### INTRODUTION TO HTML

#### HOW TO CREATE AN HTML DOCUMENT

 The essential tags that are required to create a HTML document are:

- <HTML>.....</HTML>
- <HEAD>.....</HEAD>
- <BODY>.....</BODY>

### HTML Tag <HTML>

- The <HTML> tag encloses all other HTML tags and associated text within your document. It is an optional tag. You can create an HTML document that omits these tags, and your browser can still read it and display it. But it is always a good form to include the start and stop tags. The format is:
- <HTML>

Your Title and Document (contains text with HTML tags) goes here

• </HTML>

Most HTML tags have two parts, an opening tag and closing tag. The closing tag is the same as the opening tag, except for the slash mark e.g. </HTML>. The slash mark is always used in closing tags.

# An HTML document has two distinct parts HEAD and BODY

- <HTML>
- <HEAD>
- •
- •
- •
- </HEAD>
- <BODY>
- •
- •
- •
- </BODY>
- </HTML>

### **HEAD Tag <HEAD>**

 HEAD tag comes after the HTML start tag. It contains TITLE tag to give the document a title that displays on the browsers title bar at the top. The Format is:

```
<HEAD>
<TITLE>
Your title goes here
</TITLE>
</HEAD>
```

### BODY Tag <BODY>

 The BODY tag contains all the text and graphics of the document with all the HTML tags that are used for control and formatting of the page. The Format is:

<BODY>
Your Document goes here
</BODY>

An HTML document, web page can be created using a text editor, Notepad or WordPad. All the HTML documents should have the extension .htm or html. It require a web browser like Internet Explorer or Netscape Navigator/Communicator to view the document.

### TEXT TEGS

- Text tag are dividing into two categories as:
- -Character-level tags and attributes which applies to formatting of individual letters or words.
- -Paragraph level tags and attributes which apply
  - =To formatting of sections of text.

### **Character Formatting Tag**

 The character formatting tags are used to specify how a particular text should be displayed on the screen to distinguish certain characters within the document.

# The most common character formatting tags are

Boldface <B>: displays text in BOLD

Example: Welcome to the <B> Internet World </B>

Output: Welcome to the Internet World

• Italics <I>: displays text in Italic

Example: Welcome to the <I> Internet World </I>

Output: Welcome to the Internet World

- Subscript <SUB>: displays text in Subscript
- Superscript <SUP>: displays text in Superscript
- Small <SMALL>: displays text in smaller font as compared to normal font
- Big <BIG>: displays text in larger font as compared to normal font
- Underline<U>specifies that the enclosed text be underline

Example:<U> hello</u>

Output: hello

### MARQUEE TAG

- This tag is used text horizontally across the screen.it is mainly used to deliver a specfic message to the visitor or to scroll Ads on a page.
- Example: <marquee> hello world></marquee>

### Attributes of marquee tag

- Direction :Sets the direction of the marquee box to either left-to-right, right-to-left, up-todown and down-to-up.
- Width: This sets how wide the marquee should be.
- Loop: This sets how many times the marquee should 'Loop' its text. Each trip counts as one loop.

### paragraph Formatting Tag

 Paragraph level formatting applies to formatting of an entire portion of text unlike character level tags where only individual letters or words are formatted.

# The most common paragraph formatting tags are

Using paragraph tag: <P>

This tag < P > indicates a paragraph, used to separate two paragraphs with a blank line.

- Example:
- <P> Welcome to the world of HTML </P>
- <P> First paragraph. Text of First paragraph goes here</P>
- Output:

Welcome to the world of HTML

First paragraph. Text of First paragraph goes her

### Using Line Break Tag: <BR>

 The empty tag <BR> is used, where the text needs to start from a new line and not continue on the same line. To get every sentence on a new line, it is necessary to use a line break.

### Using Preformatted Text Tag: <PRE>

- <PRE> tag can be used, where it requires total control over s p a c i ng and line breaks such as typing a poem. B r o w s e r preserves your space and line break in the text written inside the tag.
- Example:

<PRE>

National Institute of Open Schooling B-31B, Kailash Colony

New Delhi-110048

</PRE>

Output:

National Institute of Open Schooling B-31B, Kailash Colony

New Delhi-11004

### An HTML document control.html shows the use of <P>, <BR> and <PRE>

```
<HTML>
<HEAD>
<TITLE>
Use of Paragraph, Line break and preformatted text Tag
</TITLE>
</HEAD>
<BODY>
HTML Tutorial
<P>
HTML stands for Hypertext Markup Language
It is used for creating web page. It is very simple
and easy to learn.
```

# An HTML document control.html shows the use of <P>, <BR> and <PRE>

```
</P>
<P>
HTML stands for Hypertext Markup Language.<BR>
It is used for creating web page. It is very simple<BR>
and easy to learn.<BR>
</P>
<PRF>
HTML stands for Hypertext Markup Language
It is used for creating web page. It is very simple
and easy to learn.
</PRE>
</BODY>
 </HTML>
```

### OUTPUT

HTML Tutorial

HTML stands for Hypertext Markup Language. It is used for creating web page. It is very simple and easy to learn.

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### Using Horizontal Rule Tag: <HR>

- An empty tag <HR> basically used to draw lines and horizontal rules. It can be used to separate two sections of text.
- Example:

<BODY>

Your horizontal rule goes here. <HR>

The rest of the text goes here.

</BODY>

Output:

Your horizontal rule goes here.

The rest of the text goes her

### HEADING: <H1>.....<H6>tags

HTML has six header tags <H1>, <H2>.....<H6> used to specify section headings. Text with header tags is displayed in larger and bolder fonts than the normal body text by a web browser. Every .header leaves a blank line above and below it when displayed in browse.

# Example: An HTML document, headings.html shows the different section headings

```
<HTML>
<HEAD>
<TITLE>
Section Heading
</TITLE>
</HEAD>
<BODY>
<H1> This is Section Heading 1 </H1>
<H2> This is Section Heading 2 </H2>
<H3> This is Section Heading 3 </H3>
<H4> This is Section Heading 4 </H4>
<H5> This is Section Heading 5 </H5>
<H6> This is Section Heading 6 </H6>
</BODY>
</HTML>
```

# Viewing output of HTML document headings.html in browse

This is Section Heading 1

This is Section Heading 2

This is Section Heading 3

This is Section Heading 4

This is Section Heading 5

This is Section Heading 6

### SPECIAL CHARTACTER

 There are certain special characters that can be used while creating document. Following are some special character:

•	Symbols	Entity
	©,®	©, ®
	1/4, 1/2, 3/4	¼, ½, ¾
	÷, <, >, ≤,≥	÷, <, >, ≤, ≥
	&	&
	<b>† † v</b>	♠, ♣, ♥
	All these sr	pecial character must be ended wit

All these special character must be ended with a semicolon;

### Example:

```
<PRE>
The copyright symbol is: ©
The registered rank is: ®
</PRE>
Output:
The copyright symbol is:©
The registered rank is:®
```

### 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 1/4	Registration mark	®®
Fraction one half	½ 1/2	Trademark sign	™

### Lists

In this chapter you will learn how to create a variety of lists.

#### **Objectives**

Upon completing this section, you should be able to

- Create an unordered list.
- Create an ordered list.
- Create a defined list.
- Nest Lists.

- HTML supplies several list elements. Most list elements are composed of one or more <LI> (List Item) elements.
- UL: Unordered List. Items in this list start with a list mark such as a bullet. Browsers will usually change the list mark in nested lists.

```
<UL><LI> List item ...</LI></LI> List item ...</LI></UL>List item ...
```

List item ...

- You have the choice of three bullet types: disc(default), circle, square.
- These are controlled in Netscape Navigator by the "TYPE" attribute for the <UL> element.

```
<UL TYPE="square">
<LI> List item ...</LI>
<LI> List item ...</LI>
<LI> List item ...</LI>
</UL>
List item ...
```

- List item ...
- List item ...

 OL: Ordered List. Items in this list are numbered automatically by the browser.

```
<OL>
<LI> List item ...</LI>
<LI> List item ...</LI>
<LI> List item ...</LI>
</OL>
1. List item ...
2. List item ...
3. List item
```

You have the choice of setting the TYPE Attribute to one of five numbering styles.

TYPE	Numbering Styles		
1	Arabic numbers	1,2,3,	
а	Lower alpha	a, b, c,	
Α	Upper alpha	A, B, C,	
i	Lower roman	i, ii, iii,	
l	Upper roman	I, II, III,	

You can specify a starting number for an ordered list.

```
<OL TYPE ="i">
<LI> List item ...</LI>
<LI> List item ...</LI>
</OL>
<P> text ....</P>
<OL TYPE="i" START="3">
<LI> List item ...</LI>
</OL>
```

```
List item ...
  List item ...
Text ....
  List item ...
```

DL: Definition List. This kind of list is different from the others. Each item in a DL consists of one or more Definition Terms (DT elements), followed by one or more Definition Description (DD elements).

## **Nesting Lists**

 You can nest lists by inserting a UL, OL, etc., inside a list item (LI).

```
EXample
<UL TYPE = "square">
<LI> List item ...</LI>
<LI> List item ...
<OL TYPE="i" START="3">
<LI> List item ...</LI>
</OL>
</LI>
<LI> List item ...</LI>
```

</UL>

```
■ List item ....
List item ....
  iii. List item ...
   iv. List item ...
   v. List item ...
   vi. List item ...
  vii. List item ...
■ List item ...
```

## What will be the output?

```
<H1 ALIGN="CENTER">SAFETY TIPS FOR CANOEISTS</H1>
<OL TYPE="a" START="2">
<LI>Be able to swim </LI>
<LI>Wear a life jacket at all times </LI>
<LI>Don't stand up or move around. If canoe tips,
   <UL>
   <LI>Hang on to the canoe </LI>
   <LI>Use the canoe for support and </LI>
   <LI>Swim to shore
   </UL> </LI>
<LI>Don't overexert yourself </LI>
<LI>Use a bow light at night </LI>
</OI>
```

# The output....

### SAFETY TIPS FOR CANOEISTS

- b. Be able to swim
- c. Wear a life jacket at all times
- d. Don't stand up or move around. If canoe tips,
  - o Hang on to the canoe
  - o Use the canoe for support and
  - o Swim to shore
- e. Don't overexert yourself
- f. Use a bow light at night

## **Images**

In this chapter you will learn about images and how to place images in your pages.

#### **Objectives**

Upon completing this section, you should be able to

Add images to your pages.

## lmages

- <IMG>This element defines a graphic image on the page.
- Image File (SRC:source): This value will be a URL (location of the image) E.g. <a href="http://www.domain.com/dir/file.ext">http://www.domain.com/dir/file.ext</a> or /dir/file.txt.
- Alternate Text (ALT): This is a text field that describes an image or acts as a label. It is displayed when they position the cursor over a graphic image.
- Alignment (ALIGN): This allows you to align the image on your page.

## **Images**

- Width (WIDTH): is the width of the image in pixels.
- Height (HEIGHT): is the height of the image in pixels.
- Border (BORDER): is for a border around the image, specified in pixels.

## Anchors, URLs and Image Maps

In this chapter you will learn about Uniform Resource Locator, and how to add them as Anchor or Links inside your web pages.

#### **Objectives**

Upon completing this section, you should be able to

- Insert links into documents.
- Define Link Types.
- Define URL.
- 4. List some commonly used URLs.
- 5. Plan an Image Map.

## HOW TO MAKE A LINK

- 1) The tags used to produce links are the <A> and </A>. The <A> tells where the link should start and the </A> indicates where the link ends. Everything between these two will work as a link.
- 2) The example below shows how to make the word Here work as a link to yahoo.

Click <A HREF="http://www.yahoo.com">here</A> to go to yahoo.

## **More on LINKs**

```
<body LINK="#C0C0C0" VLINK="#808080"
ALINK="#FF0000">
```

LINK - standard link - to a page the visitor hasn't been to yet. (standard color is blue - #0000FF).
 VLINK - visited link - to a page the visitor has been to before. (standard color is purple - #800080).
 ALINK - active link - the color of the link when the mouse is on it. (standard color is red - #FF0000).

#### If the programmer what to change the color

 Click <a href="http://www.yahoo.com"><font color="FF00CC">here</font></a> to go to yahoo.

## **Internal Links**

- Internal Links: Links can also be created inside large documents to simplify navigation. Today's world wants to be able to get the information quickly. Internal links can help you meet these goals.
- Select some text at a place in the document that you would like to create a link to, then add an anchor to link to like this:
  - <A NAME="bookmark\_name"></A>
  - The Name attribute of an anchor element specifies a location in the document that we link to shortly. All NAME attributes in a document must be unique.
- Next select the text that you would like to create as a link to the location created above.
  - <A HREF="#bookmark\_name">Go To Book Mark</A>

## E-Mail (Electronic Mail)

#### E.g. mailto:kmf@yahoo.com

- The type of service is identified as the mail client program. This type of link will launch the users mail client.
- The recipient of the message is kmf@yahoo.com

<a href="mailto:kmf@yahoo.com">Send me</a>
More Information </a>

In this chapter you will learn that tables have many uses in HTML.

#### Objectives:

Upon completing this section, you should be able to:

- 1. Insert a table.
- 2. Explain a table's attributes.
- 3. Edit a table.
- 4. Add a table header.

- The <TABLE></TABLE> element has four subelements:
- 1. Table Row<TR></TR>.
- 2. Table Header <TH></TH>.
- 3. Table Data <TD></TD>.
- 4. Caption <CAPTION></CAPTION>.
- The table row elements usually contain table header elements or table data elements.

```
 Column 1 header 
 Column 2 header 
Row1, Col1 
Row1, Col2 
Row2, Col1 
Row2, Col2
```

Column 1 Header	Column 2 Header
Row1, Col1	Row1, Col2
Row2, Col1	Row2, Col2

## **Tables Attributes**

- BGColor: Some browsers support background colors in a table.
- Width: you can specify the table width as an absolute number of pixels or a percentage of the document width. You can set the width for the table cells as well.
- Border: You can choose a numerical value for the border width, which specifies the border in pixels.
- CellSpacing: Cell Spacing represents the space between cells and is specified in pixels.

## **Table Attributes**

- CellPadding: Cell Padding is the space between the cell border and the cell contents and is specified in pixels.
- Align: tables can have left, right, or center alignment.
- Background: Background Image, will be titled in IE3.0 and above.
- BorderColor, BorderColorDark.

## **Table Caption**

 A table caption allows you to specify a line of text that will appear centered above or bellow the table.

<TABLE BORDER=1 CELLPADDING=2>

<CAPTION ALIGN="BOTTOM"> Label For My Table </CAPTION>

 The Caption element has one attribute ALIGN that can be either TOP (Above the table) or BOTTOM (below the table).

## Table Header

 Table Data cells are represented by the TD element. Cells can also be TH (Table Header) elements which results in the contents of the table header cells appearing centered and in bold text.

# Table Data and Table Header Attributes

- Colspan: Specifies how many cell columns of the table this cell should span.
- Rowspan: Specifies how many cell rows of the table this cell should span.
- Align: cell data can have left, right, or center alignment.
- Valign: cell data can have top, middle, or bottom alignment.
- Width: you can specify the width as an absolute number of pixels or a percentage of the document width.
- Height: You can specify the height as an absolute number of pixels or a percentage of the document height.

### **Basic Table Code**

#### Spare Parts

Stock Number	Description	List Price
3476-AB	76mm Socket	45.00
3478-AB	78mm Socket	47.50
3480-AB	80mm Socket	50.00

#### **Table Data and Table Header Attributes**

```
<Table border=1 cellpadding =2>
  Column 1 Header 
Column 2 Header
  Row 1 Col 1 
 Row 2 Col 1
Row 2 Col2
  Row 3 Col2
```

# Table Data and Table Header Attributes

Column 1 Header	Column 2 Header
Row 1 Col 1	
Row 2 Col 1	Row 2 Col 2
	Row 3 Col 2

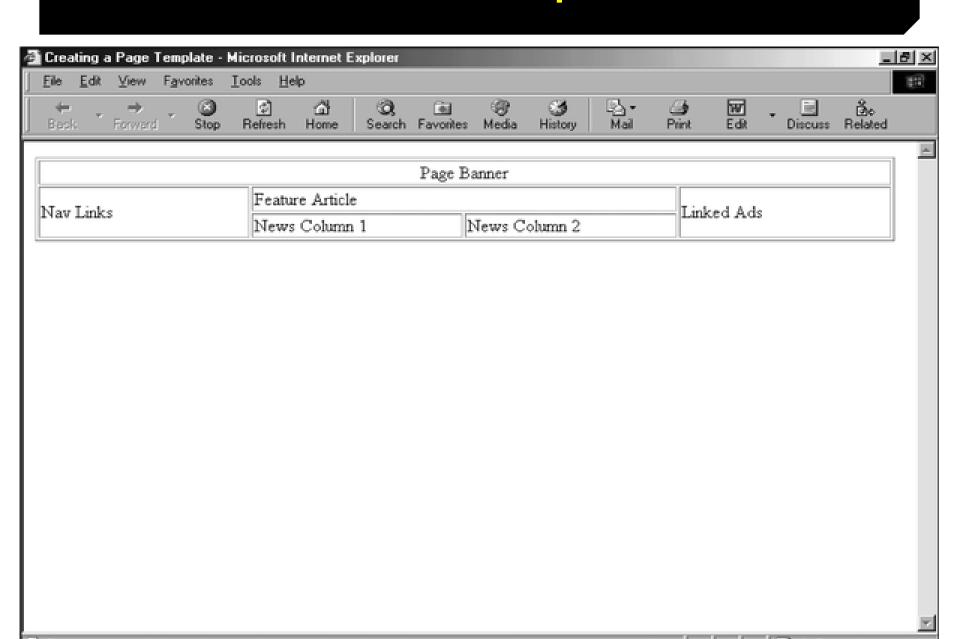
## **Special Things to Note**

- TH, TD and TR should always have end tags. Although the end tags are formally optional, many browsers will mess up the formatting of the table if you omit the end tags. In particular, you should always use end tags if you have a TABLE within a TABLE -- in this situation, the table parser gets hopelessly confused if you don't close your TH, TD and TR elements.
- A default TABLE has no borders
   By default, tables are drawn without border lines. You need the BORDER attribute to draw the lines.
- By default, a table is flush with the left margin
   TABLEs are plopped over on the left margin. If you want
   centered tables, You can either: place the table inside a DIV
   element with attribute ALIGN="center".
   Most current browsers also supports table alignment, using the
   ALIGN attribute. Allowed values are "left", "right", or "center", for
   example: <TABLE ALIGN="left">. The values "left" and "right"
   float the table to the left or right of the page, with text flow
   allowed around the table. This is entirely equivalent to IMG
   alignment

## What will be the output?

```
<TABLE BORDER width="750">
<TR> <TD colspan="4" align="center">Page
 Banner</TD></TR>
<TR> <TD rowspan="2" width="25%">Nav
 Links</TD><TD colspan="2">Feature
 Article</TD> <TD rowspan="2"
 width="25%">Linked Ads</TD></TR>
 <TR><TD width="25%">News Column 1 </TD>
 <TD width="25%"><News Column 2 </TD></TR>
</TABLE>
```

## The Output



## **FORMS**

Forms add the ability to web pages to not only provide the person viewing the document with dynamic information but also to obtain information from the person viewing it, and process the information.

#### Objectives:

Upon completing this section, you should be able to

- Create a FORM.
- Add elements to a FORM.
- Specify an action for the FORM.
- Forms work in all browsers.
- Forms are Platform Independent.

## **FORMS**

 To insert a form we use the <FORM></FORM> tags. The rest of the form elements must be inserted in between the form tags.

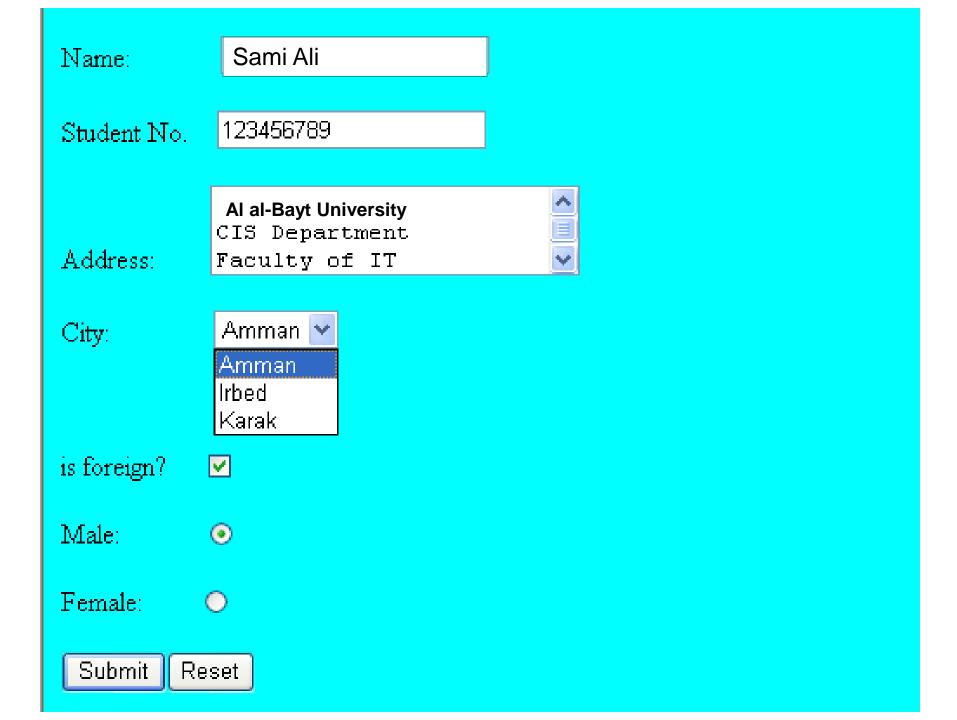
```
<HTML> <HEAD>
<TITLE> Sample Form</TITLE>
</HEAD>
<BODY>
<FORM ACTION = http://www.xnu.com/formtest.asp>
<P> First Name: <INPUT TYPE="TEXT" NAME="fname"</p>
  MAXLENGTH="50"> </P>
<P> <INPUT TYPE="SUBMIT" NAME="fsubmit1" VALUE="Send Info">
  </P>
</FORM>
</BODY> </HTML>
```

## <FORM> element attributes

- ACTION: is the URL of the CGI (Common Gateway Interface) program that is going to accept the data from the form, process it, and send a response back to the browser.
- METHOD: GET (default) or POST specifies which HTTP method will be used to send the form's contents to the web server. The CGI application should be written to accept the data from either method.
- NAME: is a form name used by VBScript or JavaScripts.

### Form Elements

- Form elements have properties: Text boxes, Password boxes, Checkboxes, Option(Radio) buttons, Submit, Reset, File, Hidden and Image.
- The properties are specified in the TYPE Attribute of the HTML element <INPUT></INPUT>.



## Form Elements

#### <INPUT> Element's Properties

**TYPE=** Type of INPUT entry field.

**NAME** = Variable name passed to CGI application

VALUE= The data associated with the variable name to be passed to the CGI application

**CHECKED=** Button/box checked

**SIZE=** Number of visible characters in text field

**MAXLENGHT=** Maximum number of characters accepted.

## **Text Box**

Text boxes: Used to provide input fields for text, phone numbers, dates, etc.

```
<INPUT TYPE= " TEXT " >
```

Browser will display

Textboxes use the following attributes:

- TYPE: text.
- SIZE: determines the size of the textbox in characters. Default=20 characters.
- MAXLENGHT: determines the maximum number of characters that the field will accept.
- NAME: is the name of the variable to be sent to the CGI application.
- VALUE: will display its contents as the default value.

## **Password**

Password: Used to allow entry of passwords.

#### <INPUT TYPE= " PASSWORD " >

Browser will display

Text typed in a password box is starred out in the browser display.

Password boxes use the following attributes:

- TYPE: password.
- SIZE: determines the size of the textbox in characters.
- MAXLENGHT: determines the maximum size of the password in characters.
- NAME: is the name of the variable to be sent to the CGI application.
- VALUE: is usually blank.

### Hidden

 Hidden: Used to send data to the CGI application that you don't want the web surfer to see, change or have to enter but is necessary for the application to process the form correctly.

<INPUT TYPE="HIDDEN">

Nothing is displayed in the browser.

Hidden inputs have the following attributes:

- TYPE: hidden.
- NAME: is the name of the variable to be sent to the CGI application.
- VALUE: is usually set a value expected by the CGI application.

### **Check Box**

Check Box: Check boxes allow the users to select more than one option.

<INPUT TYPE="CHECKBOX">

Browser will display



Checkboxes have the following attributes:

- TYPE: checkbox.
- CHECKED: is blank or CHECKED as the initial status.
- NAME: is the name of the variable to be sent to the CGI application.
- VALUE: is usually set to a value.

## Radio Button

Radio Button: Radio buttons allow the users to select only one option.

<INPUT TYPE="RADIO">

Browser will display



Radio buttons have the following attributes:

- TYPE: radio.
- CHECKED: is blank or CHECKED as the initial status. Only one radio button can be checked
- NAME: is the name of the variable to be sent to the CGI application.
- VALUE: usually has a set value.

## **Push Button**

Push Button: This element would be used with JavaScript to cause an action to take place.

<INPUT TYPE="BUTTON">

Browser will display



Push Button has the following attributes:

- TYPE: button.
- NAME: is the name of the button to be used in scripting.
- VALUE: determines the text label on the button.

## **Submit Button**

Submit: Every set of Form tags requires a Submit button. This is the element causes the browser to send the names and values of the other elements to the CGI Application specified by the ACTION attribute of the FORM element.

#### <INPUT TYPE="SUBMIT">

The browser will display

Submit Query

Submit has the following attributes:

- TYPE: submit.
- NAME: value used by the CGI script for processing.
- VALUE: determines the text label on the button, usually Submit Query.

## Reset Button

 Reset: It is a good idea to include one of these for each form where users are entering data. It allows the surfer to clear all the input in the form.

#### <INPUT TYPE="RESET">

Browser will display

Reset

•

- Reset buttons have the following attributes:
- TYPE: reset.
- VALUE: determines the text label on the button, usually Reset.

## **Image Submit Button**

Image Submit Button: Allows you to substitute an image for the standard submit button.

<INPUT TYPE="IMAGE" SRC="jordan.gif">

Image submit button has the following attributes:

- TYPE: Image.
- NAME: is the name of the button to be used in scripting.
- SRC: URL of the Image file.

## **File**

- File Upload: You can use a file upload to allow surfers to upload files to your web server.
- <INPUT TYPE="FILE">
- Browser will display

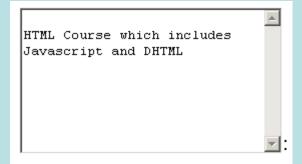
  Browse...

  Browse...
- File Upload has the following attributes:
- TYPE: file.
- SIZE: is the size of the text box in characters.
- NAME: is the name of the variable to be sent to the CGI application.
- MAXLENGHT: is the maximum size of the input in the textbox in characters.

### Other Elements used in Forms

TEXTAREA></TEXTAREA>: is an element that allows for free form text entry.

Browser will display



Textarea has the following attributes:

- NAME: is the name of the variable to be sent to the CGI application.
- ROWS: the number of rows to the textbox.
- COLS: the number of columns to the textbox.

### Other Elements used in Forms

The two following examples are <SELECT></SELECT> elements, where the attributes are set differently.

The Select elements attributes are:

- NAME: is the name of the variable to be sent to the CGI application.
- SIZE: this sets the number of visible choices.
- MULTIPLE: the presence of this attribute signifies that the user can make multiple selections. By default only one selection is allowed.

### Other Elements used in Forms

#### Option

The list items are added to the **<SELECT>** element by inserting **<OPTION></OPTION>** elements.

The Option Element's attributes are:

- SELECTED: When this attribute is present, the option is selected when the document is initially loaded. It is an error for more than one option to be selected.
- VALUE: Specifies the value the variable named in the select element.