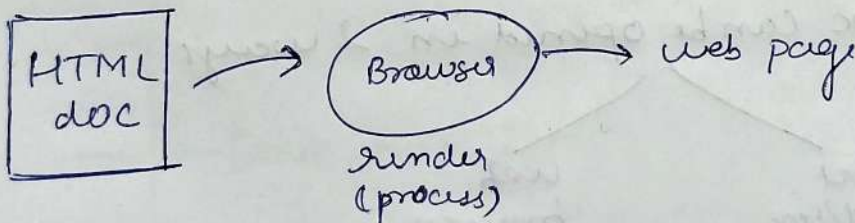# HTML Basics

↳ Hyper Text Markup Language

web pages are linked in a website with hyper link

↳ we will use annotations or tags to show our content.

→ defines the structure of web page.
→ HTML provides (description) to web browser.
→ Basic building Block of webpage.
→ Skeleton of webpage.

$$\begin{bmatrix} CSS & → & Formatting / appearance. \\ JS & → & Functionality \end{bmatrix}$$

(HTML + CSS + JS) → Full Stack application

```
┌──────┐      ╭────────╮
│ HTML │  →   │ Browser │  →   web page
│ doc  │      ╰────────╯
└──────┘       render
              (process)
```

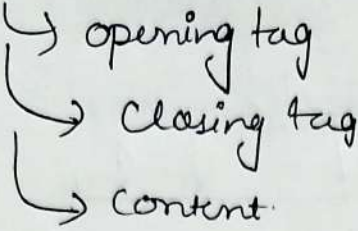✗ Tag :- Tells Browser, How to Render different elements.

<p>   <h1>   <img>   < a >
 ↓   ↓   ↓   ↓
paragraph heading   image   link

100+ html tags exists

Tag

→ opening tag
→ Closing tag
→ Content

(Tags are not case Sensitive)

→ element

```
<h1>   Namaste Duniya </h1>
```
↓ Opening tag   Content   ↓ Closing tag
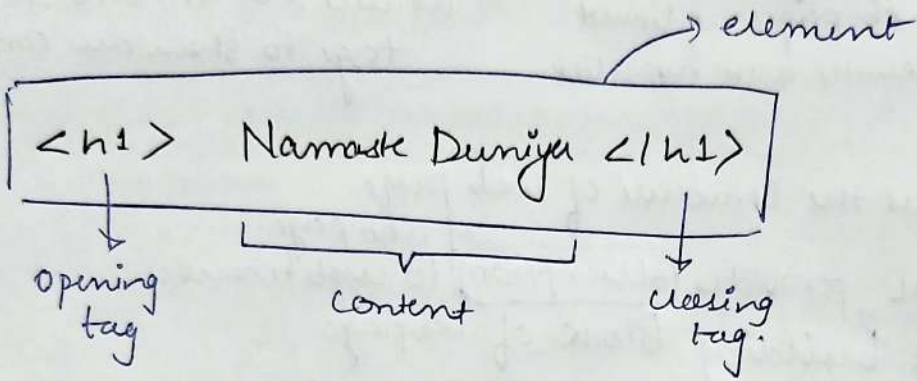
Comment in HTML

```
<!-- This is comment -->
```

— × — — × —

HTML doc can be opened in 2 ways

Text editor   web browser.

HTML
Text Element :-

(To differentiate Specific part of text)

Block elements ← (divides contents of your web page in Sections)

Inline elements

`<em>` → emphasize
`<strong>`
`<a>`

`<p>`, `<h1>`-`<h6>`

`<ol>`/`<ul>`, `<article>`
`<section>`

<div> tag → Container in which we can add tags.
→ can customise this tag.

#* & Line break tag

< br/>
→ adds new empty line

This tag does not have closing tag.
So, it is called Empty / Self closing tag.

ex:- br, img, input
< br/>, <img/>
<input/> <hr/>

List

— Ordered List   → In a ordered way.

— Unordered List   (w/H)

— Description List → (H/W)

→ all html elements can have attributes
→ property. of a Tag
→ additional information of html element

Attributes

<img src = "   " >
↑
property of img tag.

<div id = "Turwash" >
↑
property of div tag.

Any exception for Attribute?

<img width = "100">
↑   ↑
attribute value

Attribute	Uses
id →	all element
class →	all element
Src →	Only on img tag
href →	a tag.

A class → Green ⟶ changing here

↓

E1
A class

E2
A class

E3
A class

E4
A class
} Changes to all class.
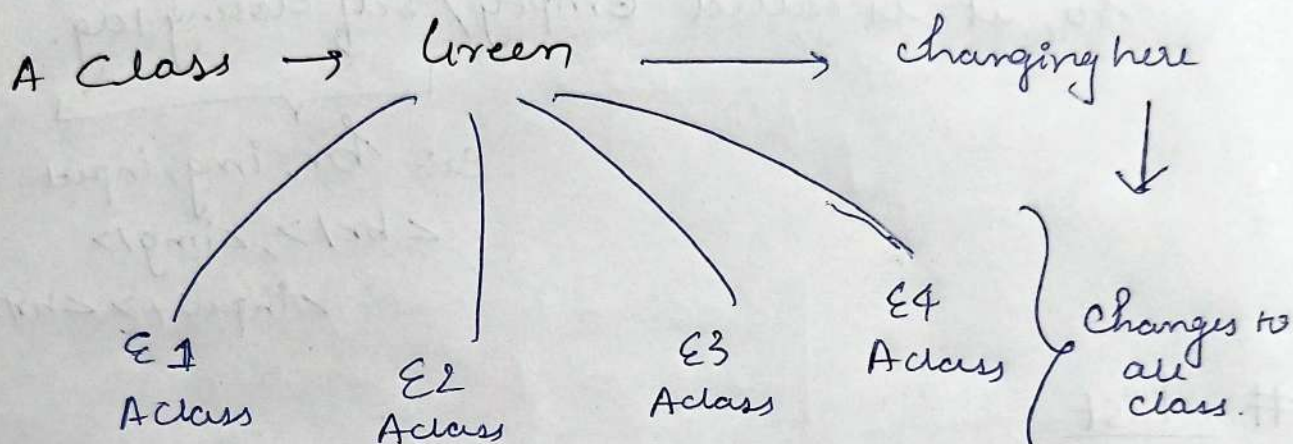
┌───┐
│ (H/W) → what happens when we │
│ close an empty │
│ tag? │
└───┘

(! → enter)

↓

For boilerplate
code of HTML
in VS code

Boilerplate Explanation

① `<!DOCTYPE html>`
  ↳ tells browser about the version of html document ie (HTML5)

② `<html lang="en">`
  whole web page content is to in English language.

  (en-IN for Indian english)

③ `<head>`   `</head>`
  ↳ contains metadata of HTML doc
  - title
  - Viewport
  - Style
  - Script
  - characterset

  metadata → Data about Data.

  Logo in website is called Fevicon

④ `<body>`   `</body>`
  ↳ actual content is inside this tag.
  → every data of web page.

⑤ `<meta class> tag.` → developer point of view (buffer)
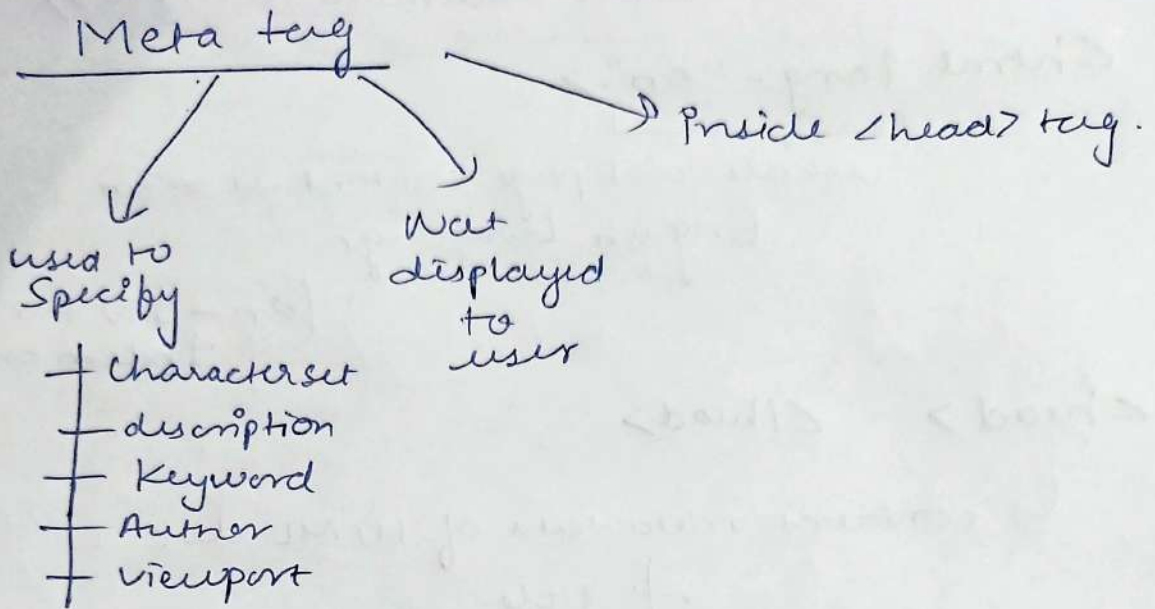 ↳ information is stored about the web page.

`<meta name="description" content="xyz">`

  ↓
  description of website.

✓ Meta tag used in SEO
                    ↓
            Search engine optimization.

Meta tag ────────────→ Inside <head> tag.
        ╱   ╲
       ↙   ↘
   used to   Not
   Specify   displayed
                to
   ┤ Characterset   user
   ┤ description
   ┤ Keyword
   ┤ Author
   ┤ viewport

⑥ <meta charset = "Utf-8">
                      ↓
              type of character encoding
                      ⇅
              90% web page uses utf-8
              So, utf-8 is Standard.

⑦ <meta name = "viewport" Content="width =
              └──────┬──────┘   divice-width" (initial-scale
                     ↓   └───┬───┘   = 1·0";
                  display   ↓   ↓
                  area of your   width of   controls
                  screen is   device   the
                  viewport   using   zoom level
                                                  when page
                                                  is first
                                                  Loaded

⑧ <title> Document <Ititle>
          ↖ written on the top bar of the
            web browser

(9) <meta http-equiv = "X-UA Compatible"
           content = "IE-edge ">

Line added by
    microsoft and US ooeu
it is just for compatibility
Nothing else.