

Full Stack Web Development

@MK_Codes

This time, the last time.

Frontend + Backend $\Rightarrow$ Full stack web Development

Frontend

Frontend Development
Notes

Back end

Price → 5900 RS
1-1-23 - 1-1-2027
valid

Delta 5.0

#MIdentity
@MK_Coder
#Seekho_Code

by APNA
College

Start → 20-1-23

complete / End →

WEB DEVELOPMENT Course

HTML5



Hyper Text Markup Language

Day #1

↳ Stack overflow

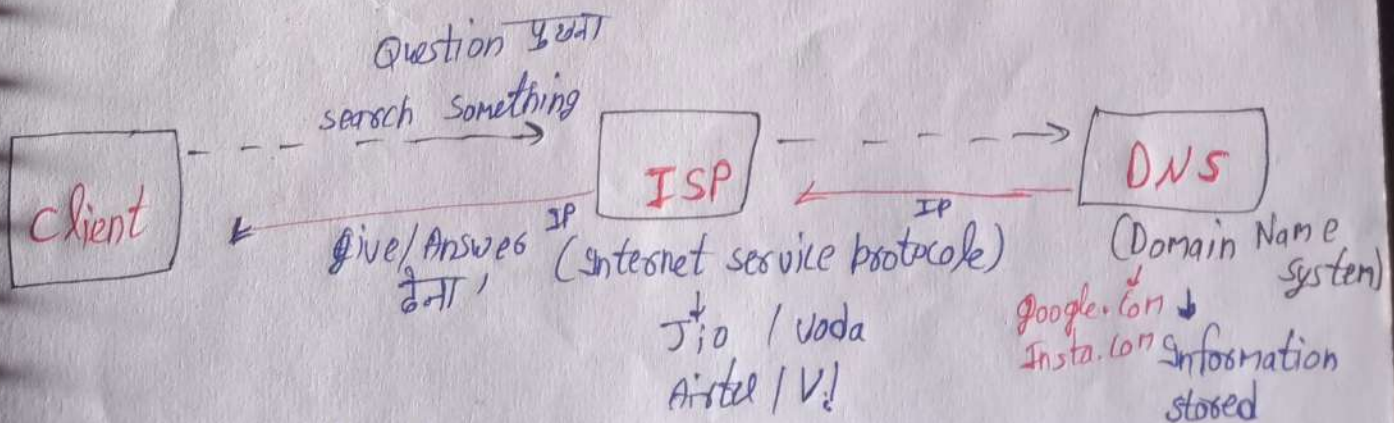
↳ for problem solutions

HTML Elements:

Basic

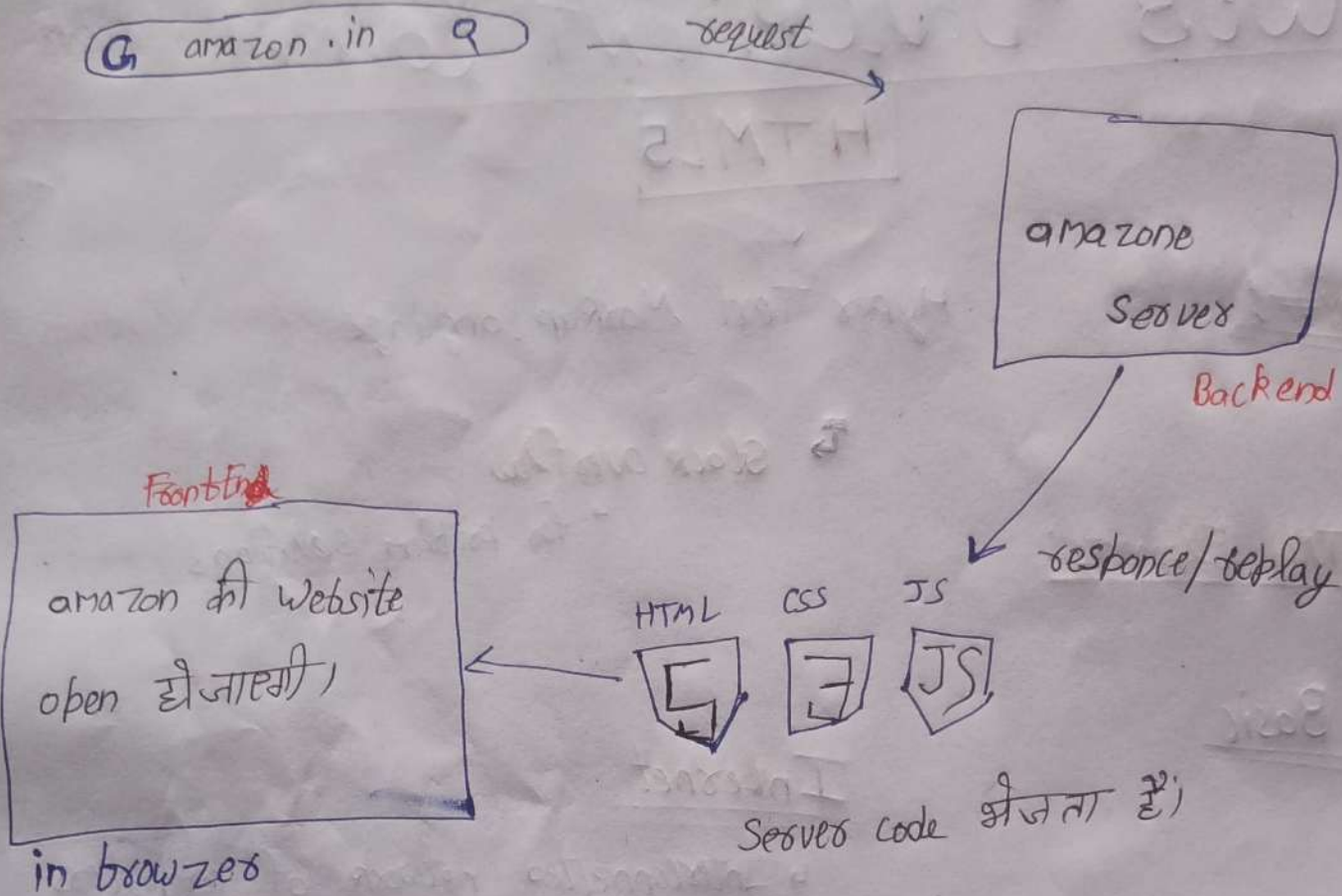
Internet

↳ Interconnected network of computers
around the world.



IP → Internet protocol

Web Development $\Rightarrow$ Building website for the internet.



HTML



structure formatting

↳ Hypertext Markup language

HTML built

↳ 1991



Tim Berners-Lee

CSS



style

↳ Cascading style sheets

CSS built

Javascript



functionality / logic

↳ Javascript.

JS built

extension

• .html

• .css

• .js

* 1989 → Tim Berners-Lee invented www

#1 HTML Elements → used to design the structure of ^{website} angular bootstrap

Paragraph

< p >

< / p >

Heading

< h1 >

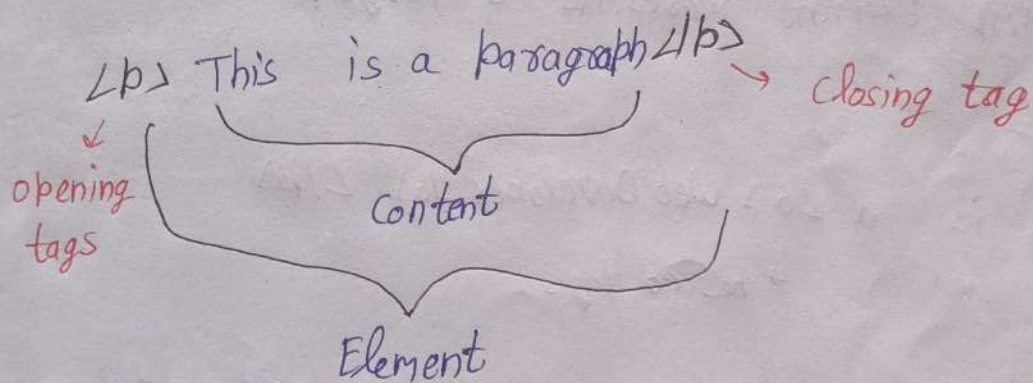
< / h1 >

Image

< img >

* HTML Tags

↳ A container for some content or other tags.



`<b>` Mohit `</b>` ↳ bold

Mohit

`<i>` Web `</i>` ↳ italic

Web

`<u>` Developer `</u>` ↳ Underline

Developer

`<hr>` ↳ horizontal line

Paragraph Element

The `<p>` HTML Element represents a paragraph.

`<p>` Mohit is a `<b>` Web Developer `</b>`
↳ nested tags

Nesting ↳ One tag into another tag. one thing into another things.

Heading Elements

The `<h1>` to `<h6>` HTML elements represent six levels of section headings.

`<h1>` is the highest section and `<h6>` is the lowest.

`<h1>` `<h2>` `<h3>` `<h4>` `<h5>` `<h6>`

→ decreasing.

Day 9

Basic HTML Page

<!DOCTYPE html >

tells browser you are using HTML

<html>

so

root of an html document

<head>

container for metadata

<title> My First Page </title>

page title

</head>

<body>

contains all the data rendered by the browser.

<p> hello world </p>

paragraph tag

</body>

</html>

for extra information provide to codes

This is a part of code that should not be parsed.

Comments :- <!-- This is an HTML comment -->

Key ↴
[< + /]
forward slash

* We can use inspect element / view page source to edit HTML.

* Some tags have no content in between, eg-

* HTML is Not case sensitive.

`<html>` = `<HTML>`

`<p>` = `<P>`

`<h1>` = `<H1>`

`<body>` = `<BODY>`

`<head>` = `<HEAD>`

Case Sensitive means
small (a) & capital (A)
are not equal.

} Pair Tags (open & closing Tags)
Single Tag (only opening tags)

• Same meaning.

↓
`<img />` etc

* HTML Attributes: →

Attributes are used to add more
information to the tag.

`<html lang = "en">`
↓ ↓
language english

we can use " " / ' ' Single quote
double quote

• Anchor Tag: →

Used to add links to your page

`<a href = "https://google.com"> Google` `</a>`

↓
hypertext
reference

Path
↓ ↓
absolute relative
↓ ↓
internet ~~file~~ file (our computer)

Image Tag

used to add images to your page.

``

source

absolute/relative url

alternative (use it when our netw. has problem.)



Random Image

Br Tag

used to add next line (line breaks) to your page.

`<br>`

Mohit is web Developer

↳ Mohit is
web Developer

Big & small Tags

↳ Used to display big & small text on your page.

`<big> Mohit`

`</big>`

Mohit

font-size: larger

`<small> Mohit`

~~`<big>`~~ `</small>`

Mohit

font-size: ~~larger~~ smaller.

Subscript & Superscript Tags

used to display a horizontal

rules, used to separate content.

`<sub> subscript`

`</sub>`

H₂O

H `<sub>` 2 ~~`<sub>`~~ O

`<sub> Superscript`

`</sub>`

Aⁿ + B

A `<sub>` n ~~`<sub>`~~ B

Pre Tag

Used to display text as it is (without ignoring spaces & next line)

`<pre>` This is sample text. `</pre>`

Page Layout Techniques :->

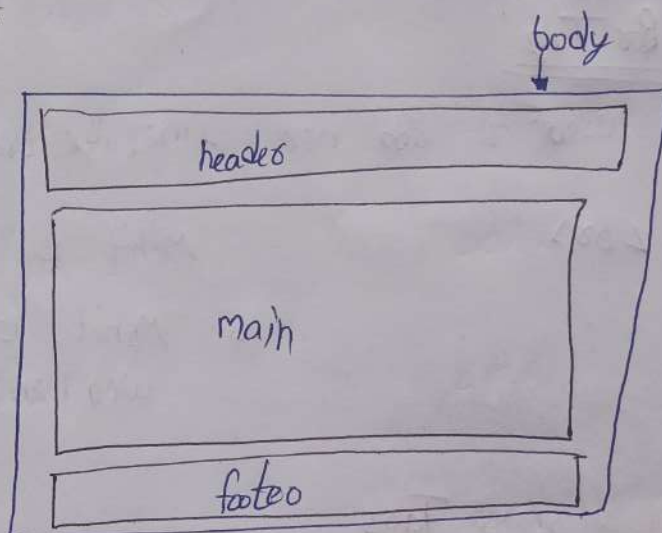
using semantic tags for layout

using the Right Tags

`<header>`

`<main>`

`<footer>`



Inside Main Tag

Section Tag For a section on your page.

`<section>`

Article Tag For an article on your page

`<article>`

Aside Tag For content aside main content (ads)

`<aside>`

* Revisiting Anchor Tag :->

`<a href = "https://google.com" target = "_main" > Google </a>`
↑
for new tab

`<a href = "https://google.com" > <img src = "link" > </a>`
↑
clickable pic

* Revisiting Image Tag

`<img src = "link" height = 50px >`
↑
set height

`<img`

set width
↓
`<img src = "link" width = 50px >`

`<img src = "mohit.png" height = 50px width = 50px >`

Div Tag

↳ Content division Element

- Div is a container used for other HTML elements or group elements together
- Block Element (take full width)

List : Div Tag

<address>	<fieldset>	<nav>
<article>	<figcaption>	<noscript>
<aside>	<figure>	
<blockquote>	<footer>	<p>
<canvas>	<form>	<pre>
<dd>	<h1> - <h6>	<section>
<div>	<header>	<table>
<dl>	<h2>	<tfoot>
<dt>	<h3>	
	<main>	<video>

Span Tag

span is also a container used for other HTML elements

• Inline Element (takes width as per size)

List span Tags

<code><a></code>	<code><code></code>	<code><output></code>
<code><abbr></code>	<code><dfn></code>	<code><q></code>
<code><acronym></code>	<code></code>	<code><sample></code>
<code></code>	<code><i></code>	<code><script></code>
<code><bdo></code>	<code></code>	<code><select></code>
<code><big></code>	<code><input></code>	<code><small></code>
<code>
</code>	<code><kbd></code>	<code></code>
<code><button></code>	<code><label></code>	<code></code>
<code><cite></code>	<code><map></code>	<code><sub></code>
	<code><object></code>	<code><sup></code>
	<code><tt></code>	<code><textarea></code>
	<code><u></code>	<code><time></code>

List in HTML

List are used to represent real life list data.

unordered

 Mohit

 Web Developer

output
↓

• Mohit

• Web Developer

Ordered

 Mohit

 Web Developer

output
↓

1. Mohit

2. Web Developer

Tables in HTML

Table are used to represent real life table data.

<tr> used to display table row

<td> used to display table data

<th> used to display table header

Tables in HTML

<table>

<tr> → table row

Table heading ← <th> Name </th>
<th> Roll no. </th>

</tr>

<tr>

table data ← <td> Mohit </td>

<td> 1231393006 </td>

</tr>

</table>

output
↓

Name	Roll No.
Mohit	1231393006

Caption in tables

<table> के just below write it

<caption> Student data </caption>

Student Data

→ Table के ऊपर center में लिखा जाएगा।

output →

Name	Class	Roll No.
Mohit	BCA	1231393006
Sachin	ITI	1231393007

<thead> to wrap table head.

<tbody> to wrap table body.

<tfoot> to wrap table footer

Colspan attribute →

colspan = "n"

column को cover करता

used to create cells which spans over multiple columns.

Rowspan row को cover करता

rowspan = "n"

rowspan = "3"
n = 3

row 1
row 2
row 3
row 4
row 5

Data			
Mohit	1	3	4
	2		5
	6	7	8
9	10	11	

colspan = "2"

Form in HTML

Forms are used to collect data from the user.

Eg - sign up / login / help requests / contact me

<form>

form content

</form>

Action in Form

~~Attr~~ Action attribute is used to define what action needs to be performed when a form is submitted.

<form action = "/action.php">

Form Element : Input

<input type = "text" placeholder = "Enter Name">

Enter Name

label

A label element represents a caption for an item in a user interface.

<label for = "id1">

<input type = "radio" value = "class X" name = "class"
id = "id1">

</label>

Class & Id

<div id = "id1" class = "group1" > </div>

<div id = "id2" class = "group2" > </div>

Checkbox

<label for = "id1" >

<input type = "checkbox" value = "class1" name = "class"
id = "id1" >

</label>

Textarea

<textarea name = "feedback" id = "feedback" add rows & columns
placeholder = "Please add Feedback" >

</textarea>



Select

<select name = "city" id = "city" >

<option value = "Delhi" > Delhi </option>

<option value = "Mumbai" > Mumbai </option>

<option value = "Banglore" > Banglore </option>

</select>

Banglore ✓

Selected

Already

Already select

iframe Tag

website inside website.



`<iframe src = "link" > Link </iframe>`

Video Tag

`<video src = "myVid.mp4" > My Video </video>`

Attributes

- controls
- width
- height
- loop
- autoplay

Audio Tag

`<audio src = "myAudio.mp3" > My Song </audio>`

! + Enter

Exclamation Mark

→ To Generate HTML Browsers Code

LO type = "A" → codes for type change

- A. Coffee
- B. Tea
- C. Milk

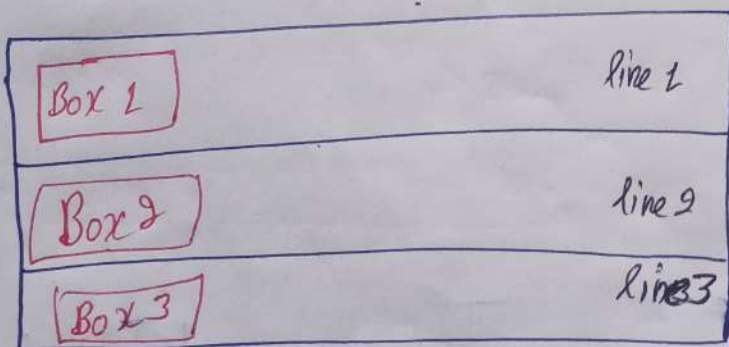
Types: → 1 → 1 से start
A → capital A से
a → small a से
I → I II → से
i → i ii से start

#day 3

Inline V/s Block

Block Element

Takes up the full-width available (whole block). start from new line.

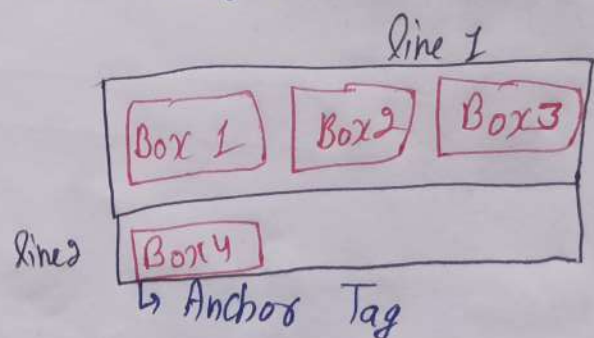


↳ Heading Element

↳ Paragraph Element

Inline Elements

- Takes up only necessary width.
- Don't start from new line.



↳ Image Element

Semantic Markup → make one in a web page.

It is the markup that relates to the meaning of content.



Semantic (जो tag है उसी पर
use का पता
चलता है)

<h1>

<p>



Non-Semantic

<div>

<header>

<nav>

<main>

<footer>

<article>

<section>

<aside>

</header>

</nav>

</main>

</footer>

</article>

</section>

</aside>

→ related links / content

Use for

→ meaningful / layout → structured.

→ SEO friendly



Search engine optimization

→ readable + screen readers



UX / UI improve

HTML Entities :->

- An HTML entity is a piece of text ('string') that begins with an ampersand (&) and ends with a semicolon (;).
- Used to display **reserved characters** (which would otherwise be interpreted as HTML code), and **invisible characters** (like non-breaking spaces).
- Can also use in place of characters that are difficult to type with a standard keyboard.
- browser interprets them & renders correct characters.

Character

Entity

&

&

<

<

>

>

"

"

space

 → non
breaking
space



♥

* use to types

direct name

unicode to convert decimal

★ → ☆

Emmet

visit emmet.io

↳ short form provided -

`<ul><li>2`

`<ul>` → Parent

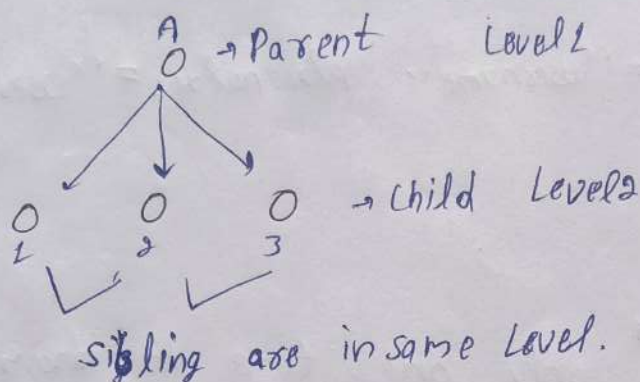
`<li>`

`<li>` → child

`<li>`

`<li>`

`</ul>`



HTML 5

↳ Add new features / upgrades in HTML

+ ↳ other things / features add not part of HTML.

How HTML works?

HTML Standard → living standard

HTML standard is a document that tells to the browser how HTML should work.

HTML code



browser → HTML standard



sends webpage

Form Elements

#Day 4

Label classical Approach

<label for = "username"> Enter your username:</label>

<input type = "text" id = "username" placeholder = "username">

Id :-> unique name | ^{identifies} (use only one time this id name)

Button Element

<button> submit </button>

types -> button
submit default
reset

<button type = "submit"> submit </button>

* Input se Button create करना।

<input type = "submit">

submit / submit

<input type = "submit" value = "click me">

Click me

Name Attribute

Name of the form control. Submitted with the form as part of a name/value pair.

`<input type = "text" placeholder = "enter name" id = "userName" name = "username" />`

Radio Button

↳ only one box click/check..

`<input type = "radio" name = "fruit" id = "apple" value = "apple" checked />`

`<label for = "apple" > Apple </label>`

checked />
↓

• Apple

○ Mango

○ Apple

○ Mango

↳ if we make Radio button group
so we write same name in all
input tags.

Range

`<label for = "vol" > select your volume level: </label>`

`<input type = "range" id = "vol" min = "0" max = "100"`

`name = "vol" step = "10" value = "70" />` ↳ by default set करना,
↓
1 step में कितना change करना



