HTML – Hyper Text Markup Language

HTML

Frames, Images and Forms
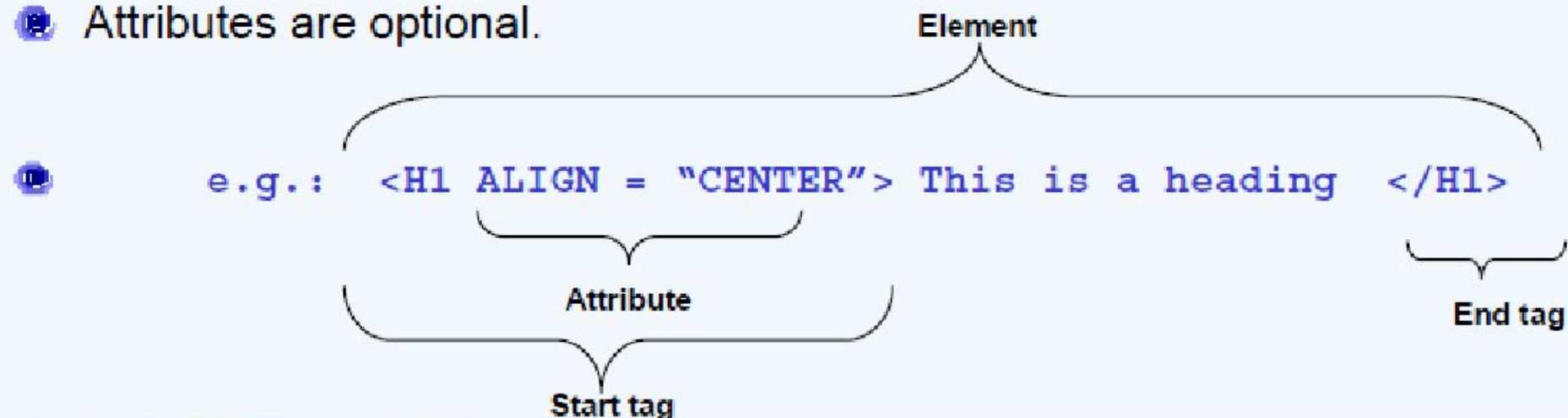
CSS

- What is HTML?

- Where does it fit in?

- HTML tags and attributes

- Text formatting tags

- Linking pages

- Working with lists and tables.

What is HTML?

- HTML stands for Hyper Text Markup Language .

- It is used to design and develop Web Pages.

- Tim Berners-Lee invented the World Wide Web and HTML

- HTML is

  - Simple

  - Browser/Platform Independent

  - Not Case Sensitive

  - Different from other Programming Languages

  - A medium for User Interface

HTML tags and attributes

- The HTML instructions are called tags, and look like
  - `<TAG> …..   Text here…….. </TAG>`

- Container tags :Tags that have starting as well as ending part.
  - e.g.: `<TITLE>Title of the Web Page </TITLE>`

- Empty tags : Tags that do not have the closing part.
  - e.g. `<BR> , <HR>`

- (HTML instructions + text to which the instructions apply)= HTML elements

- An attribute is an additional feature you can use to configure the element

- Attributes are optional.

```
                              Element

e.g.:   <H1 ALIGN = "CENTER"> This is a heading   </H1>

                                                    End tag
          Attribute

          Start tag
```

Structure of HTML Document

```
<HTML>

  <HEAD> <!-- Head Section -->

        <TITLE>Title of the Web Page </TITLE>

  </HEAD>

  <BODY> <!-- Body Section -->

        <!-- Contents on Web Page  -->

        <H1> Contents </H1>

  </BODY>

</HTML>
```

first.html

- An HTML file can be created by using a simple text editor viz notepad, textpad, editplus
- HTML file must have an extension htm or html.

```html
<!DOCTYPE html>

<html>

    <head>

        <title>My WebPage <title>

    <head>

    <body>

        <h1> Welcome to my first webpage </h1>

    </body>

</html>
```
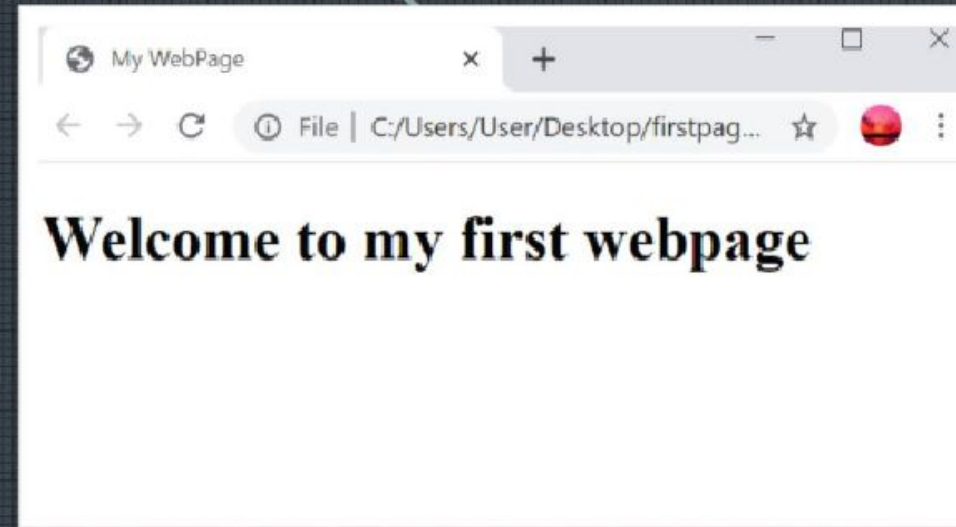
> Write the above html code using editor and save the file as **firstpage.html**
> Open the file firstpage.html using any **browser** to see the result

HTML Document - Head

- Enclosed in **<HEAD> </HEAD>** tag

- Tags that can go in the document head
  - **<TITLE>**Indicates the title of the document that is used as the window caption

  - **<BASE>** specifies the absolute URL address

  - **<LINK>** specifies the relationship between the current document and other documents.

  - **<META>** element can be used to specify name/value pairs describing various properties of the document
  - **<SCRIPT>** specifies the client side script name.
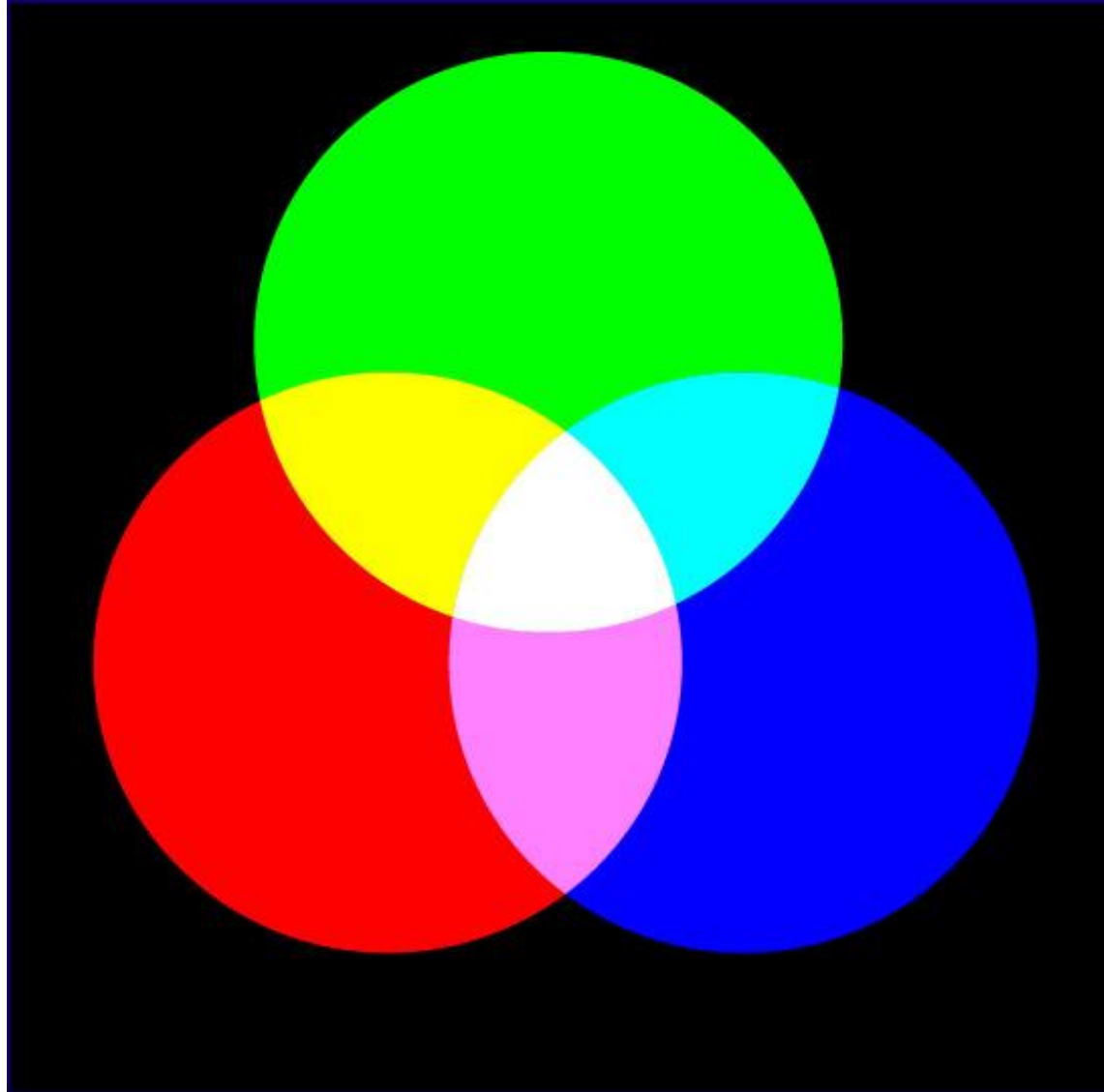 - **<STYLE>** To Include CSS (Cascading Style Sheet)

HTML Document – Body
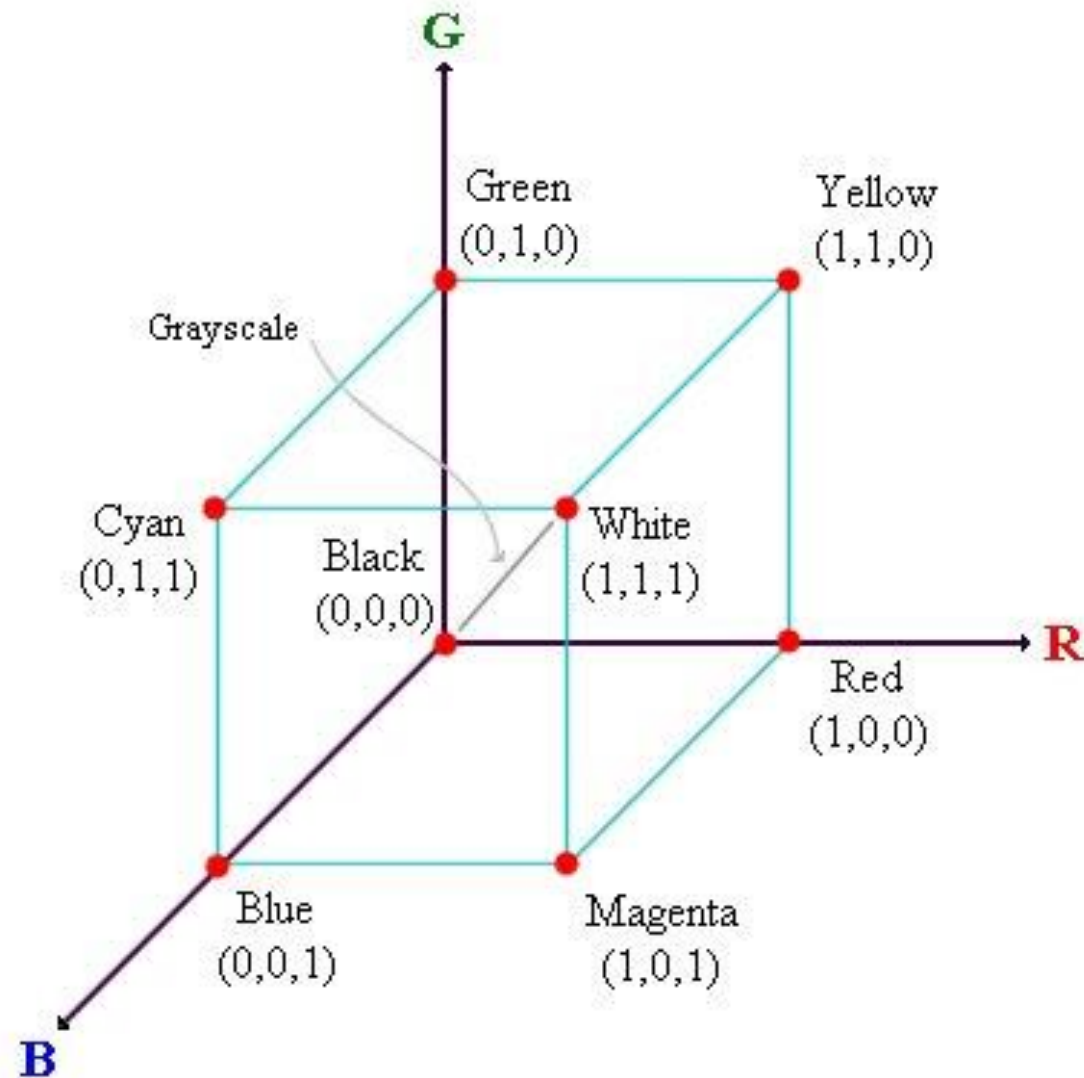
- Enclosed in `<BODY>` `</BODY>` tag.

<BODY > tag attributes
BACKGROUND=x.jpg   - Specifies an image to be tiled as background.
BGCOLOR=color   - Specifies the background color
BGPROPERTIES=FIXED   -Fixes the background image so that it doesn't scroll.
LEFTMARGIN=n   -Specifies the left margin for the entire page
TEXT=color   -Specifies the color of text in the page
TOPMARGIN=n   -Specifies the top margin for the entire page.
LINK   -Specifies the link color.
ALINK   -Specifies the active link color.
VLINK   -Specifies the active link color.

Main Colours

RGB Colour Model

16 Basic Colors

Color Name	RGB Triplet	Hexadecimal	Color Name	RGB Triplet	Hexadecimal
Aqua	(0,255,255)	00FFFF	Navy	(0,0,128)	000080
Black	(0,0,0)	000000	Olive	(128,128,0)	808000
Blue	(0,0,255)	0000FF	Purple	(128,0,128)	800080
Fuchsia	(255,0,255)	FF00FF	Red	(255,0,0)	FF0000
Gray	(128,128,128)	808080	Silver	(192,192,192)	C0C0C0
Green	(0,128,0)	008000	Teal	(0,128,128)	008080
Lime	(0,255,0)	00FF00	White	(255,255,255)	FFFFFF
Maroon	(128,0,0)	800000	Yellow	(255,255,0)	FFFF00

Color Codes

1.	WHITE	1.	#FFFFFF
2.	BLACK	2.	#000000
3.	RED	3.	#FF0000
4.	GREEN	4.	#00FF00
5.	BLUE	5.	#0000FF
6.	MAGENTA	6.	#FF00FF
7.	CYAN	7.	#00FFFF
8.	YELLOW	8.	#FFFF00
9.	AQUAMARINE	9.	#70DB93
10.	BAKER'S CHOCOLATE	10.	#5C3317
11.	VIOLET	11.	#9F5F9F
12.	BRASS	12.	#B5A642
13.	COPPER	13.	#B87333
14.	PINK	14.	#FF6EC7
15.	ORANGE	15.	#FF7F00

Headings, Paragraphs, Breaks & Horizontal Rules

Headings, <Hx> </Hx>

- Inside the **BODY** element, heading elements **H1** through **H6** are generally used for major divisions of the document

<HTML>

<HEAD>

<TITLE> Example Page</TITLE>

</HEAD>

<BODY>

<H1> Heading 1 </H1>

<H2> Heading 2 </H2>

<H3> Heading 3 </H3>

<H4> Heading 4 </H4>

<H5> Heading 5 </H5>

<H6> Heading 6 </H6>

</BODY>

</HTML>

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

Paragraphs, <P> </P>

Paragraphs allow you to add text to a document in such a way that it will automatically adjust the end of line to suite the window size of the browser in which it is being displayed. Each line of text will stretch the entire length of the window.

Paragraphs, <P> </P>

```
<HTML><HEAD>
<TITLE> Example Page</TITLE>
</HEAD>
<BODY></H1> Heading 1 </H1>
<P> Paragraph 1, ….</P>
<H2> Heading 2 </H2>
<P> Paragraph 2, ….</P>
<H3> Heading 3 </H3>
<P> Paragraph 3, ….</P>
<H4> Heading 4 </H4>
<P> Paragraph 4, ….</P>
<H5> Heading 5 </H5>
<P> Paragraph 5, ….</P>
<H6> Heading 6</H6>
<P> Paragraph 6, ….</P>
</BODY></HTML>
```

Heading 1

Paragraph 1,….

Heading 2

Paragraph 2,….

Heading 3

Paragraph 3,….

Heading 4

Paragraph 4,….

Heading 5

Paragraph 5,….

Heading 6

Paragraph 6,….

Paragraphs allow you to add text to a document in such a way that it will automatically adjust the end of line to suite the window size of the browser in which it is being displayed. Each line of text will stretch the entire length of the window

Break,

Line breaks allow you to decide where the text will break on a line or continue to the end of the window.

A <BR> is an empty Element, meaning that it may contain attributes but it does not contain content.

The <BR> element does not have a closing tag.

Break,

<HTML>

<HEAD>

<TITLE> Example Page</TITLE>

</HEAD>

<BODY>

<H1> Heading 1 </H1>

<P>Paragraph 1,

Line 2
 Line 3
….

</P>

</BODY>

</HTML>

Heading 1

Paragraph 1,….

Line 2

Line 3

….

Horizontal Rule, <HR>

The <HR> element causes the browser to display a horizontal line (rule) in your document.

<HR> does not use a closing tag, </HR>.

Horizontal Rule, <HR>

Attribute	Description	Default Value
SIZE	Determines the thickness of the horizontal rule. The value is given as a pixel value.	2 pixels
WIDTH	Width of the rule in pixels or percentage of screen width	100%
NOSHADE	Draw the rule with a flat look instead of a 3D look	Not set (3D look)
ALIGN	Aligns the line (Left, Center, Right)	Center
COLOR	Sets a color for the rule (IE 3.0 or later)	Not set

Horizontal Rule, <HR>

<HTML>

<HEAD>

<TITLE> Example Page</TITLE>

</HEAD>

<BODY>

<H1> Heading 1 </H1>

<P>Paragraph 1,

Line 2

<HR>Line 3

</P>

</BODY>

</HTML>

Heading 1

Paragraph 1,

Line 2

———————————————————

—

Line 3

Character Formatting

Objectives

Upon completing this section, you should be able to

       Change the color and size of your text.

       Use Common Character Formatting Elements.

       Align your text.

       Add special characters.

       Use other character formatting elements.

Text Formatting Tags

Tag	Description
• <B>....</B>	- Bold
• <I>......</I>	- Italic
• <U>....</U>	- Underline
• <STRIKE>...</STRIKE>	- Strikethrough
• <TT>....</TT>	- Typewriter (monospaced)
• <CENTER></CENTER>	- Centers the text on the screen.
• _{....}	- Subscript
• ^{....}	- Superscript
• <BIG>....</BIG>	- Bigger font (one font size bigger)
• <SMALL>....</SMALL>	- Small font (one font size smaller)

Formatting The Web Page

<FONT> tag describes the display attributes
of the text inside

- <FONT> tag
  - Allows you to specify the font face and font size.
  - Some common attributes are
    - FACE specifies the font style.
    - SIZE specifies the font size. Value can range from 1 to 7. The default is 3.
      SIZE can be set as a relative value using + or − .
    - COLOR- The color of a font can be specified using a hexadecimal number value six characters long.

  - E.g.: `<FONT FACE="Helvetica, Arial" SIZE="7" OLOR="#FF0000">`
    `The Written Word</FONT>`

Bold, Italic and other Character Formatting Elements

<P> <FONT SIZE="+1"> One Size Larger </FONT> - Normal –

<FONT SIZE="-1"> One Size Smaller </FONT>

<B> Bold</B> - <I> italics</I> - <U> Underlined </U> -

<FONT COLOR="#FF0000"> Colored </FONT>

<EM> Emphasized</EM> - <STRONG> Strong </STRONG> - <TT> Tele Type </TT>

One Size Larger - Normal – One Size Smaller
Bold - *italics* - <u>Underlined</u> - Colored
Emphasized - **Strong** - Tele Type

Special Characters & Symbols

Special Character	Entity Name	Special Character	Entity Name
Ampersand	& &	Greater-than sign	> >
Asterisk	∗ ✳	Less-than sign	< <
Cent sign	¢ ¢	Non-breaking space	
Copyright	© ©	Quotation mark	" "
Fraction one qtr	¼ ¼	Registration mark	® ®
Fraction one half	½ ½	Trademark sign	™ ™

Additional Character Formatting Elements

<STRIKE> strike-through text**</STRIKE>**

DEL is used for STRIKE at the latest browsers

<BIG> places text in a big font**</BIG>**

<SMALL> places text in a small font**</SMALL>**

_{** places text in subscript position **}

^{** places text in superscript style position **}

Example

<P><STRIKE> strike-through text </STRIKE></BR>

<BIG>places text in a big font </BIG>

<SMALL> places text in a small font</SMALL>

_{places text in subscript position}

Normal

^{places text in superscript style position}
  </P>

Links

HTML links are hyperlinks.
You can click on a link and jump to another document.
When you move the mouse over a link, the mouse arrow will turn into a little hand.

Syntax: *link text*

<!DOCTYPE html>
<html>
<body>

<h1>HTML Links</h1>

<p>
<a href="https://www.w3schools.com/"
title="Go to html section">
Visit W3Schools.com!</p>

</body>
</html>

HTML Links

Visit W3Schools.com!

Links

```
<!DOCTYPE html>
<html>
<body>

<h2>Absolute URLs</h2>
<p><a href="https://www.w3.org/">W3C</a></p>
<p><a href="https://www.google.com/">Google</a></p>

<h2>Relative URLs</h2>
<p><a href="html_images.asp">HTML Images</a></p>
<p><a href="/css/default.asp">CSS Tutorial</a></p>

</body>
</html>
```

Absolute URLs

W3C

Google

Relative URLs

HTML Images

CSS Tutorial

Image as a Link

```
<!DOCTYPE html>
<html>
<body>

<h2>Image as a Link</h2>

<p>The image below is a link. Try to click on it.</p>

<a href="default.asp"><img src="smiley.gif" alt="HTML tutorial"
style="width:42px;height:42px;"></a>

</body>
</html>
```