

DISCUSSION OF BASIC HTML TAGS

What is HTML?

- Hyper Text Markup Language
- Language used to design a layout
- To specify hyperlinks
- A document may contain- text, images, etc.
- HTML is not case sensitive
- HTML programming is done through notepad or any text editor
- The file is saved as .htm or .html

What HTML is made up of ?

- TAGS
 - ATTRIBUTES
-
- ✓ All HTML TAGS are contained in angle brackets < >
Eg. <HEAD> , <H1>, <TABLE>,
 - ✓ TAG is a coded HTML command to display a part of a webpage.
 - ✓ Attribute is a special word used inside a TAG to specify additional information to TAG such as color, alignment etc
 - ✓ HTML tags come in pairs

HTML Document Structure

Every HTML document has the following structure:

<HTML>

<HEAD>

<TITLE> Title of page is written here</TITLE>

</HEAD>

<BODY>

Html TAGS which define the page

</BODY>

</HTML>

TAGS

- `<HTML>....</HTML>` IDENTIFIES THE AS AN HTML DOCUMENT.
- HTML DOCUMENT BEGINS WITH `<HTML>` AND ENDS WITH `</HTML>`
- `<HEAD>....</HEAD>` CONTAINS THE INFORMATION OF DOCUMENT

TAGS

- `<TITLE>....</TITLE>`
- CONTAINS THE DOCUMENT TITLE WHICH IS DISPLAYED IN THE BROWSER'S TITLE BAR

- `<BODY>....</BODY>`

CONTAINS ALL TAGS, ATTRIBUTES & INFORMATION TO BE DISPLAYED IN THE WEB PAGE.

`<BODY>` TAG IS ENTERED BELOW THE CLOSING `</HEAD>` TAG AND ABOVE THE CLOSING OF `<HTML>` TAG

HTML writing tools

- Need a text editor
- Notepad, frontpage, etc.

Viewing HTML

HTML document can be viewed in a browser like IE, Firefox, Opera, Safari etc.

Container Elements

- These require starting and ending tags.
- These are paired tags.

Eg: `<HTML>...</HTML>` ,
`<HEAD>...</HEAD>` , `<TITLE>...</TITLE>`

Empty Elements

- These require starting tag.

Eg: `
` , `<HR>` , `` , `<LINK>`

HEADINGS

Six levels of headings are available.

<H1 ...> text </H1> -- largest of the six

<H2 ...> text </H2>

<H3 ...> text </H3>

<H4 ...> text </H4>

<H5 ...> text </H5>

<H6 ...> text </H6> -- smallest of the six

PARAGRAPH

- `<P>` defines a paragraph
- Add `ALIGN="position"` (left, center, right)
- But `</P>` is optional
- PARAGRAPH ALIGNMENTS
`< P ALIGN=LEFT> </P>`
- LINE BREAKS
`
`
- CENTRE TAG
`<CENTER>...</CENTER>`

Text Formatting Tags

This is the text of line one

Line two contains this text

The third line has this additional text

<BLOCKQUOTE> Defines a long quotation </BLOCKQUOTE>

To display a horizontal line:

<HR SIZE=4 WIDTH="50%">

<HR SIZE=4 NOSHADE>

<PRE> Preformatted Text

- <PRE> Defines preformatted text
- It preserves both spaces and line breaks

<PRE>

```
if (a < b) {  
    a++;  
    b = c * d;  
}  
else {  
    a--;  
    b = (b-1)/2;  
}
```

</PRE>

LISTS

Ordered Lists:

- List of items are marked with numbers
- An ordered lists start with the `` tag
- Each list item start with the `` tag

LISTS

Ordered Lists:

```
<OL TYPE="1">  
  <LI> Item one </LI>  
  <LI> Item two </LI>  
  <OL TYPE="I" >  
    <LI> Sublist item one </LI>  
    <LI> Sublist item two </LI>  
    <OL TYPE="i">  
      <LI> Sub-sublist item one </LI>  
      <LI> Sub-sublist item two </LI>  
    </OL>  
  </OL>  
</OL>
```

LISTS

UnOrdered Lists:

- List of items are marked with bullets
- An ordered lists start with the `` tag
- Each list item start with the `` tag
- Type Attribute can have the value:

TYPE= CIRCLE

TYPE=SQUARE

TYPE=DISC

LISTS

Unordered Lists:

```
<UL TYPE="disc">  
  <LI> One </LI>  
  <LI> Two </LI>  
  <UL TYPE="circle">  
    <LI> Three </LI>  
    <LI> Four </LI>  
    <UL TYPE="square">  
      <LI> Five </LI>  
      <LI> Six </LI>  
    </UL>  
  </UL>  
</UL>
```


LISTS

Definition Lists:

- List of terms and Explanation of terms
- Definition lists start with the `<DL>` tag
- Definition list term starts with `<DT>` tag
- Each definition list definition starts with `<DD>` tag

LISTS

Definition Lists:

<DL>

<DT> Coffee </DT>

<DD> Black Hot Drink </DD>

<DT> Milk </DT>

<DD> White Cold Drink </DD>

</DL>

Formatting tags

Bold

Bold

<I>Italic</I>

Italic

<U>Underlined</U>

Underlined

Subscripts: $f_{\text{0}} + f_{\text{1}}$

Subscripts: $f_0 + f_1$

Superscripts: $x^2 + y^2$

Superscripts: $x^2 + y^2$

<STRIKE>Strike Through</STRIKE>

~~Strike Through~~

<I>Bold Italic</I>

Bold Italic

Gray

Gray

Images

- To display image in a document use tag
- To display image we need SRC attribute (source)
- Value of SRC attribute is the URL of the image
- ALT attribute define an “alternate text” for an image(if the browser can’t load images)
- WIDTH, HEIGHT may be in units of pixels or percentage of page or frame
 - WIDTH="357"
 - HEIGHT="50%"

Example:

```

```

<A> Anchors (HyperLinks)

- **Link to an absolute URL:**

If you get spam, contact Microsoft to report the problem.

- **Link to a relative URL:**

See these references concerning our fine products.

- **Link to a section within a URL:**

Amazon provided a reference for our company.

- **Naming a Section**

<H2> Our References </H2>

URL (Uniform Resource Locator) is used to address a document on World Wide Web.

HYPERLINKS

```
<BODY>
```

```
<H3>Welcome to <A HREF="http://www.manipal.edu">
```

```
<STRONG>Manipal Institute of Technology</STRONG></A>
```

```
</H3>
```

```
</BODY>
```

Welcome to Manipal Institute of Technology

Tables

- `<TABLE>` table tag
- `<CAPTION>` optional table title
- `<TR>` table row
- `<TH>` table column header
- `<TD>` table data element

Tables

```
<TABLE BORDER=1>
```

```
  <CAPTION>Table Caption</CAPTION>
```

```
  <TR><TH>Heading1</TH>
```

```
<TH>Heading2</TH></TR>
```

```
  <TR><TD>Row1 Col1 Data</TD><TD>Row1 Col2  
Data</TD></TR>
```

```
  <TR><TD>Row2 Col1 Data</TD><TD>Row2 Col2  
Data</TD></TR>
```

```
  <TR><TD>Row3 Col1 Data</TD><TD>Row3 Col2  
Data</TD></TR>
```

```
</TABLE>
```


<TABLE> Element Attributes

- `ALIGN=position` -- left, center, right for table
- `BORDER=number` -- width in pixels of border (including any cell spacing, default 0)
- `CELLSPACING=number` -- spacing in pixels between cells, default about 3
- `CELLPADDING=number` -- space in pixels between cell border and table element, default about 1
- `WIDTH=number[%]` -- width in pixels or percentage of page/frame width
- `BGCOLOR=color` -- background color of table, also valid
- for `<TR>`, `<TH>`, and `<TD>`

TABLES

- `cellspacing=10`

`cellspacing=10`

1	2
3	4

- `cellpadding=10`

`cellpadding=10`

1	2
3	4

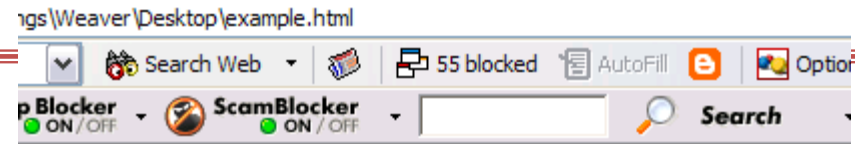
<TR> Table Row Attributes

Valid for the table row:

ALIGN -- left, center, right

VALIGN -- top, middle, bottom

BGCOLOR -- background color



One	Two
Three	Four
Five	Six

```
<TABLE ALIGN="center" WIDTH="300" HEIGHT="200">
```

```
<TR ALIGN="left" VALIGN="top" BGCOLOR="red"><TD>One</TD><TD>Two</TD>
```

```
<TR ALIGN="center" VALIGN="middle"
```

```
BGCOLOR="lightblue"><TD>Three</TD><TD>Four</TD>
```

```
<TR ALIGN="right" VALIGN="bottom" BGCOLOR="yellow"><TD>Five</TD><TD>Six</TD>
```

```
</TABLE>
```

<TD> Table Cell Attributes

Valid for the table cell:

colspan -- how many columns this cell occupies

rowspan – how many rows this cell occupies

```
<TABLE ALIGN="center" WIDTH="300" HEIGHT="200" border="1">
<TR>
<TD colspan="1" rowspan="2">a</TD>
<TD colspan="1" rowspan="1">b</TD>
</TR>
<TR>
<TD colspan="1" rowspan="1">c</TD>
</TR>
</TABLE>
```

Frames

- Frames help control navigation and display
- `<FRAME>` attributes include
 - FRAMEBORDER – yes or 1 for borders
 - FRAMESPACING – width of border
 - BORDERCOLOR – color
 - SRC – location of HTML to display in frame
 - NAME – destination for TARGET attribute
 - MARGINWIDTH – left/right margins
 - MARGINHEIGHT – top/bottom margins
 - SCROLLING – yes or 1 adds scroll bar
 - NORESIZE – yes or 1 disables resizing

Frames

```
<FRAMESET ROWS="75%,25%">
```

```
<FRAMESET COLS="*,*,*">
```

```
<FRAME SRC="http://www.google.co.in">
```

```
<FRAME SRC="http://www.google.co.in ">
```

```
<FRAME SRC="http://www.google.co.in ">
```

```
</FRAMESET>
```

```
<FRAMESET COLS="*,*">
```

```
<FRAME SRC="http://www.google.co.in ">
```

```
<FRAME SRC="http://www.google.co.in ">
```

```
</FRAMESET>
```

```
</FRAMESET>
```

FORMS

- Used to select different kind of user input.
- Forms is an area that contain form elements
- Form elements are elements that allow to enter information in a form
- Defined by `< FORM >` tag
- Action attribute defines the name of the file to which the contents are sent

FORMS

- INPUT Tag:

Type of input is specified with TYPE attribute.

- Text Fields:

Used when we want to type numbers or text.

```
<input type="text" name="first name">
```


FORMS

- Radio Buttons:

Used when we want user to select one of a limited number of choices.

- Check Boxes:

Used when we want user to select one or more options of a limited number of choices.

- Submit Button:

When user clicks on submit button, the content of the form is send to the server.

FORMS

```
<HTML>
<HEAD>
...
</HEAD>
<BODY>
<FORM>
First name: <input type="text" name="firstname" /><br>
Last name: <input type="text" name="lastname" /><br>
Password: <input type="password" name="pwd" /><br>
<input type="radio" name="gender" value="male" /> Male<br>
<input type="radio" name="gender" value="female" /> Female<br>
<input type="checkbox" name="vehicle" value="Car" /> I have <br>a car <br>
Username: <input type="text" name="user" />
<input type="submit" value="Submit" /></FORM>
</BODY>
</HTML>
```

FORMS

- `<TEXTAREA rows="10" cols="30">` Defines a text area
`</TEXTAREA>`
- `<SELECT>` Defines a selectable list of items.

`<SELECT name="cars">`

`<OPTION value="alto"> ALTO </option>`

`<OPTION value="santro"> SANTRO </option>`

`...`

`</SELECT>`

END OF LECTURE