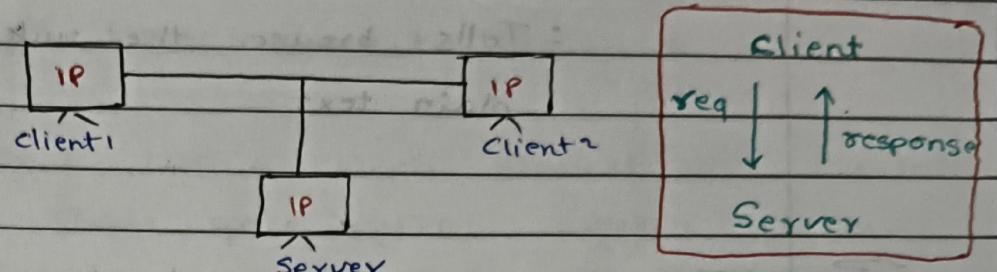


5

Internet :- Interconnected network of computers around the world.



Client : Someone who wants to access web/internet
Requests sends to ISP

ISP : Internet Service Provider (Airtel, Jio)
looks up at DNS

◆ DNS : A dictionary for websites that contains IP addresses

Returns IP address to ISP

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Web Development (Request–Response cycle)

Get amazon.in q

Request

Backend

frontend

HTML : Skeleton

CSS : Styling

JS : functionality

Amazon Survey

response (gives)
code
bundled

amaz0 ~

 Renders
website

11

→ HTML : HyperText Markup Language (Structure &)

formatting

: Tells browser the rules how to present plain text

→ HTML Elements :- Standard elements that browser recognizes

Paragraph `<p>` `</p>`

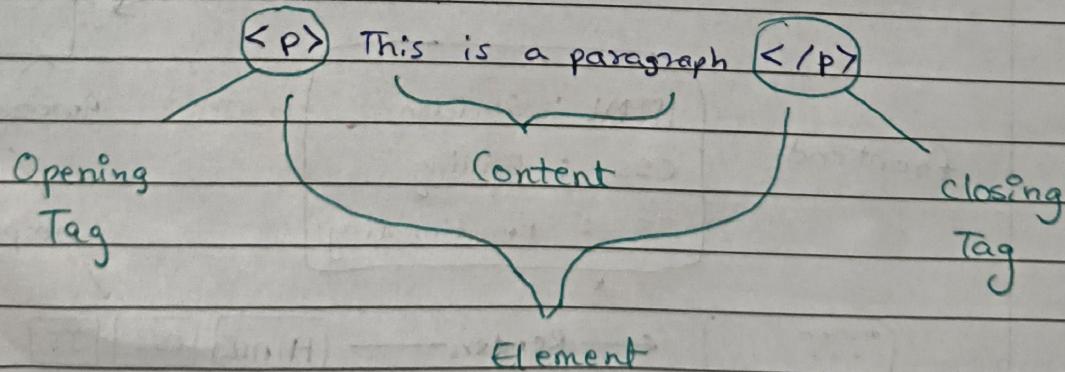
Heading `<h1>` `</h1>`

Image

case insensitive
interpreted some way

⇒ The components used to design the structure of websites are called HTML Tags

→ HTML Tags :- A container for some content or other tags.



3

Paragraph Element

The `<p>` HTML element represents a paragraph



Content within single element are treated as single space, HTML considers only one space, no multiple spaces or paragraphs.

3

Heading Element

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

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

3

Boilerplate

3) Lists in HTML

◊ Unordered list



 Bread

 Butter

 Jam

Types of UL

- ○ ■
- ○ ■
- ○ ■

To add
items to
list

◊ Ordered list

 Bread

 Butter

 Jam

Types of OL

- A a i i I
- B b ii II
- C c iii III
- D d iv IV

3) HTML Attributes

Attributes are used to add more information to tag.

<html lang="en">

attribute

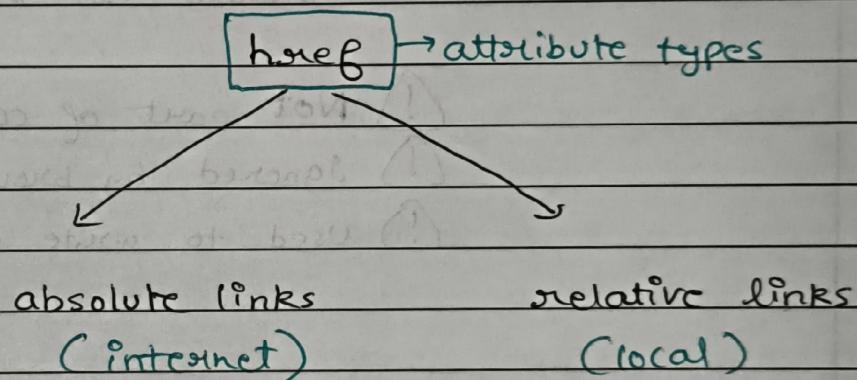
value

" " or ' ' are interpreted as same
way in HTML.

☞ Anchor Element : Used to add links to your page

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

attribute Complete link Text
Hyperlink reference to be written



☞ Image Element : Used to add image to your page

```

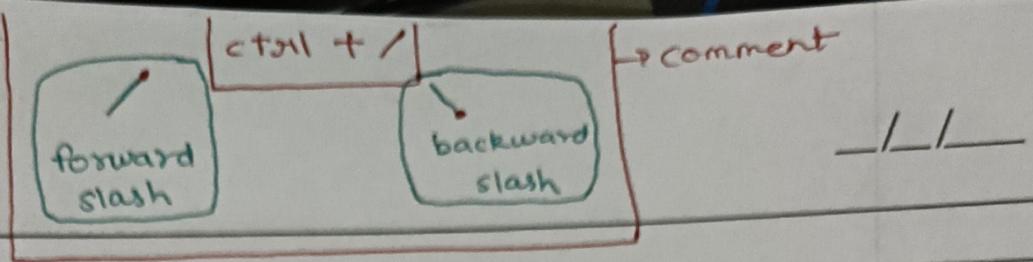
```

→ contains 2 attributes

→ can add extra attributes of
`height = "300px" width = "300px"`

→ can use absolute url in
place of img.png by pasting
image address.

→ Image tag is single
tag → no closing tag
needed.



→ More HTML tags (Pair tags : must be closed)

◊ By Tag : used to add next line (line break) to
`
` your page

◊ Bold, Italic and Underline tags : Used to highlight text
`` `<i>` `<u>` in your page.

→ Comments in HTML : This is part of code that should not be parsed

⚠ Not part of code

⚠ Ignored by browser

⚠ Used to write extra information to code

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

HTML is not Case Sensitive

`<html>` = `<HTML>`

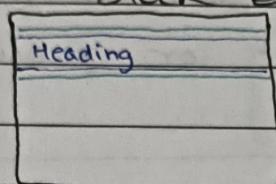
`<p>` = `<P>`

`<head>` = `<HEAD>`

⚠ Good practice to write in lower case as in future lectures of JavaScript, it will be case sensitive

→ Inline Vs Block elements

◊ **Block elements** : Take up full-width available



(whole block)

: start from new line

Examples : Heading elements `<h1> Hello </h1>`

Paragraph element `<p> ... </p>`

Body element `<body> ... </body>`

◊ **Inline Elements** : Take up only necessary width

: Doesn't start from new line.

Examples : Anchor Tag `link `

Image element ``

→ Div element (block element) [Content division element]

Div is a container used to hold other HTML elements or group elements together.

`<div>`

`Google `

`Youtube `

`</div>`

11

3

Span Element (Inline Element)

:- Span is also a generic container used to hold other HTML elements or group elements together.



The difference between `<div>` and `` is `<div>` is a block element whereas `` is an inline element.

:- Stays in same line.

3

Hr Tag (Single Tag)

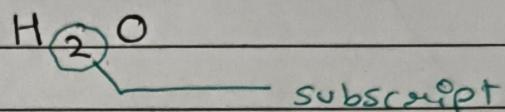
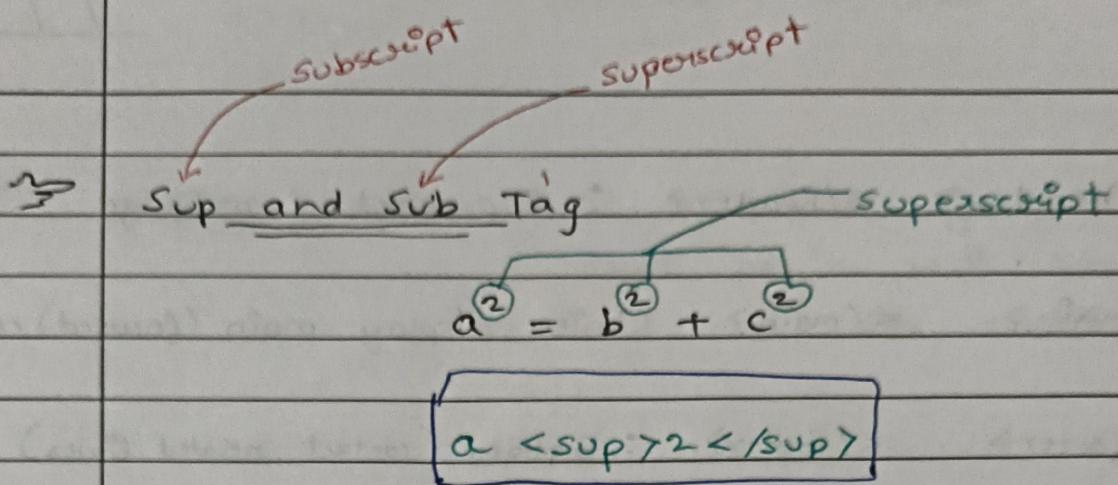
⇒ It is a horizontal rule element

⇒ Breaks page with a line



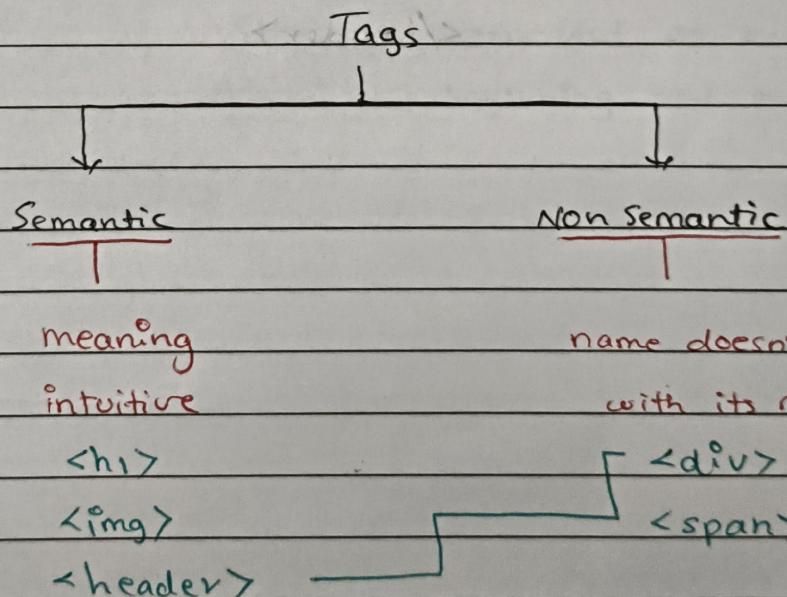
`
` tag is used as a line break

`<hr>` tag is used as a divider



$H ₂O$

Semantic markup : markup that relates to meaning of content.



- makes code meaningful or structured layout
- SEO friendly
- readable + screen readability (improves UX)

`<header> </header>` :- Top part of webpage

`<main> </main>` : To display main (focused) content

`<footer> </footer>` : Bottom (contact, related links)

`<nav>` `</nav>` : collect redirecting links.

Example : `<header> Priyansh Kumar <nav>`

```
<a href="#"> Portfolio </a>
<a href="#"> LinkedIn </a>
</nav>
</header>
```

Emmet Abbreviation

Parent-child

ul > li

multiplication

ul > li * 5

Handy

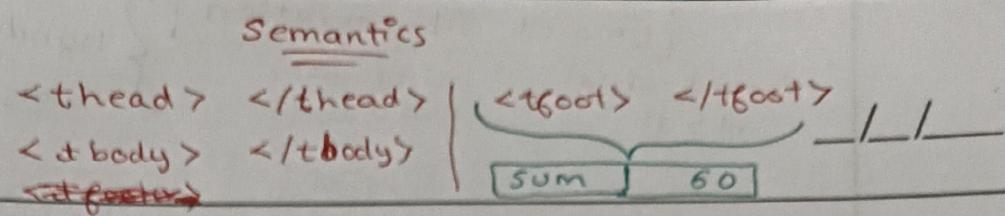
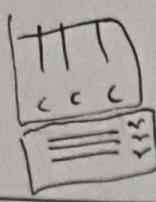
Tools

2

HTML Entities : is a piece of text ("string") that begins with ampersand (&) and end with semicolon (;)

- : used to display reserved characters (which would otherwise be interpreted as HTML code) and invisible characters (like non-breaking spaces)
- : Browser interprets them & renders correct character.

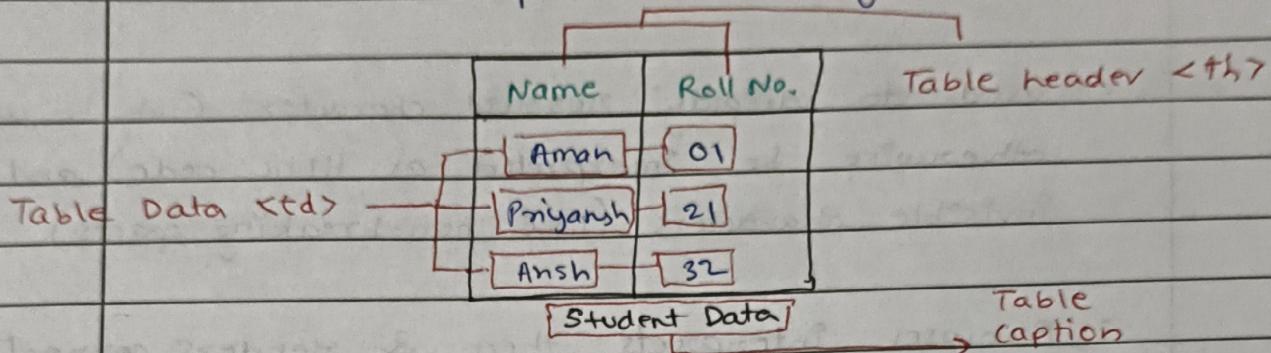
Character	Entity	Note
a&b	&	Interpreted as beginning of entity
a<b	<	Interpreted as beginning of a tag
a>b	>	Interpreted as ending of a tag
a"b"	"	beginning and end of attribute value



3

Tables in HTML

: Used to represent real life table data.



<table>

<caption> Student Data </caption>

<tr>

<th> Name </th>

<th> Roll No. </th>

<tr>

<td> Aman </td>

<td> 01 </td>

</tr>

<tr>

<td> Priyansh </td>

<td> 21 </td>

</tr>

<tr>

<td> Ansh </td>

<td> 32 </td>

</tr>

</table>

CODE

Colspan & Rowspan Attributes

: used to create cells which spans over multiple rows or columns.

```
<th rowspan="2">Item </th>  
<th colspan="2">Price </th>
```

Food Menu		
ITEM	Price	
	INR	USD
Frooti	20	0.28
Chips	10	0.14

Forms in HTML : used to collect data from user

```
<form>  
  content...  
</form>
```

Action attribute : used to define what action needs to be performed when a form is submitted or where the form data should be sent.

```
<form action="/action.php">
```

```
<form action="/action">
```

3 form elements

- ◇ Input : used to create multiple form controls
 - : there are many types of inputs that can be created using type attribute

<input type = "text">

password

number

time

color

button

checkbox

radio

range etc.

- ◇ Placeholder attribute (hint inside textbox)

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

- ◇ Label : represents a caption for an item in UI.
: (connects or binds)

<label>

Enter your username

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

</label>

Enter your username:

Enter username

★

Classic Label approach

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

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

id → unique name / element