2. XHTML Doctypes (4 types) (HTML ka ek XML version - zyada strict rules ke saath)

A. XHTML 1.0 Strict

Very strict coding, saare tags properly close karne hote hain

Syntax : <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

B. XHTML 1.0 Transitional

Thoda flexible, kuch purane tags bhi allow karta hai.

Syntax: <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

C. XHTML 1.0 Frameset

Frames ke saath XHTML likhne ke liye.

Syntax: <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">

D. XHTML 1.1

Aur bhi zyada modular aur strict version hai XHTML ka. Bahut kam use hota hai aajkal.

Syntax : <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"

"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">

3. HTML 5 Doctypes

Format Bahut simple aur chhota hai, Most pupular hai version hai aur aajkal ki saari modern websites isi ka use karti hain.

Syntax : <!DOCTYPE html>

About of HTML/XHTML/HTML5

1. HTML

Webpages ka basic structure create karne ke liye. Ye Flexible hota hai, Jisme chhoti-moti mistakes (like missing closing tags) chal jaati hain. kuch error hone per bhi browser per run ho jata hai.

2. XHTML (Extensible Hyper Text Markup Language)

HTML + XML rules ke saath webpages banana. Bahut strict hai. Har tag properly close karna mandatory hai.

XML jaisa strict syntax follow karna padta hai:

- Tags lowercase mein hone chahiye.
- Har tag ko close karna zaruri hai (
).
- Proper nesting karni padti hai (tags ke andar galat order allowed nahi).

1. HTML5 (Latest aur Modern Version)

Modern, mobile-friendly dynamic websites banane ke liye. HTML jaisa simple syntax. Strict XML jaise rules nahi hain.

Thoda flexible + new features jaise:

- Built-in audio/video support
- Graphics ke liye <canvas>
- Offline storage (localStorage, sessionStorage)
- Semantic elements (<header>, <footer>, <article>)

 ka matlab kya hota hai?

Ye line HTML document ke starting mein likhi jaati hai:

- <html> = HTML ka root element hai, jisme poora page ka content hota hai.
- lang="en" = Ek attribute hai jo batata hai ki page ka language English (en) hai.

Kyu zaroori hai lang attribute?

A. SEO ke liye (Google jaise search engines):

- Search engines ko samajh aata hai ki page kis language mein hai.
- Better indexing aur ranking milti hai.

B. Screen readers ke liye (Accessibility):

- Jo log visually impaired (andhe) hote hain, unke screen readers correct language mein page ko padh paate hain.
- Agar lang="hi" likha hoga to Hindi mein padhne ki koshish karega.

C. Browser hints ke liye:

 Browser correct grammar checker ya translator suggestions de sakta hai.

HTML ke saare important tags

A. Basic Structure Tags:

- <html> → Poora HTML document ka container.
- <head> → Metadata (title, links, scripts) ko define karta hai.
- <title> → Browser tab ka title set karta hai.
- <body> → Main visible content yahan likhte hain.

B. Text Formatting Tags:

- <h1> to <h6> → Headings (h1 sabse bada, h6 sabse chhota).
- > > → Paragraph likhne ke liye.
- <hr> → Horizontal line draw karta hai.
- **** → Bold text.
- <i> → Italic text.
- <u> → Underline text.

- <small> → Chhota text dikhata hai.
- → Important (bold) text.
- → Emphasized (italic) text.

C. Link and Media Tags:

- <a> → Hyperlink banane ke liye (anchor tag).
- → Image embed karne ke liye.
- <video> → Video embed karne ke liye.
- <audio> → Audio files embed karne ke liye.
- <iframe> → Kisi doosre webpage ko apne page me embed karne ke liye.

D. List Tags:

- dist (bullet points).
- ol> → Ordered list (numbered list).
- → List item (ul/ol ke andar use hota hai).
- <dl> → Description list.
- <dt> → Description term.
- <dd>→ Description detail.

E. Table Tags:

- → Table create karne ke liye.
- <**tr>** → Table row.
- → Table data/cell.
- → Table heading cell.
- <thead>, , <tfoot> → Table ke parts ko define karne ke liye.

F. Form Tags:

- <form> → User input collect karne ke liye form banata hai.
- <input> → User se data lena (text, radio, checkbox, etc).
- <textarea> → Multi-line text input ke liye.
- <button> → Clickable button.
- <select> → Dropdown menu.
- <option> → Dropdown ke options.
- <label> → label dene ke liye use karte hai.
- <fieldset> → Ye strike ki tarah use hota hai ye text to delete dikhane ke liye use hota hai.

G. Semantic Tags (HTML5):

- <header> → Ye page ya section ka top wala part hota hai jisme title, logo, ya navigation ho sakta hai.
- <footer> → Ye end mein hota hai jisme copyright, contact info, ya links hote hain.
- <section> → Jab page ke andar ek topic ya part ko alag dikhana ho, tab section use karte hain.
- <article> → Iska use hota hai independent content ke liye jaise blog post, news, ya social media post.
- <aside> → Ye page ke side mein hota hai, jisme ads, links, ya related content hota hai.
- <figure> → Isme hum image ya chart daalte hain, jiska explanation bhi de sakte hain.
- <figcaption> → Figure ka caption.
- <main> → Page ka main content.
- <nav> → Navigation links ka section.
- → Small inline container.
- <mark> → Highlighted text.
- <time> → Date/time show karta hai.
- <mark> → Highlighted text.
- <address> → Contact ya address info.
- <code> → Code snippets ke liye.
- → Preformatted text (jaisa likha, waisa dikhega).

- <script> → JavaScript code embed karne ke liye.
- link> → External files (CSS, favicon) ko link karne ke liye.
- <meta> → Page ke metadata ko define karta hai (SEO ke liye important).

H. Non - Semantic Tags (HTML5):

- <div> → Block-level generic container.
- → Inline-level generic container.
- **>** → Bold text (without meaning).
- <i>→ Italic text (without meaning).
-

 Line break (style ke liye).
- <hr> → Horizontal line.

I. Other Tags (HTML5):

- <!-- ... --> → Sirf notes ya explanation dene ke liye hota hai. Browser isko render nahi karta.
- <pr
- → Ye strike ki tarah use hota hai ye text to delete dikhane ke liye use hota hai.

- <map> → image ke particular area per clickable bana sakte hai. (usemap="")
- <meter> → External files (CSS, favicon) ko link karne ke liye. Ye bhi progress ke similar tag hai jisme hum range dikha sakte he
- <s> → Text ko strike mark karne ke liye use hota hai.
- <sup> → Text ko Superscript mark karne ke liye use hota hai.
- <sub> → Text ko Subscript mark karne ke liye use hota hai.
- <svg>→ SVG (Scalable Vector Graphics) ka use drawing paths, boxes, circles, text, and graphic images ke liye use hota hai.
- <canvas> → Canvas me graphic images, shape and chart drawing karne ke liye use hota hai but hum esme direct use nhi kr sakte hai without javascript ke.
- <address> → Contact information show karwan ke liye.
- <iframe> → iframe ka full form hota hai: Inline Frame, Ye HTML tag kisi doosri website,
 HTML page, video, map, ya external content ko current page ke andar embed karne ke liye use hota hai.

About of attributes

- Attributes extra information dete hain kisi HTML element ke baare me.
- Ye element ke opening tag me likhe jaate hain.
- Attributes name="value" format me hote hain.

Important Points about Attributes:

- Har attribute element ke behavior ya properties ko control karta hai.
- Attributes always start inside the opening tag.
- Kuch attributes universal hote hain (sab elements me use ho sakte hain).

Attribute - href

Description - Link address (for <a>)

Example - Google

Attribute - src

Description - Image/Media source (for , <video>)

**Example - **

Attribute - alt

Description - Image alternate text (for)

Example -

Attribute - title

Description - Tooltip text on hover

Example - Hover me

Attribute - id

Description - Unique identifier for element

Example - <div id="main">

Attribute - class

Description - Grouping multiple elements for CSS/JS

Example - <div class="box">

Attribute - style

Description - Inline CSS styling

Example - Red Text

Attribute - type

Description - Input type specification

Example - <input type="text">

Attribute - value

Description - Default value for form fields

Example - <input type="text" value="Hello">

Attribute - placeholder

Description - Greyed out hint text in input fields

Example - <input placeholder="Enter your name">

Attribute - disabled

Description - Disable a form field

Example - <button disabled>Click Me</button>

Attribute - disabled

Description - Disable a form field

Example - <button disabled>Click Me</button>

Attribute - readonly

Description - Input field ko read-only banata hai

Example - <input readonly value="Can't change">

Attribute - required

Description - Form field mandatory banata hai

Example - <input required>