**HTML**

**(hyper text markup language)**

* Used for stucture and lay out
* Not a case sensitive like c++ and python etc
* The components used to design the structure of website called **html tag**
* by default html donot count our spaces and our next line
* **Index.html**=tell server make our homepage
* **EMET**=toll kit in vs code give alots of helpful tool
* Browser=take your htmlpage and convert it into website
* **Toggle word wrap=alt+z** to see text at different line make readability easy
* **<!--hello are you ok-->**=**commment**

**Key word for comment=ctrl+slash/**

**TAG:**

Container for some content

<p>hi saman</p>

<>=angular bracket

Hi saman=content

**Open tag=<p>**

**Closing tag=</p>**

**Opentag+content+closing tag=ELEMENT**

We also write tag inside another tag

<p><u>the</u></p>

**<!Doctype html>**

Tell your browser you are using html5

Or

Tell us doccuments we are write its type is html

**<html>**

Called root type element used in pair starting and ending

Largest starting element

After this a large element come that all we can show on web page

**<head>**

Tell the code that we donot wants to display on webpage but important to write in our code

In head we have some **meta information** means about data that is useful but we donot want to show on our screen

**<meta charset="UTF-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1.0">**

tell about HTML page= responsive=size or screen on android ,galaxy,iPhone,laptop etc

**<title>Document</title>**

Add title between title tag like (document)

**</head>**

**<body>**

Write those thing that we want t display on our screen

**</body >**

**ATTRIBUTES:**additional properties in the tag

<html lang=’en’>

Lang=language

En=english

**ANCHOR TAG:**used to add links to your page

**<a href=”http://ww.google.com”>google</a>**

**Absolute link:**link of another website like google or download visual studio code

**Relative link:**that relates to our web page like we create a file in vscode and add its link in our html code to open that file

Use **slash** while writing the link

**<a href=”/helloFolder/hello.html”> go to hello file</a>**

**To open link in new tab**

<a href=”/helloFolder/hello.html” target=”\_main”>go to file</a>

<nav>

<a href=”#”>home</a>

When we used empty navigation bar we want to used # in it doesnot give any error

<nav/>

&copy:copy tag

<a href=”#”>&copy:2020 |APNA KAKSHA>

<a href=”/helloFolder/hello.html” target=”\_blank” rel=”nooper noreferre”</a>&nbsp;

**&nbsp :for spacing**

**to make an image click able**

<a href=”/helloFolder/hello.html” target=”\_main”><image src=”/image,jpeg image adress” alt=”note book” height=”500”/></a>

<**section> write piece of content that we donot repeat</section>**

**PARAGRAPH TAG:**

**<p>content </p>**

**HEADING TAG**

Different sizes from heading 1 (very important)to heading 6 (least important)

We set heading on web page on the basis of its importance not size means we want to write important heading that is meaning full

And headings imp decreases from 1 to 6 step wise

h1 most important)

h2

h2

h4

h5

h6 (least important)

On the basis of importance **<h1> content</h1>**

**ESCAPE**

<br />:used for escaping or move to the next line

Br tag us an empty tag donot have an additional information(attribute-or content)

**IMAGE TAG:**

**<image src=”/image,jpeg image adress” alt=”note book” height=”500”/>**

**Alt=for alternating naming** in that case if image is not opened

**Height=**adjacement of an image or to set size of image

**Width=**adjacement of an image

But we can’t use both at a time it affect on image dimension

<**u> underline tag :use to under line the content </u>**

**<b> BOLD TAG</b>**

**<i> italic tag</i>**

**<big > this show big letter</big>**

**<small>this show small</small>**

**<hr/>:**horizentalruler(scale)

Content move toward next line

Work of separation with next line and line between that context

**Subscript:**

Used to write those part which comes slightly lower to the normal text

**H20**

**<p>h<sub>2</sub><p>**

**Superscript**

Used to write those part which comes slightly upper to the normal text

3^2=9

**<p>3<sup>2</sup>=9</p>**

**PRE TAG:**

Used where we want to show our written spaces or to move to the next line space on the web page

**We have two types of tags**

1. **Semantic tags**
2. **Non sematic tags**

**SEMANTIC TAG:**

<HEADER>

<MAIN>

<FOOTER>

with the help of their names we can easily understand what will happen in this tag

Benefits:

1)Readable code

2)Ranking

3)Good user experiences

It is important to divide your code through semanticaly we know in this web page which part represent which thing

**NON SEMANTIC TAG**

<div>

<span>

Through their names we can’t easily determine what will happen in this tag

**DIV TAG:**

Div is a container used for other html elements

Donot have own special work

Contain another tags

**Also called Block element** because it take all width on web page

Used when we wants to make changes in collective of elements to gether

**Span tag:**

Span is also a container used for other html elements

**Inline elements**

occupy required space on web page

**Em tag:<em> used to emphasize the text in inline</em>**

**Inside Main Tag:**

1. **Section tag :**

For a section on your paragraph

<section>education:|KFUIET</section>

<section>experence:|home|apna collage</section>

1. **ArticleTag:**

We write an article on our page

<article>mystory:from where you are study and so on </article>

1. **Aside Tag:**

Like we want to run an add on our web page that not related to our topic at that condition we want to tell html which part is not the part of our main content that’s wwhy we use aside tag

<aside>this is an add</aside>

**tag:code bar**

**LIST IN HTML**

List are used to represent real life data 2types of list

**ORDERED LIST**

1. Or **a or I**
2. B ii
3. **C iii**

**<ol>**

**<li>apple</li>**

**<li>banana</li>**

**</ol>**

**UN ORDERED LIST** :



Used these dots

Display all the items in ul tag with the help of li tag

**<ul>**

**<li>apple</li>**

**<li>banana</li>**

**</ul>**

**TABLES IN HTML**

Tables are used to represent real life table

**<table></table>**

**<tr>**-used to display tabel row

**<td>**=used to display tabel data

**<th>=**used to display tabel header

**<theader>=**include all header part

**<tbody>=**include all part of tabel after header

**<caption>=**add header about what

**For merging to or three cells and give them a name**

**<th colspan=” cells number”**

**Name you want to give**

**</th>**

**Example:**

|  |  |
| --- | --- |
| student data | |
| **Name** | **Roll No** |
| Saman Tariq | DSAI242103004 |
| khadija | DSAI242103048 |
|  |  |

|  |  |
| --- | --- |
| Studen\t information | |
| **information** | |
| Saman Tariq | DSAI242103004 |
| khadija | DSAI242103048 |

**FORMS IN HTML:**

Used to collect data from the user

**Eg:** like signup ,login, help request and contact me

1)<form>

Content</form>

1. <form action=”action.php”

Action.php is fle when click on submitted button it goes to this file in backend that process the form data what you login and also you put all information or not

For making a form first written enter name box

Enter user name

**<input type=”text” placeholder=’’enter user name’’>**

For password box

**<input type=’’password’’ placeholder=”enter a valid password”>**

**Type=password -->convert text into (.)**

Used placeholder if we cant write any thing it takes the place

**For radio button :ue can select one option at a time**

Used label tag if any one have eye sight issue through then make text clickable also we write same name in all options

Value-->used to give information to the backend

**<input type=”radio” value=”class xi” name=class>class xi**

**<input type=”radio” value=”class xii” name=class>class xii**

**<input type=”radio” value=”class xiii” name=class>class xiii**

**We also give them id**

**Id:** id is unique we can’t repeat it a code having same id like class

Id=101 in a code other is id=102 not 101 for other codes line

**Class: helpful incss for coloring purpose**

We can reuse it in code

**INFORM TAG:**show website inside website

We can copy it from any you tube

**Video tag:**

**To add video in a web page we can use it relative or absolute**

**<video height=”75%” width=”33%” src=”http://video/electricity.mp” poster=image adress control</video>**

Used poster=starting look pic of video (thumbnail)

Some attribute we can use their for playing video we can play both video relative and absolute vedio

**Controls -->through we can show button for playing like you tube videos have different option**

**AUTOPLAY:**when we go on web page it autoplay it directly play the video

**CSS:NOTES**

**CSS:**

**Cascading style sheet**

used to add style

Cascading mean thing comes at last give the highest priority

Basic syntax

H1{

Color:red;

}

Color=property

Red=value

Including style having **three** ways

1. **Inline styling :**

Having highest priority than other ways

**<h1 style=”color:red;”**

1. **<style tag>:**

Write in head tag then select heading which we want to color or style

**<style>**

**H1{**

**Color:red;**

**}**

**<style/>**

1. **External style sheet:**

Widely use in css

Make a separate file only for css

We make to files one is for CSS and other is for HTML and link both files together through a link tag

That we can usedwit in ahead tag

<link rel=”stylesheet” href=” name of css file if placed in same folder other wise placed the whole address”>

**Rel=what kind of relation you are link**

**Href=which thing you want to link**

**Color property:**

Used to set the color of foreground and

background color

**Foreground -color:**

Or text color we can say

Select the heading

H1{

Color;red;

}

**Background -color:**

h1{

Background-color:red;

}

**Color system:**

**RGB**

**HEX**

**HSLA**

**Frequently used color system are**

**RGB:**

Red ,green ,blue}primary colors

**Red+green=yellow**

**Red+blue=pink**

**Blue+green=segreen**

**Red+green+blue}equal quantity=white**

H1{

Color: red;

background-color: rgb(00, 00, 225);

}

It gives blue background color we assume the colors as a number and their limits of color from 0-225 tell how much light and dark our color was

1st 00 is for red color means we can’t take any color

2nd 00 for green color

**HEX:**

(Hex decimal)

Hex =six=A-F

Decimal =10=0-9

It is like rgb where we take 0-225 but here 225=ff

Red=ff 00 00

Green=00 ff 00

Blue=00 00 ff

**Selector**

**Universal selector:**

\*{

Its means you are doing changes in whole document

}

\*=asterisk

**Element selector:**

H1{

Color:red

}

If we write an id and class in HTML document and want to select in CSS file

Eg: id=one,class=content

**#one**{

Color:red;

}

**.content**{

Color:red;

}

**Id:**

Any unique name

Element in HTML can give them a specific id. we can’t give same id to two diff or same element

<p id=one>this is a paragraph</P>

<p id=two> this s a paragraph</P>

**Class:**

If we need same property for multiple element we can use selector class

We can use same class for different element

**Text properties:**

**Text-align:**

Direction of the content that we write on the web pad

Three types of text-align

Left /right/ center

Write English with left side

In css 2 values are added

1. start 2)end value

in english language left=start

And in urdu language left=end

Right =start

H1{

Text-align:center; }

h1

{

Text-align:center;

Left:start;

}

**Text decoration:**

How to set the lines

UNDERLINES:

**This is a paragraph**

OVERLINES:

This paragraph is about how to built

LINE THROUGH:

~~THIS THING IS UNPREDICTABEL~~

**NOTE:**

if we set text decoration=none thenit removes all under lines we can ue it while removing underline under any doccument

**Font-weight:**

Normal /bold/bolder/light

Written text islight or bold

Lightest=100

darkest=900

Bold=400

H1{

Font-weight:light;

}

**Font-family:**

Aerial,new time roman, calibri(body)etc

They can also use follow back mechanisum:

Means if one family can’t apply then apply the next

H1{

Font-family:aerial;

Or

Font-family:Aerial,new time roman, calibri(body)

}