

Introduction to HTML



Definitions

- **WWW** – World Wide Web.
- **HTML** – HyperText Markup Language – The Language of Web Pages on the World Wide Web.
- HTML is a text formatting language.
- **URL** – Uniform Resource Locator.
- **Browser** – A software program which is used to show web pages.
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Introduction

- “Normal text” surrounded by bracketed tags that tell browsers how to display web pages
- Pages end with “.htm” or “.html”
- HTML Editor – A word processor that has been specialized to make the writing of HTML documents more effortless.

Introduction

- HTML stands for Hypertext Markup Language, and it is the most widely used language to write Web Pages.
- As its name suggests, HTML is a markup language.
- **Hypertext** refers to the way in which Web pages (HTML documents) are linked together. When you click a link in a Web page, you are using hypertext.

Introduction

- Markup Language describes how HTML works.
- With a markup language, you simply "mark up" a text document with tags that tell a Web browser how to structure it to display.

Structure of HTML

- The basic structure for all HTML documents is simple and should include the following minimum elements or tags:
- **<html>** - The main container for HTML pages
- **<head>** - The container for page header information
- **<title>** - The title of the page
- **<body>** - The main body of the page

Basic Structure Document

- <HTML>
- <HEAD>
- <TITLE>MES College Marampally</TITLE>
- </HEAD>
- <BODY>
- This is what is displayed.
- </BODY>
- </HTML>
-

Tags

- Codes enclosed in brackets
- Usually paired
 - `<TITLE>My Web Page</TITLE>`
- Not case sensitive
 - `<TITLE> = <title> = <TITLE>`

<!DOCTYPE> Declaration

- The <!DOCTYPE> declaration tag is used by the web browser to understand the version of the HTML used in the document. Current version of HTML is 5 and it makes use of the following declaration –
- <!DOCTYPE html> There are many other declaration types which can be used in HTML document depending on what version of HTML is being used.

The `<html>` Element

- The `<html>` element is the containing element for the whole HTML document. Each HTML document should have one `<html>` and each document should end with a closing `</html>` tag.
- Following two elements appear as direct children of an `<html>` element:
 - `<head>`
 - `<body>`
- As such, start and end HTML tags enclose all the other HTML tags you use to describe the Web page.

The `<head>` Element

- The `<head>` element is just a container for all other header elements. It should be the first thing to appear after the opening `<html>` tag.
- Each `<head>` element should contain a `<title>` element indicating the title of the document.

The `<title>` Element

- You should specify a title for every page that you write inside the `<title>` element. This element is a child of the `<head>` element). It is used in several ways:
 1. It displays at the very top of a browser window.
 2. It is used as the default name for a bookmark in browsers such as **IE** and **Netscape**.

The <title> Element

3. It is used by search engines that use its content to help index pages.
- Therefore it is important to use a title that really describes the content of your site. The <title> element should contain only the text for the title and it may not contain any other elements.
 - Example:
 - Here is the example of using title tag.
 - `<head><title>HTML Basic tags</title> </head>`

The `<body>` Element

- The `<body>` element appears after the `<head>` element and contains the part of the Web page that you actually see in the main browser window, which is sometimes referred to as body content.
- A `<body>` element may contain anything from a couple of paragraphs under a heading to more complicated layouts containing forms and tables.
- Most of what you will be learning in this and the following five chapters will be written between the opening `<body>` tag and closing `</body>` tag.

The `<body>` Element

- Example:
- Here is the example of using body tag.
- `<body> <p>This is a paragraph tag.</p>
</body>`

Attributes

- **Attributes** are another important part of HTML markup.
- An **attribute** is used to define the characteristics of an element and is placed inside the element's opening tag.
- All attributes are made up of two parts: **a name and a value**:
- The **name** is the property you want to set.
- For example, the `` element in the example carries an attribute whose name is `face`, which you can use to indicate which typeface you want the text to appear in.

Attributes

- The **value** is what you want the value of the property to be.
- The first example was supposed to use the Arial typeface, so the value of the face attribute is Arial.
- you can see that a color for the text has been specified as well as the typeface in this element:
- ``

Generic Attributes

Attribute	Options	Function
align	right, left, center	Horizontally aligns tags
valign	top, middle, bottom	Vertically aligns tags within an HTML element.
bgcolor	numeric, hexadecimal, RGB values	Places a background color behind an element
background	URL	Places an background image behind an element

Generic Attributes

Attribute	Options	Function
id	User Defined	Names an element for use with Cascading Style Sheets.
class	User Defined	Classifies an element for use with Cascading Style Sheets.
width	Numeric Value	Specifies the width of tables, images, or table cells.
height	Numeric Value	Specifies the height of tables, images, or table cells.
title	User Defined	"Pop-up" title for your elements.

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

- WHITE
 - BLACK
 - RED
 - GREEN
 - BLUE
 - MAGENTA
 - CYAN
 - YELLOW
 - AQUAMARINE
 - BAKER'S CHOCOLATE
 - VIOLET
 - BRASS
 - COPPER
- #FFFFFF
 - #000000
 - #FF0000
 - #00FF00
 - #0000FF
 - #FF00FF
 - #00FFFF
 - #FFFF00
 - #70DB93
 - #5C3317
 - #9F5F9F
 - #B5A642
 - #B87333

Background Color

- It is very common to see web pages with their background color set to white or some other colors.
- To set your document's background color, you need to edit the <BODY> element by adding the BGCOLOR attribute.
- The following example will display a document with a white background color:

```
<BODY BGCOLOR="#FFFFFF"></BODY>
```

TEXT Color

- The TEXT attribute is used to control the color of all the normal text in the document. The default color for text is black. The TEXT attribute would be added as follows:
- `<BODY BGCOLOR="#FFFFFF" TEXT="#FF0000"></BODY>`
- In this example the document's page color is white and the text would be red.

Headings, <Hx> </Hx>

- Inside the BODY element, heading elements **H1** through **H6** are generally used for major divisions of the document.
- Headings are permitted to appear in any order, but you will obtain the best results when your documents are displayed in a browser if you follow these guidelines:
- **H1**: should be used as the highest level of heading, **H2** as the next highest, and so forth.

Headings, <Hx> </Hx>

- <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, <P> </P>

- <p align="left">This is left aligned.</p>
<p align="center">This is center aligned.</p>
<p align="right">This is right aligned.</p>
<p align="justify">This is jutified. This works
when you have multiple lines in your paragraph
and you want to justfy all the lines so that they
can look more nice.</p>

Break, `
`

- Line breaks allow you to decide where the text will break on a line or continue to the end of the window.
- A `
` is an empty Element, meaning that it may contain attributes but it does not contain content.
- The `
` 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 rules are used to visually break up sections of a document.
- The <hr> tag creates a line from the current position in the document to the right margin and breaks the line accordingly.
- For example
- <p>This is paragraph one and should be on top</p> <hr> <p>This is paragraph two and should be at bottom</p>

Horizontal Rule, <HR>

Attribute	Description	Default Value
SIZE	Height of the rule in pixels	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

- The `<center>` Element
- You can use `<center>` tag to put any content in the center of the page or any table cell.
- Example:
- `<p>This is not in the center.</p> <center>
<p>This is in the center.</p> </center>`

Character Formatting

- Nonbreaking Spaces:
- Suppose you were to use the phrase "12 Angry Men." Here you would not want a browser to split the "12" and "Angry" across two lines:
- A good example of this technique appears in the movie "12 Angry Men."
- In cases where you do not want the client browser to break text, you should use a [nonbreaking space entity \(\)](#) instead of a normal space. For example, when coding the "12 Angry Men" paragraph, you would use something similar to the following code:
- `<p>A good example of this technique appears in the movie "12 Angry Men."</p>`

Character Formatting

- Preserve Formatting - The `<pre>` Element:
- Sometimes a text to follow the exact format of how it is written in the HTML document. In those cases, use the preformatted tag (`<pre>`).
- Any text between the opening `<pre>` tag and the closing `</pre>` tag will preserve the formatting of the source document.
- `<pre>` function testFunction(strText)
 - { alert (strText) }`</pre>`

Presentational Tags

- If you use a word processor, you are familiar with the ability to make text **bold, italicized, or underlined**; these are just three of the ten options available to indicate how text can appear in HTML.
- Bold Text - **The Element:**
- Anything that appears in a ... element is displayed in bold, like the word bold here:
- <p>The following word uses a bold typeface.</p>
- This will produce following result:
- The following word uses a **bold** typeface.

Presentational Tags

- Italic Text - The `<i>` Element:
- Anything that appears in a `<i>...</i>` element is displayed in italicized, like the word italicized here:
- `<p>The following word uses a italicized</i> typeface.</p>`
- This will produce following result:
- The following word uses a *italicized* typeface.

Presentational Tags

- Underlined Text - The `<u>` Element:
- Anything that appears in a `<u>...</u>` element is displayed with underline, like the word underlined here:
- `<p>The following word uses a <u>underlined</u> typeface.</p>`
- This will produce following result:
- The following word uses a underlined typeface.

Presentational Tags

- Strike Text - The `<strike>` Element:
- Anything that appears in a `<strike>...</strike>` element is displayed with strikethrough, which is a thin line through the text:
- `<p>The following word uses a <strike>strikethrough</strike> typeface.</p>`
- This will produce following result:
- The following word uses a ~~strikethrough~~ typeface.

Presentational Tags

- Monospaced font - The `<tt>` Element:
- The content of a `<tt>` element is written in monospaced font.
- Most fonts are known as variable-width fonts because different letters are of different widths (for example, the letter m is wider than the letter i). In a monospaced font, however, each letter is the same width.
- `<p>The following word uses a <tt>monospaced</tt> typeface.</p>`
- This will produce following result:
- The following word uses a monospaced typeface

Presentational Tags

- Superscript Text - The `<sup>` Element:
- The content of a `<sup>` element is written in superscript; the font size used is the same size as the characters surrounding it but is displayed half a characters height above the other characters.
- `<p>The following word uses a ^{superscript} typeface.</p>`
- This will produce following result:
- The following word uses a ^{superscript} typeface.

Presentational Tags

- Subscript Text - The `<sub>` Element:
- The content of a `<sub>` element is written in subscript; the font size used is the same as the characters surrounding it, but is displayed half a character's height beneath the other characters.
- `<p>`The following word uses a `_{subscript}` typeface.`</p>`
- This will produce following result:
- The following word uses a subscript typeface.

Presentational Tags

- Larger Text - The `<big>` Element:
- The content of the `<big>` element is displayed one font size larger than the rest of the text surrounding it.
- `<p>The following word uses a <big>big</big> typeface.</p>`
- This will produce following result:
- The following word uses a **big** typeface.

Presentational Tags

- Smaller Text - The `<small>` Element:
- The content of the `<small>` element is displayed one font size smaller than the rest of the text surrounding it.
- `<p>The following word uses a small typeface.</p>`
- This will produce following result:
- The following word uses a small typeface.

Phrase Elements

- The following elements are not used as widely. As the element names indicate, they are designed to describe their content:
 - ❑ `` and `` for emphasis
 - ❑ `<blockquote>`, `<cite>`, and `<q>` for quotations and citations
 - ❑ `<abbr>`, `<acronym>`, and `<dfn>` for abbreviations, acronyms, and key terms
 - ❑ `<code>`, `<kbd>`, `<var>`, and `<samp>` for computer code and information
 - ❑ `<address>` for addresses

Phrase Elements

- Emphasized Text - The `` Element:
- The content of an `` element is intended to be a point of emphasis in the document, and it is usually displayed in italicized text. The kind of emphasis intended is on words such as "must" in the following sentence:
- `<p>You must remember to close elements in HTML.</p>`
- This will produce following result:
- You *must* remember to close elements in HTML.

Phrase Elements

- Strong Text - The `` Element:
- The `` element is intended to show strong emphasis for its content; stronger emphasis than the `` element. As with the `` element, the `` element should be used only when you want to add strong emphasis to part of a document.
- `<p>You must remember to close elements in HTML.</p>`
- This will produce following result:
- You **must** remember to close elements in XHTML.

Phrase Elements

- Text Abbreviation - The `<abbr>` Element
- You can indicate when you are using an abbreviated form by placing the abbreviation between opening `<abbr>` and closing `</abbr>` tags.
- `<p>I have a Friend called <abbr title = "Abhishek" > Abhy</abbr>.</p>`
- This will produce following result:
- I have a friend called **Abhy**.
-

Phrase Elements

- Using Acronym - The `<acronym>` Element
- The `<acronym>` element allows to indicate that the text between an opening `<acronym>` and closing `</acronym>` element is an acronym.
- When possible use a title attribute whose value is the full version of the acronyms on the `<acronym>` element.
- `<p>This chapter covers marking up text in <acronym title="Hypertext Markup Language"> HTML</acronym>.</p>`
- This will produce following result:
- This chapter covers marking up text in **HTML**.

Phrase Elements

- The `<dfn>` Element :
- The `<dfn>` element allows to specify a special term.
- Its use is similar to the words that are in italics in the midst of paragraphs.
- Most recent browsers render the content of a `<dfn>` element in an italic font.
- `<p>`This tutorial teaches you how mark up your documents for the web using `<dfn>` HTML `</dfn>`
`</p>`
- This will produce following result:
- This tutorial teaches you how mark up your documents for the web using *HTML*.

Phrase Elements

- The `<blockquote>` Element :
- When to quote a passage from another source, you should use the `<blockquote>` element.
- Text inside a `<blockquote>` element is usually indented from the left and right edges of the surrounding text, and sometimes uses an italicized font.
- `<p>`The following description of HTML is taken from the W3C Web site:`</p>` `<blockquote>` HTML 1.0 is the W3C's first Recommendation for XHTML, `</blockquote>`
- This will produce following result:
- The following description of HTML is taken from the W3C Web site:
- HTML 1.0 is the W3C's first Recommendation for XHTML

Phrase Elements

- Short Quotations - The <q> Element :
- The <q> element is intended to be used to add a quote within a sentence rather than as an indented block on its own.
- <p>Amit is in Spain, <q>He is their at my home. I think I am wrong</q>.</p>
- This will produce following result:
- Amit is in Spain, "He is their at my home. I think I am wrong."

Phrase Elements

- Citations - The `<cite>` Element :
- If you are quoting a text, you can indicate the source placing it between an opening `<cite>` tag and closing `</cite>` tag.
- The content of the `<cite>` element is rendered in italicized text by default.
- `<p>`This HTML Tutorial is derived from `<cite>`World Wide Web Standard for HTML`</cite>`.`</p>`
- This will produce following result:
- This HTML Tutorial is derived from *World Wide Web Standard for HTML*.

Phrase Elements

- The `<code>` Element :
- Any code to appear on a Web page should be placed inside a `<code>` element. Usually the content of the `<code>` element is presented in a monospaced font, just like the code in most programming books.
- `<h1><code>This` is inside code element `</code>`
`</h1>`
- This will produce following result:
- This is inside code element

Phrase Elements

- Keyboard Text - The `<kbd>` Element :
- When you are talking about computers, if you want to tell a reader to enter some text, you can use the `<kbd>` element to indicate what should be typed in, as in this example.
- The content of a `<kbd>` element is usually represented in a monospaced font rather like the content of the `<code>` element.
- `<h1> <kbd>This is inside kbd element</kbd></h1>`
This will produce following result:
- This is inside kbd element

Phrase Elements

- Programming Variables - The `<var>` Element :
- This element is usually used in conjunction with the `<pre>` and `<code>` elements to indicate that the content of that element is a variable that can be supplied by a user.
- `<p><code>document.write("<var>user-name</var>") </code></p>` This will produce following result:
- `document.write("user-name")`

Phrase Elements

- Addresses - The <address> Element :
- The <address> element is used to contain any address. For example:
- <address>304, Menna Colony, Hyderabad - INDIA, 500032</address> This will produce following result:
- 304, Menna Colony, Hyderabad - INDIA, 500032

Phrase Elements

- Program Output - The `<samp>` Element :
- The `<samp>` element indicates sample output from a program, script, or the like. Again, it is mainly used when documenting programming concepts. For example:
- `<p>Result produced by the program is <samp>Hello World</samp></p>` This will produce following result:
- Result produced by the program is Hello World

Comments

- Comments are piece of code which is ignored by any web browser. It is good practice to comment your code, especially in complex documents, to indicate sections of a document, and any other notes to anyone looking at the code. Comments help you and others understand your code.
- HTML Comment lines are indicated by the special beginning tag `<!--` and ending tag `-->` placed at the beginning and end of EVERY line to be treated as a comment.

Comments

- Comments do not nest, and the double-dash sequence "--" may not appear inside a comment except as part of the closing --> tag. You must also make sure that there are no spaces in the start-of-comment string.
- For example: Given line is a valid comment in HTML
- <!-- This is commented out -->

Comments

- T Multiline Comments:
- You have seen how to comment a single line in HTML. You can comment multiple lines by the special beginning tag `<!--` and ending tag `-->` placed before the first line and end of the lastline to be treated as a comment.
- For example:
- `<!--`

This is a multiline comment `
`

and can span through as many as lines you like.

`-->`

HTML Fonts

- Font face and color depends entirely on the computer and browser that is being used to view your page. But the `` tag is used to add style, size, and color to the text on the site.
- it can use a `<basefont>` tag to set all of your text to the same size, face, and color.
- The font tag is having three attributes called size, color, and face to customize your fonts.
- To change any of the font attributes at any time within your page, simply use the `` tag.
- The text that follows will remain changed until you close with the `` tag.

HTML Fonts

- Font Size attribute:
- You can set the size of your font with size attribute. The range of accepted values is from 1(smallest) to 7(largest). The default size of a font is 3.
- Example:
- `Font size="1"`
- `Font size="2"`
- `Font size="3"`
- `Font size="4"`
- `Font size="5"`
- `Font size="6"`
- `Font size="7"`

HTML Fonts

- SPECIFY THE RELATIVE FONT SIZE.
- `` or ``:
You can specify how many sizes larger or how many sizes smaller than the preset font size should be.
- Example:
- `Font size="-1"`
- `Font size="+1"`
- `Font size="+2"`
- `Font size="+3"`
- `Font size="+4"`

HTML Fonts

- Font Face:
- You can set any font you like using face attribute but be aware that if the user viewing the page doesn't have the font installed, they will not be able to see it.
- Instead they will default to Times New Roman of your font with size attribute.
- Example:
- `Times New Roman`
- `Verdana`
- `Comic Sans MS`
- `WildWest`
- `Bedrock`

HTML Fonts

- Specify alternate font faces:
- A visitor will only be able to see your font if they have that font installed on their computer.
- So, it is possible to specify two or more font face alternatives by listing the font face names, separated by a comma.
- Example:
- ``
- ``
- When your page is loaded, their browser will display the first font face that it has available.
- If none of your selections are installed....then it will display the default font face Times New Roman.

HTML Fonts

- Font Color:
- You can set any font color you like using color attribute.
- You can specify the color that you want by either the color name or hexadecimal code for that color.
- Example:
- `This text is hexcolor #FF00FF`
- `This text is red`

HTML marquee

- A HTML marquee is a scrolling piece of text displayed either horizontally across or vertically down your web site page depending on the settings. This is created by using HTML tag <marquees>.
- **Syntax:**
- A simple syntax to use marquee is as follows:
- <marquee attribute_name="attribute_value"....more attributes>
- One or more lines or text message or image </marquee>

HTML marquee

- Attributes:
- A HTML marquee can have following attributes:
 1. **width**: how wide the marquee is. This will have a value like 10 or 20%etc.
 2. **height**: how tall the marquee is. This will have a value like 10 or 20% etc.
 3. **direction**: which direction the marquee should scroll. This will have value either up,down, left or right.
 4. **behavior**: what type of scrolling. This will have value scroll, slid and alternate.
 5. **scrolldelay**: how long to delay between each jump. This will have a value like 10 etc.

HTML marquee

6. **scrollamount**: how far to jump. This will have a value like 10 etc.
7. **loop**: how many times to loop. The default value is INFINITE, which means that the marquee loops endlessly.
8. **bgcolor**: background color. This will have any color name or color hex value.
9. **hspace**: horizontal space around the marquee. This will have a value like 10 or 20%etc.
10. **vspace**: vertical space around the marquee. This will have a value like 10 or 20%etc.

HTML Images

- Images are very important to beautify as well as to depicts many concepts on your web page. Its is true that one single image is worth than thousands of words.
- Insert Image - The Element:
- You will insert any image in your web page by using tag.
- Following is the simple syntax to use this tag.
-

HTML Images

- `` 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. <http://www.domain.com/dir/file.ext> or [/dir/file.txt](#).

HTML Images

- Image Attributes:
- Following are most frequently used attributes for `` tag.
 1. **width**: sets width of the image. This will have a value like 10 or 20%etc.
 2. **height**: sets height of the image. This will have a value like 10 or 20% etc.
 3. **border**: sets a border around the image. This will have a value like 1 or 2 etc.
 4. **src**: specifies URL of the image file.
 5. **alt**: this is an alternate text which will be displayed if image is missing.

HTML Images

6. **align**: this sets horizontal alignment of the image and takes value either left, right or center.
7. **valign**: this sets vertical alignment of the image and takes value either top, bottom or center.
8. **hspace**: horizontal space around the image. This will have a value like 10 or 20% etc.
9. **vspace**: vertical space around the image. This will have a value like 10 or 20% etc.
10. **name**: name of the image with in the document.
11. **id**: id of the image with in the document.

HTML Images

- 12. **style**: this will be used if you are using CSS.
- 13. **stitle**: specifies a text title. The browser, perhaps flashing the title when the mouse passes over the link.

HTML Images

- Some Examples on images

- 1) ``
- 2) ``
- 3) ``
- 4) ``
- 5) ``

Lists

- In this chapter you will learn how to create a variety of lists.
- Objectives
- Upon completing this section, you should be able to
 - ❑ **Unordered lists**, which are like lists of bullet points
 - ❑ **Ordered lists**, which use a sequence of numbers or letters instead of bullet points
 - ❑ **Definition lists**, which allow you to specify a term and its definition
- **Nest Lists.**

List Elements

- HTML supplies several list elements. Most list elements are composed of one or more `` (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.
- ``
- `` List item ...`` List item ...
- `` List item ...`` List item ...
- ``

List Elements

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

List Elements

- OL: Ordered List. Items in this list are numbered automatically by the browser.
- ``
- ` List item One...`
- ` List item Two ...`
- ` List item Three...`
- ``
- You have the choice of setting the TYPE Attribute to one of five numbering styles.

List Elements

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

List Elements

- You can specify a starting number for an ordered list.
- `<OL TYPE =“i”>`
- ` List item ...`
- ` List item ...`
- ``
- `<P> text</P>`
- `<OL TYPE=“i” START=“3”>`
- ` List item ...`
- ``

List Elements

- **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).
- `<DL>`
- `<DT> HTML </DT>`
- `<DD> Hyper Text Markup Language </DD>`
- `<DT> DOG </DT>`
- `<DD> A human's best friend!</DD>`
- `</DL>`

Nesting Lists

- You can nest lists by inserting a UL, OL, etc., inside a list item (LI).
- EXample
- `<UL TYPE = “square”>`
- ` List item ...`
- ` List item ...`
- `<OL TYPE=“i” START=“3”>`
- ` List item 1 ...`
- ` List item 2...`
- ` List item 3...`
- ` List item 4...`
- ` List item ...`
- ``
- ``
- ` List item ...`
- ``

What will be the output?

<H1 ALIGN="CENTER">SAFETY TIPS FOR CANOEISTS</H1>

<OL **TYPE="a" START="2"**>

Be able to swim

Wear a life jacket at all times

Don't stand up or move around. If canoe tips,

Hang on to the canoe

Use the canoe for support and

Swim to shore

Don't overexert yourself

Use a bow light at night

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

<H1 ALIGN="CENTER">SAFETY TIPS FOR CANOEISTS</H1>

<OL TYPE="a" START="2">

Be able to swim

Wear a life jacket at all times

Don't stand up or move around. If canoe tips,

Hang on to the canoe

Use the canoe for support

<OL type="I" start="4">

 Be careful

 Do not look around

Swim to shore

Don't overexert yourself

Use a bow light at night

What
will
be the
output?

The output....

SAFETY TIPS FOR CANOEISTS

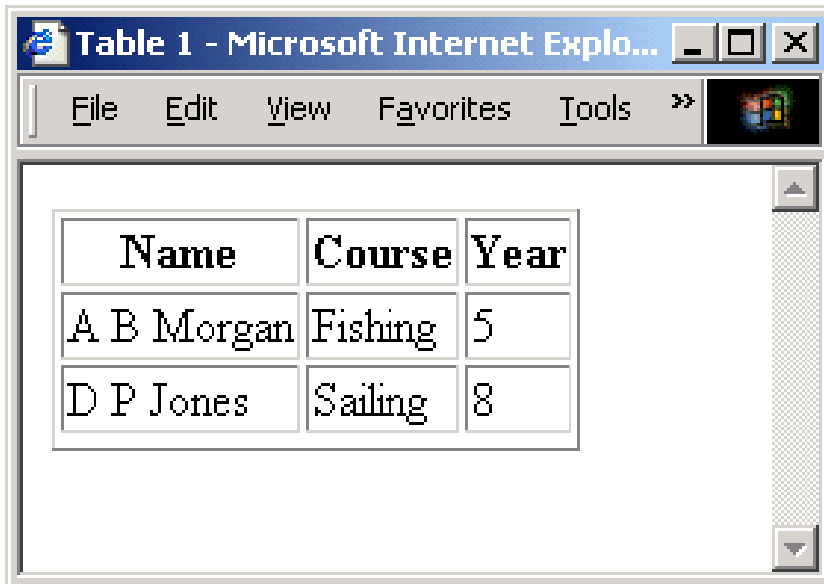
- b. Be able to swim
- c. Wear a life jacket at all times
- d. Don't stand up or move around. If canoe tips,
 - o Hang on to the canoe
 - o Use the canoe for support
- IV. Be careful
- V. Do not look around
 - o Swim to shore
- e. Don't overexert yourself
- f. Use a bow light at night

Tables

- Tables provide a means of organising the layout of data
- A table is divided into **rows** and **columns**: these specify the **cells** of the table
- Cells can contain text, images, links, other tables...
- Tables can also be used for organising the layout of the web page itself.

Tables

- `<table>` main element
- `<tr>` table row
- `<th>` table header
- `<td>` table data

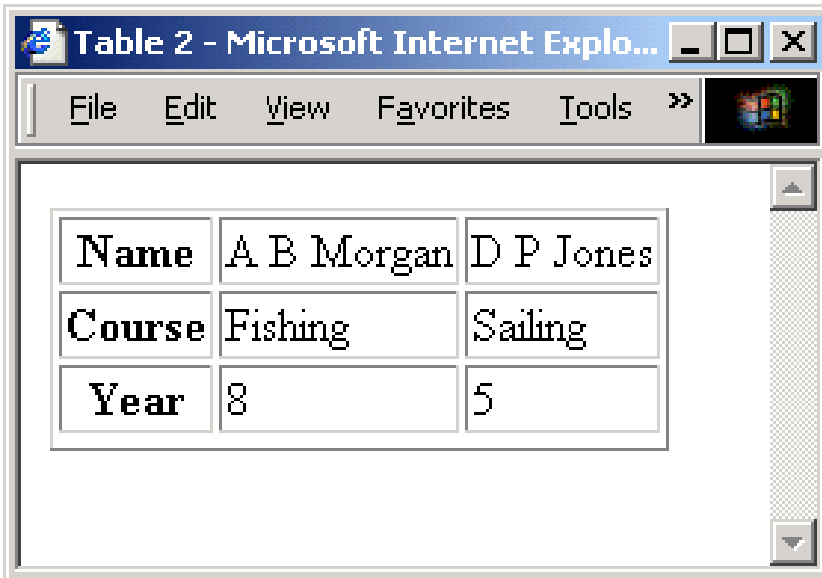


Name	Course	Year
A B Morgan	Fishing	5
D P Jones	Sailing	8

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Course</th>
    <th>Year</th>
  </tr>
  <tr>
    <td>A B Morgan</td>
    <td>Fishing</td>
    <td>5</td>
  </tr>
  <tr>
    <td>D P Jones</td>
    <td>Sailing</td>
    <td>8</td>
  </tr>
</table>
```

Tables

- `<table>` main element
- `<tr>` table row
- `<th>` table header
- `<td>` table data

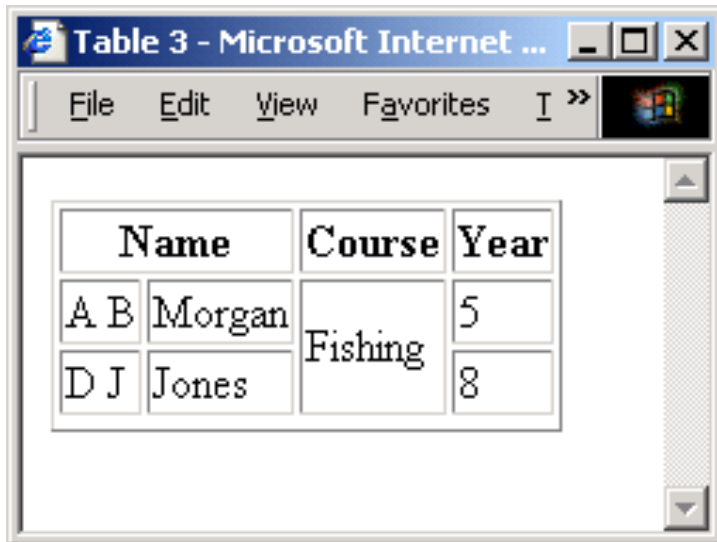


Name	A B Morgan	D P Jones
Course	Fishing	Sailing
Year	8	5

```
<table border="1">
  <tr>
    <th>Name</th>
    <td>A B Morgan</td>
    <td>D P Jones</td>
  </tr>
  <tr>
    <th>Course</th>
    <td>Fishing</td>
    <td>Sailing</td>
  </tr>
  <tr>
    <th>Year</th>
    <td>8</td>
    <td>5</td>
  </tr>
</table>
```

Rows and Columns

- Cells can span multiple columns and multiple rows with the **colspan** and **rowspan** attributes



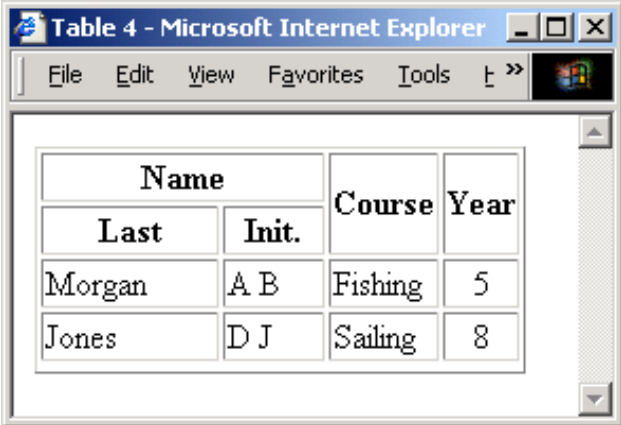
Name		Course	Year
A B	Morgan	Fishing	5
D J	Jones	Fishing	8

```
<table border="1">
  <tr>
    <th colspan="2">Name</th>
    <th>Course</th>
    <th>Year</th>
  </tr>
  <tr>
    <td>A B</td>
    <td>Morgan</td>
    <td rowspan="2">Fishing</td>
    <td>5</td>
  </tr>
  <tr>
    <td>D J</td>
    <td>Jones</td>
    <td>Sailing</td>
    <td>8</td>
  </tr>
  <tr>
    <td colspan="2"></td>
    <td></td>
    <td></td>
  </tr>
</table>
```

The align and width attributes

- The **align** attribute determines the position of the text within a cell
- The **width** attribute determines the width of the row relative to the table

```
<table border="1" align="center">
  <tr>
    <th colspan="2" width="60%">Name</th>
    <th rowspan="2">Course</th>
    <th rowspan="2">Year</th>
  </tr>
  <tr>
    <th>Last</th>
    <th>Init.</th>
  </tr>
  <tr>
    <td>Morgan</td>
    <td>AB</td>
    <td>Fishing</td>
    <td align="center">5</td>
  </tr>
  <!-- etc -->
```



Name		Course	Year
Last	Init.		
Morgan	A B	Fishing	5
Jones	D J	Sailing	8

Table attributes

Table attributes

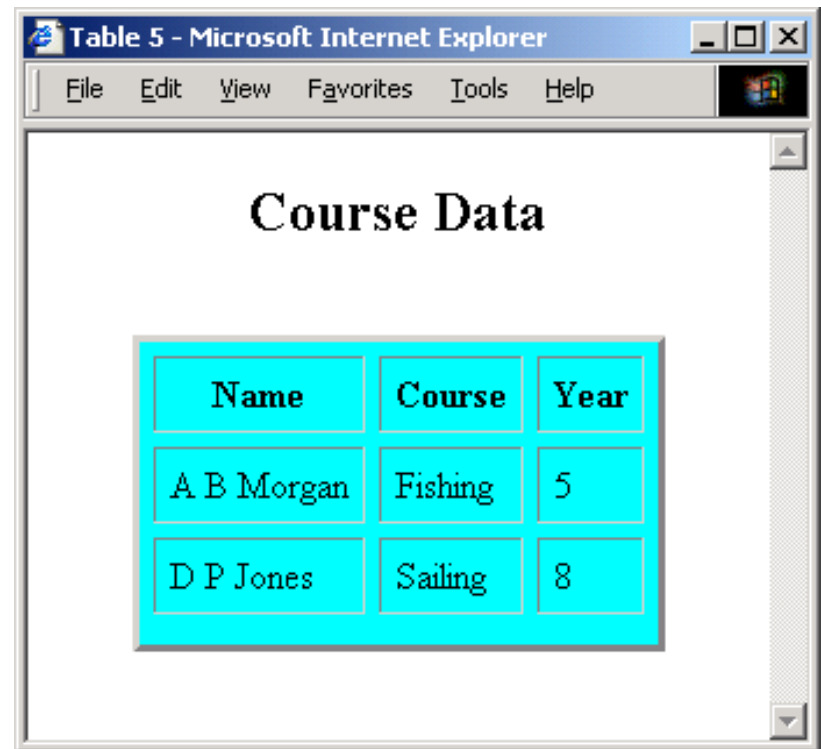
- **align** alignment relative to the page
- **width** in pixels or percentage of page width
- **border** - width of border (pixels)
- **cellspacing** separation between cells (pixels)
- **cellpadding** - space around data inside cell (pixels)
- **bgcolor** - background colour (inside cells)

Furthermore

- The **<caption>** element puts a title above the table

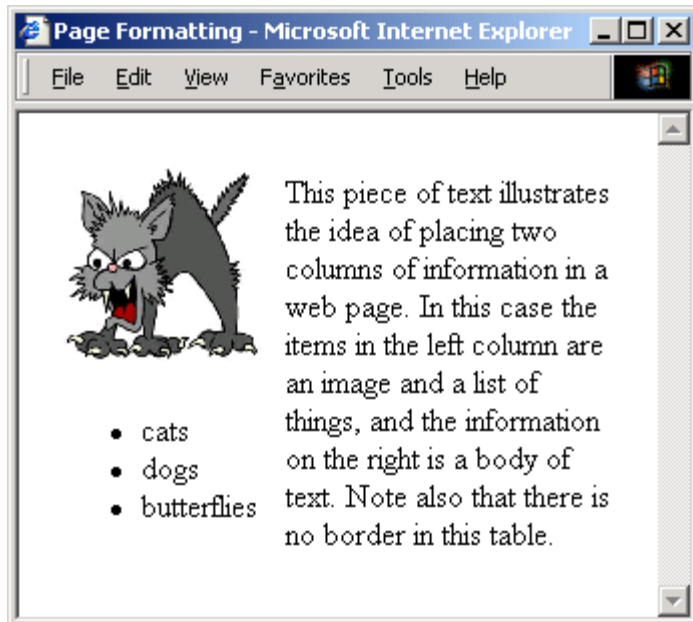
Table attributes

```
<table border="3" align="center" cellspacing="6"
cellpadding="6" bgcolor="cyan">
  <caption>
    <h2>Course Data</h2>
  </caption>
  <tr>
    <th>Name</th>
    <th>Course</th>
    <th>Year</th>
  </tr>
  <tr>
    <td>A B Morgan</td>
    <td>Fishing</td>
    <td>5</td>
  </tr>
  <!-- etc -->
```



Page formatting

- Tables can be used to organize the layout of the web page itself



```
</body>
<table border="0" cellspacing="10">
  <tr>
    <td>
      
      <ul>
        <li>cats</li>
        <li>dogs</li>
        <li>butterflies</li>
      </ul>
    </td>
    <td>
      This piece of text illustrates
      the idea of placing two columns
      of information in a web page...
      Note also that there is no
      border in this table.
    </td>
  </tr>
</table>
</body>
```

HTML Links

- Web pages can contain links that take you directly to other pages and even specific parts of a given page.
- These links are known as [hyperlinks](#).
- [Hyperlinks](#) allow visitors to navigate between Web sites by clicking on [words](#), [phrases](#), and [images](#).

HTML Links

- Linking Documents - The <a> Element:
- A link is specified using the <a> element.
- This element is called **anchor tag** as well.
- Anything between the opening <a> tag and the closing tag becomes part of the link and a user can click that part to reach to the linked document.
- Following is the simple syntax to use this tag.
- `<a href="Document URL" attr_name = "attr_value"
..more attributes />`

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 `here` to go to yahoo.

HTML Links

- **Anchor Attributes:**
- Following are most frequently used attributes for <a> tag.
 1. **href:** specifies the URL of the target of a hyperlink.
Its value is any valid document URL, absolute or relative, including a fragment identifier or a JavaScript code fragment.
 2. **target:** specify where to display the contents of a selected hyperlink.
 1. If set to "_blank" then a new window will be opened to display the loaded page,

HTML Links

- **Anchor Attributes:**
 - if set to "_top" or "_parent" then same window will be used to display the loaded document,
 - if set to "_self" then loads the new page in current window. By default its "_self".
- 3. **name & id:** attributes places a label within a document. When that label is used in a link to that document, it is the equivalent of telling the browser to goto that label.
- 4. **event:** attributes like onClick, onMouseOver etc. are used to trigger any Javascript or VBscript code.

HTML Links

5. **title**: attribute lets you specify a title for the document to which you are linking. The value of the attribute is any string, enclosed in quotation marks. The browser might use it when displaying the link, perhaps flashing the title when the mouse passes over the link.
6. **accesskey**: attribute provides a keyboard shortcut that can be used to activate a link. For example, you could make the T key an access key so that when the user presses either the Alt or Ctrl key on his keyboard (depending on his operating system) along with the T key, the link gets activated

Internal Links

- **Internal Links** : Links can also be created inside large documents to simplify navigation.
- 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:
- ``
-

Internal Links

- 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.
- `Go To Book Mark`

Special Characters & Symbols

- These Characters are recognized in HTML as they begin with an ampersand and end with with a semi-colon e.g. &value; The value will either be an entity name or a standard ASCII character number. They are called escape sequences.
- The next table represents some of the more commonly used special characters.

Special Characters & Symbols

Special Character	Entity Name	Special Character	Entity Name
Ampersand	&amp; &	Greater-than sign	&gt; >
Asterisk	&lowast; **	Less-than sign	&lt; <
Cent sign	&cent; ¢	Non-breaking space	&nbsp; ;
Copyright	&copy; ©	Quotation mark	&quot; ''
Fraction one qtr	&frac14; 1/4	Registration mark	&reg; ®
Fraction one half	&frac12; 1/2	Trademark sign	&trade; TM

Special Characters & Symbols

- Additional escape sequences support accented characters, such as:
- `ö`
 - a lowercase o with an umlaut: ö
- `ñ`
 - a lowercase n with a tilde: ñ
- `È`
 - an uppercase E with a grave accent: È
- NOTE: Unlike the rest of HTML, the escape sequences are case sensitive. You cannot, for instance, use `<` instead of `<`.

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
- Send me
- More Information

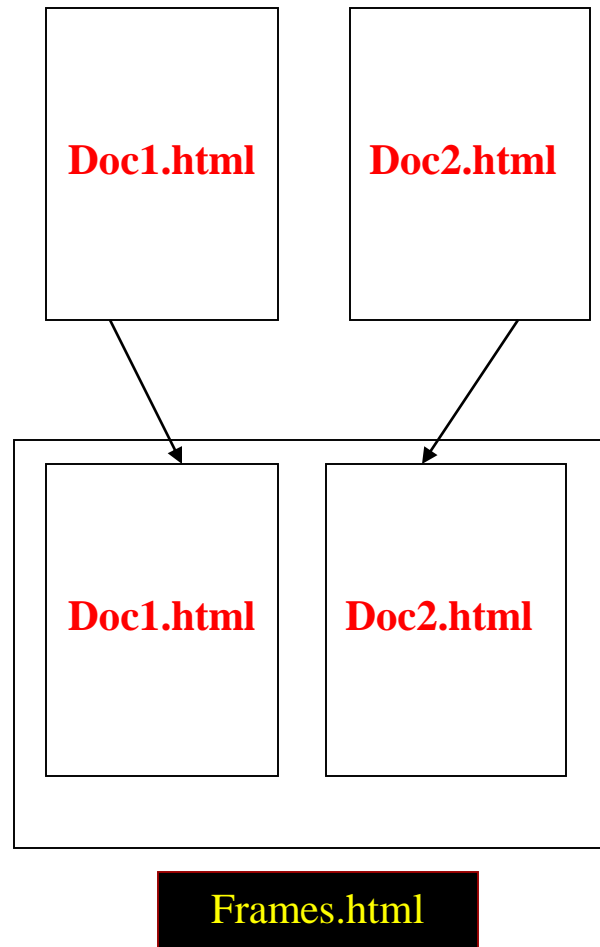
Frames

- Frames are a relatively new addition to the HTML standard. First introduced in Netscape Navigator 2.0.
- Objectives:
- Upon completing this section, you should be able to:
- Create a Frame based page.
- Work with the Frameset, Frame, and Noframes elements.
- Use the attributes of the Frames elements to control the display.
- Set Targets appropriately.

Frames

- A framed page is actually made up of multiple HTML pages. There is one HTML document that describes how to break up the single browser window into multiple windowpanes. Each windowpane is filled with an HTML document.
- For Example to make a framed page with a windowpane on the left and one on the right requires three HTML pages. Doc1.html and Doc2.html are the pages that contain content. Frames.html is the page that describes the division of the single browser window into two windowpanes.

Frames



Frame Page Architecture

- A `<FRAMESET>` element is placed in the html document before the `<BODY>` element. The `<FRAMESET>` describes the amount of screen real estate given to each windowpane by dividing the screen into ROWS or COLS.
- The `<FRAMESET>` will then contain `<FRAME>` elements, one per division of the browser window.
- **Note:** Because there is no BODY container, FRAMESET pages can't have background images and background colors associated with them.

Frame Page Architecture

- <HTML>
- <HEAD>
- <TITLE> Framed Page </TITLE>
- <FRAMESET COLS="23%,77%">
- <FRAME SRC="Doc1.html">
- <FRAME SRC="Doc2.html">
- </FRAMESET >
- </HEAD>
- </HTML>

Graphical view

FRAMESET COLS="23%, 77%"

FRAME

**NAME= left_pane
SRC=Doc1.html**

FRAME

**NAME=right_pane
SRC= Doc2.html**

<FRAMESET> Container

- <FRAMESET> : The FRAMESET element creates divisions in the browser window in a single direction. This allows you to define divisions as either rows or columns.
- ROWS : Determines the size and number of rectangular rows within a <FRAMESET>. They are set from top of the display area to the bottom.
- Possible values are:
 - Absolute pixel units, I.e. “360,120”.
 - A percentage of screen height, e.g. “75%,25%”.
 - Proportional values using the asterisk (*). This is often combined with a value in pixels , e.g. “360,*”.
- <Frameset cols=“200,20%,*,2*”>

Creating a Frames Page

- **COLS**: Determines the size and number of rectangular columns within a **<FRAMESET>**. They are set from left to right of the display area.
- Possible values are:
 - Absolute pixel units, I.e. “480,160”.
 - A percentage of screen width, e.g. “75%,25%”.
 - Proportional values using the asterisk (*). This is often combined with a value in pixels , e.g. “480,*”.

Creating a Frames Page

- **FRAMEBORDER** : Possible values 0, 1, YES, NO. A setting of zero will create a borderless frame.
- **FRAMESPACING**: This attribute is specified in pixels. If you go to borderless frames you will need to set this value to zero as well, or you will have a gap between your frames where the border used to be.
- **BORDER** (thickness of the Frame): This attribute specified in pixels. A setting of zero will create a borderless frame. Default value is 5.
- **BORDERCOLOR**: This attribute is allows you choose a color for your border. This attribute is rarely used.

<FRAME>

- <FRAME>: This element defines a single frame within a frameset. There will be a FRAME element for each division created by the FRAMESET element. This tag has the following attributes:
- SRC: Required, as it provides the URL for the page that will be displayed in the frame.
- NAME: Required for frames that will allow targeting by other HTML documents. Works in conjunction with the target attribute of the <A>, <AREA>, <BASE>, and <FORM> tags.

<FRAME>

- **MARGINWIDTH**: Optional attribute stated in pixels. Determines horizontal space between the <FRAME> contents and the frame's borders.
- **MARGINHEIGHT**: Optional attribute stated in pixels. Determines vertical space between the <FRAME> contents and the frame's borders.
- **SCROLLING**: Displays a scroll bar(s) in the frame. Possible values are:
 - **Yes** – always display scroll bar(s).
 - **No** – never display scroll bar(s).
 - **Auto** – browser will decide based on frame contents.
 - By default: scrolling is auto.

<FRAME>

- **NORESIZE**: Optional — prevents viewers from resizing the frame. By default the user can stretch or shrink the frame's display by selecting the frame's border and moving it up, down, left, or right.

<NOFRAMES>

- <NOFRAMES>: Frame – capable browsers ignore all HTML within this tag including the contents of the BODY element. This element does not have any attributes.
- <HTML>
- <HEAD>
- <TITLE> Framed Page </TITLE>
- </HEAD>

<NOFRAMES>

- <FRAMESET COLS="23%,77%">
- <FRAME SRC="" NAME="left_pane">
- <FRAME SRC="" NAME="right_pane">
- <NOFRAMES>
- <P> This is a Framed Page. Upgrade your browser to support frames.</P>
- </NOFRAMES></FRAMESET>

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.
- Define CGI (Common Gateway Interface).
- Describe the purpose of a CGI Application.
- 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 BGCOLOR="FFFFFF">
- <FORM ACTION = <http://www.xnu.com/formtest.asp>>
- <P> First Name: <INPUT TYPE="TEXT" NAME="fname" MAXLENGTH="50"> </P>
- <P> <INPUT TYPE="SUBMIT" NAME="submit1" 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.
- **TARGET**: is the target frame where the response page will show up.

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>`.

Name:

Sami Ali

Student No.

123456789

Address:

Al al-Bayt University
CIS Department
Faculty of IT



City:

Amman



Amman

Irbid

Karak

is foreign?



Male:



Female:



Submit

Reset

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

MAXLENGTH= 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.
- **MAXLENGTH** : 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.

Example on Text Box

- <TITLE>Form_Text_Type</TITLE>
</HEAD> <BODY>
- <h1> Please enter the following
bioData</h1>
- <FORM name="fome1" Method= " get " Action= "
URL " >
- First Name: <INPUT TYPE="TEXT"
NAME="FName"
- SIZE="15" MAXLENGTH="25">

- Last Name: <INPUT TYPE="TEXT"
NAME="Lname"

Example on Text Box

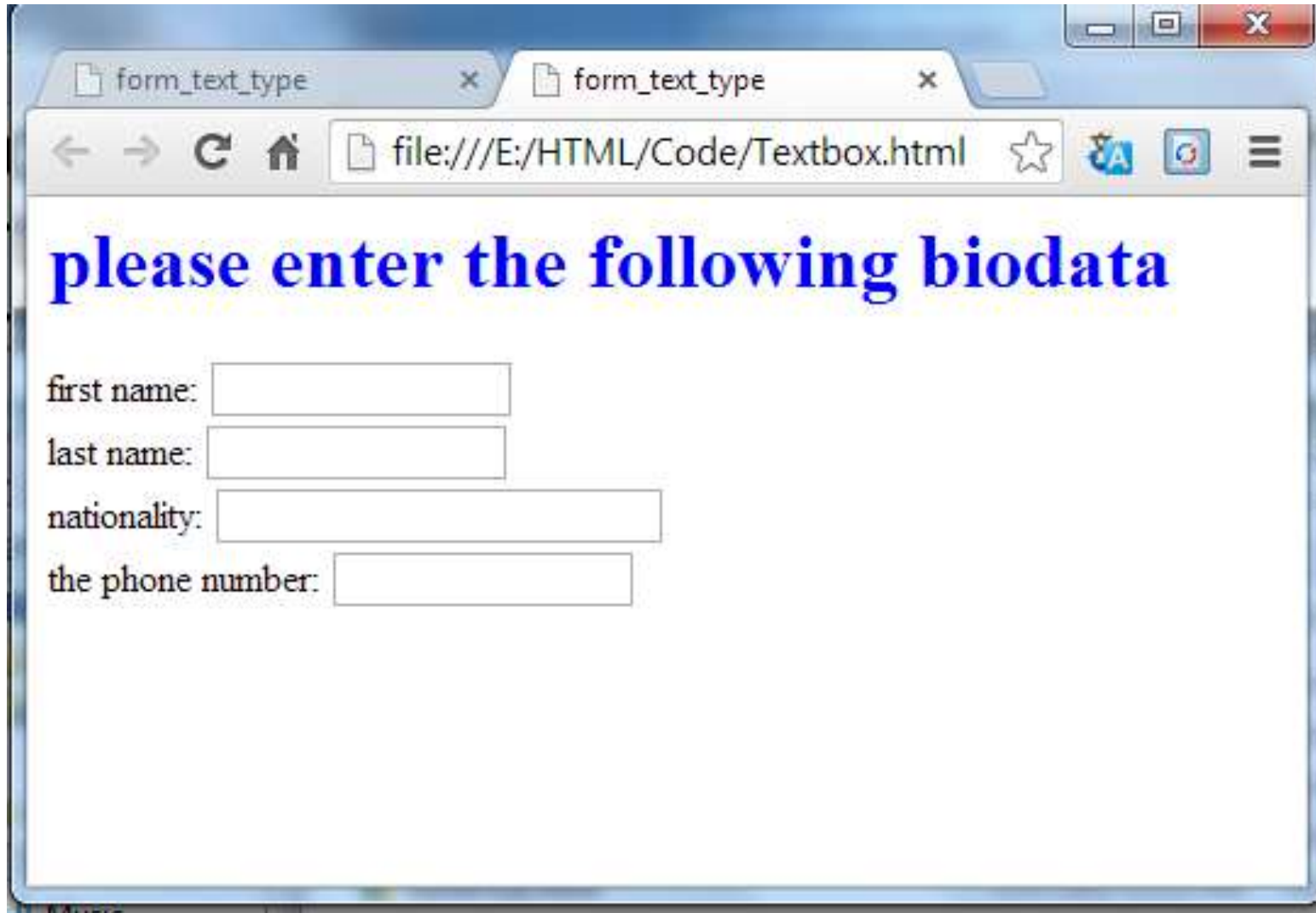
- SIZE="15" MAXLENGTH="25">

- Nationality: <INPUT TYPE="TEXT"
NAME="Country"
- SIZE="25" MAXLENGTH="25">

- The Phone Number: <INPUT TYPE="TEXT"
NAME="Phone"
- SIZE="15" MAXLENGTH="12">

- </FORM> </BODY> </HTML>

Output



The screenshot shows a web browser window with two tabs, both labeled 'form_text_type'. The address bar displays the file path 'file:///E:/HTML/Code/Textbox.html'. The main content area features a blue heading 'please enter the following biodata' followed by four text input fields with labels: 'first name:', 'last name:', 'nationality:', and 'the phone number:'.

form_text_type x form_text_type x

file:///E:/HTML/Code/Textbox.html

please enter the following biodata


first name:

last name:

nationality:

the phone number:

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.

Password

- **MAXLENGTH**: 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.

Example on Password Box

- <HTML><HEAD>
- <TITLE>Form_Password_Type</TITLE></HEAD>
- <BODY>
- <h1> To Access, Please
- enter:</h1>
- <FORM name="fome2" Action="url" method="get">
- User Name: <INPUT TYPE="TEXT" Name="FName"
- SIZE="15" MAXLENGTH="25">

- Password: <INPUT TYPE="PASSWORD"
- NAME="PWord" value="" SIZE="15"
- MAXLENGTH="25">

- </FORM></BODY> </HTML>

Output



A screenshot of a web browser window. The address bar shows the file path `file:///E:/HTML/Code/PassWord.htm`. The page content includes a red heading "To Access, Please enter:", followed by a "User Name:" label and a text input field containing "MES College". Below this is a "Password:" label and a password input field with masked characters ".....".

To Access, Please enter:


User Name:

Password:

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.

Check Box

- `<HTML>`
`<HEAD><TITLE>CheckBoxType</TITLE>`
`</HEAD>`
`<BODY>`
`<h1> Please check one of the`
`following </h1>`
`<FORM name="form3" Action="url" method="get"`
`>`
` Select Country:
`
`India:<INPUT TYPE="CheckBox" Name="country"`
`CHECKED>
`

Check Box

- Srilanka<INPUT TYPE="CheckBox"
Name="country">

Qatar:<INPUT TYPE="CheckBox"
Name="country">

Select Language:

Hindi:<INPUT TYPE="CheckBox" Name="lang"
CHECKED>

English:<INPUT TYPE="CheckBox" Name="lang“ >
- Arabic:<INPUT TYPE="CheckBox" Name="lang"

- </FORM>
- </BODY>
- </Html>

Output



form_te x form_te x Form_P x CheckB x

file:///E:/HTML/Code/CheckBox.html

Please check one of the following

Select Country:

India: ☒

Srilanka: ☐

Qatar: ☐

Select Language:

Hindi: ☒

English: ☐

Arabic: ☐

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.

```
<HTML> <HEAD><TITLE>CheckBoxType</TITLE> </HEAD>
<BODY>
<h1> <font color=green>Please check one of the
following</font></h1>
<FORM name="fome3" Action="url" method="get">
<font color=red> Select Country: </font><BR>
jordan:<INPUT TYPE= "RADIO" Name="country"
CHECKED><BR>
Yemen<INPUT TYPE="RADIO " Name="country"><BR>
Qatar:<INPUT TYPE="RADIO" Name="country"><BR>
<BR>
<font color=blue>Select Language:</font><BR>
Arabic:<INPUT TYPE="RADIO" Name="language"
CHECKED><BR> English:<INPUT TYPE=" RADIO "
Name="language"><BR>
French:<INPUT TYPE=" RADIO " Name="language">
<BR></FORM> </BODY></HTML>
```


OUTPUT



```
<HTML><HEAD>
<TITLE>RADIOBox</TITLE> </HEAD>
<BODY>
```

Form #1:

```
<FORM>
  <INPUT TYPE="radio" NAME="choice" VALUE="one"> Yes.
  <INPUT TYPE="radio" NAME="choice" VALUE="two"> No.
</FORM>
<HR color=red size="10" >
```

Form #2:

```
<FORM>
  <INPUT TYPE="radio" NAME="choice" VALUE="three"
CHECKED> Yes.
  <INPUT TYPE="radio" NAME="choice" VALUE="four"> No.
</FORM>
</BODY></HTML>
```

Output

The screenshot shows a web browser window with multiple tabs. The active tab is titled 'RAE x' and the address bar shows the file path 'file:///E:/HTML/Code/RadioButton.ht'. The page content includes two forms, 'Form #1:' and 'Form #2:'. Each form contains two radio buttons labeled 'Yes.' and 'No.'. In 'Form #1:', the 'No.' radio button is selected. In 'Form #2:', the 'No.' radio button is also selected. A thick red horizontal bar is positioned between the two forms.

Form #1:

☐ Yes. ☒ No.

Form #2:

☐ Yes. ☒ No.

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.

Push Button

- `<DIV align=center>

<FORM>
<h1>Press Here to see a baby crying:


<INPUT TYPE="button" VALUE="PressMe">

 Click Here to see a baby
shouting:
`
- `<INPUT TYPE="button" VALUE="ClickMe" >
`
- ` Hit Here to see a baby eating:`
- `<INPUT TYPE="button" VALUE="HitME" >`
- ` </FORM></DIV>`

OUTPUT



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 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.

```
<FORM Action="URL" method="get">  
First Name: <INPUT TYPE="TEXT" Size=25  
name="firstName"><BR>  
Family Name: <INPUT TYPE="TEXT" Size=25  
name="LastName"><BR>  
<BR>  
<FONT Color=red>  
Press Here to submit the data:<BR>  
<INPUT TYPE="submit" VALUE="SubmitData " >  
</FORM>
```


OUTPUT

The image shows a web browser window with two tabs, both labeled 'BUTTON'. The address bar displays the file path 'file:///E:/HTML/Code/SUBMIT.HTML'. The page content includes two text input fields: 'First Name:' followed by an empty text box, and 'Family Name:' followed by an empty text box. Below these fields, the text 'Press Here to submit the data:' is displayed in red. Underneath this text is a button labeled 'SubmitData'.

Reset Button

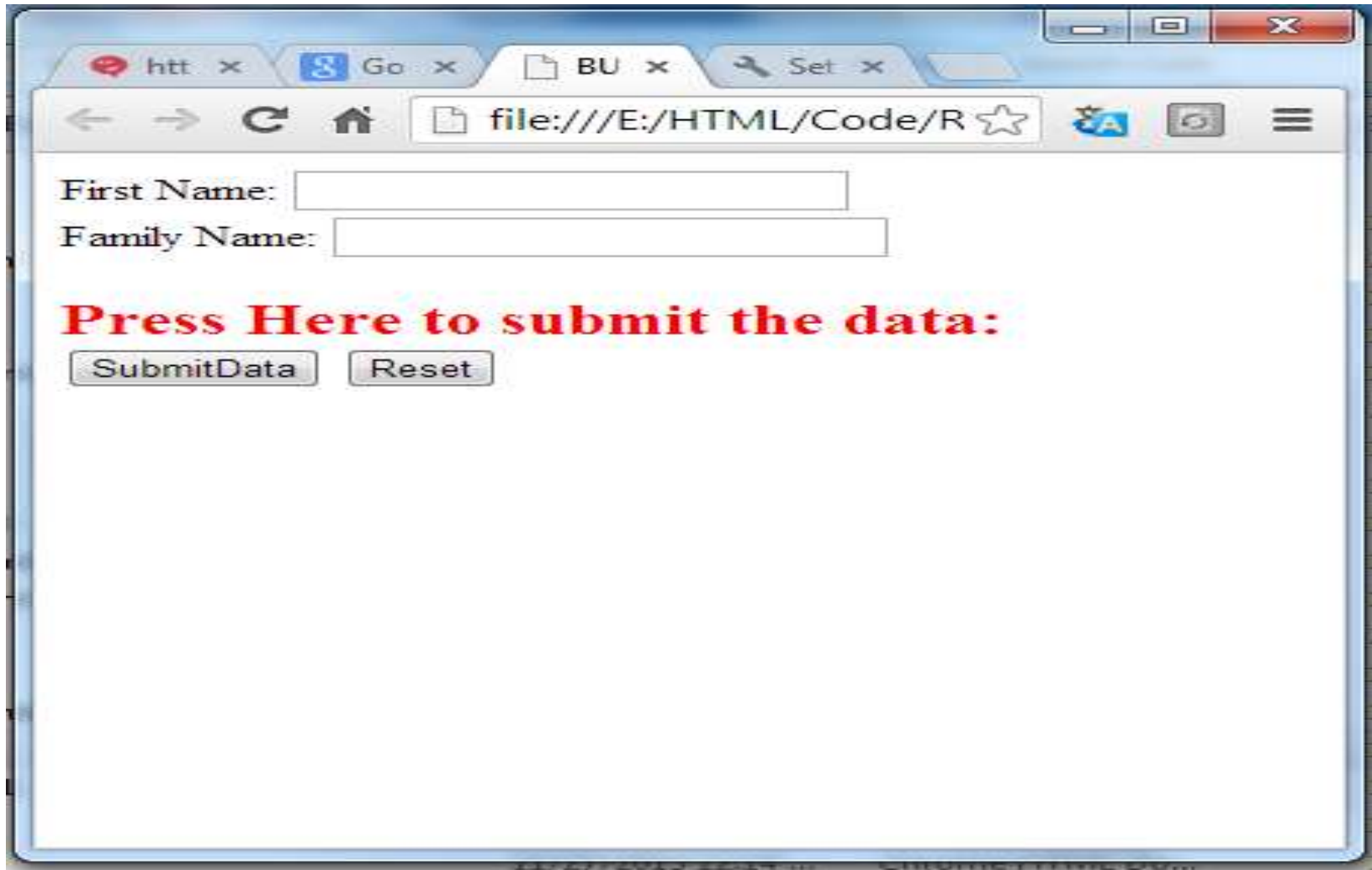
- **Reset**: It is a good idea to include one of these for each form where users are entering data. It allows the surfer to clear all the input in the form.
- `<INPUT TYPE="RESET">` 
- Browser will display
- Reset buttons have the following attributes:
- **TYPE**: reset.
- **VALUE**: determines the text label on the button, usually Reset.

Reset Button

- `<FORM Action="URL" method="get">`
- First Name: `<INPUT TYPE="TEXT" Size=25 name="firstName">
`
- Family Name: `<INPUT TYPE="TEXT" Size=25 name="LastName">

`
- ``
- `Press Here to submit the data:
`
- `<INPUT TYPE="submit" VALUE="SubmitData">`
- `<INPUT TYPE="RESET" VALUE="Reset">`
- `</FORM>`

Output



A screenshot of a web browser window. The address bar shows a file path: `file:///E:/HTML/Code/R`. The page contains a form with two text input fields labeled "First Name:" and "Family Name:". Below the inputs is a red text prompt: "Press Here to submit the data:". At the bottom of the form are two buttons: "SubmitData" and "Reset".

First Name:

Family Name:

Press Here to submit the data:

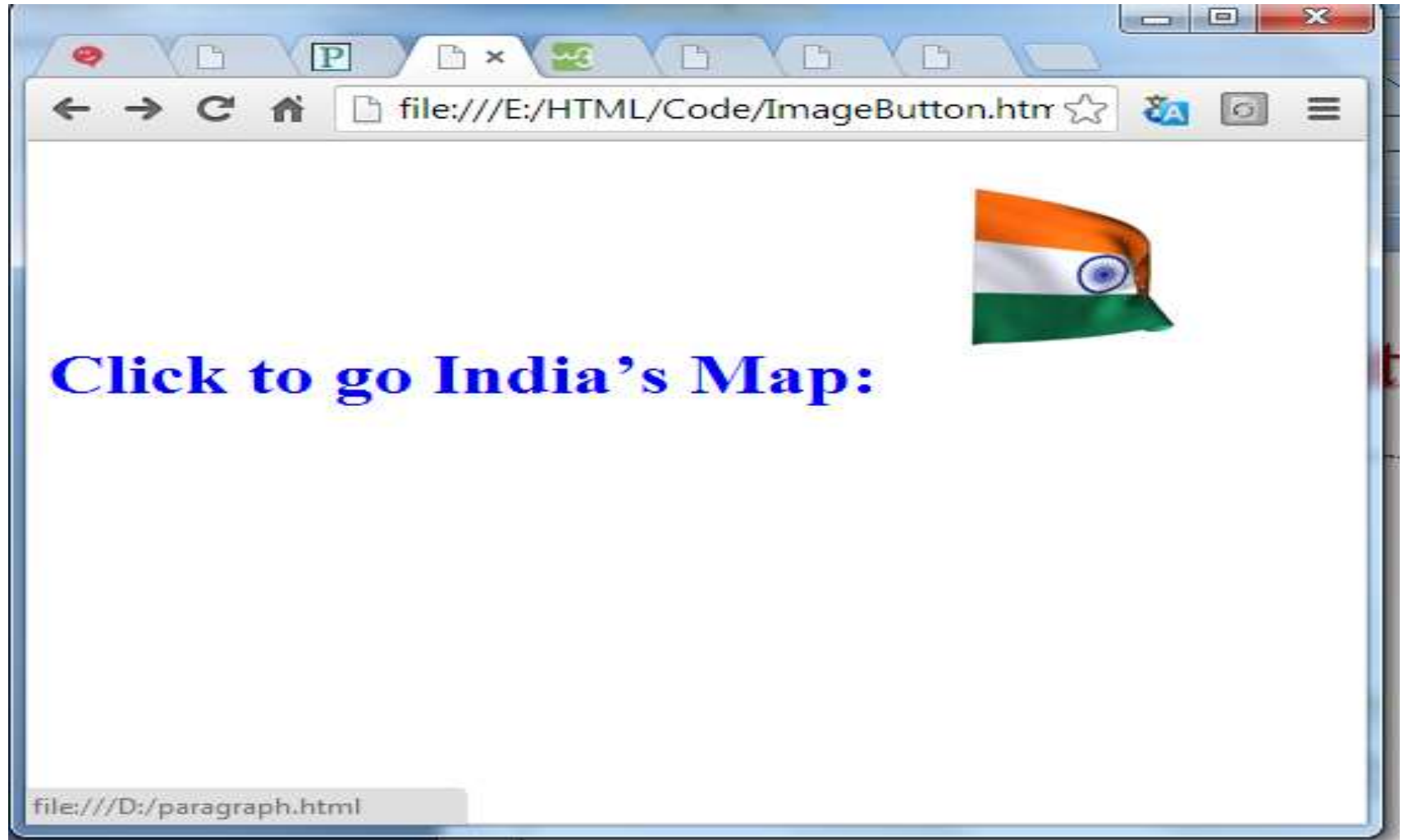
Image Submit Button

- 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.


Image Submit Button

- `<form>`
`<H1>`
Click to go Jordan's Map:
`<INPUT TYPE="IMAGE" SRC="India.gif">`
`</form>`

Image Submit Button



File

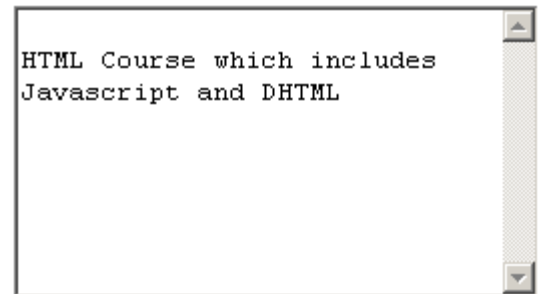
- File Upload: You can use a file upload to allow surfers to upload files to your web server.
- `<INPUT TYPE="FILE">` 
- Browser will display
- File Upload has the following attributes:
- **TYPE**: file.
- **SIZE**: is the size of the text box in characters.
- **NAME**: is the name of the variable to be sent to the
- CGI application.
- **MAXLENGTH**: is the maximum size of the input in the textbox in characters.

File

- `<BODY bgcolor=lightblue>`
- `<form>`
- `<H3>`
- Please attach your file here to for uploading to
- My `SERVER...
`
- `<INPUT TYPE="File" name="myFile" size="30">`
- `<INPUT TYPE="Submit" value="SubmitFile">`
- `</form>`
- `</BODY>`

Other Elements used in Forms

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

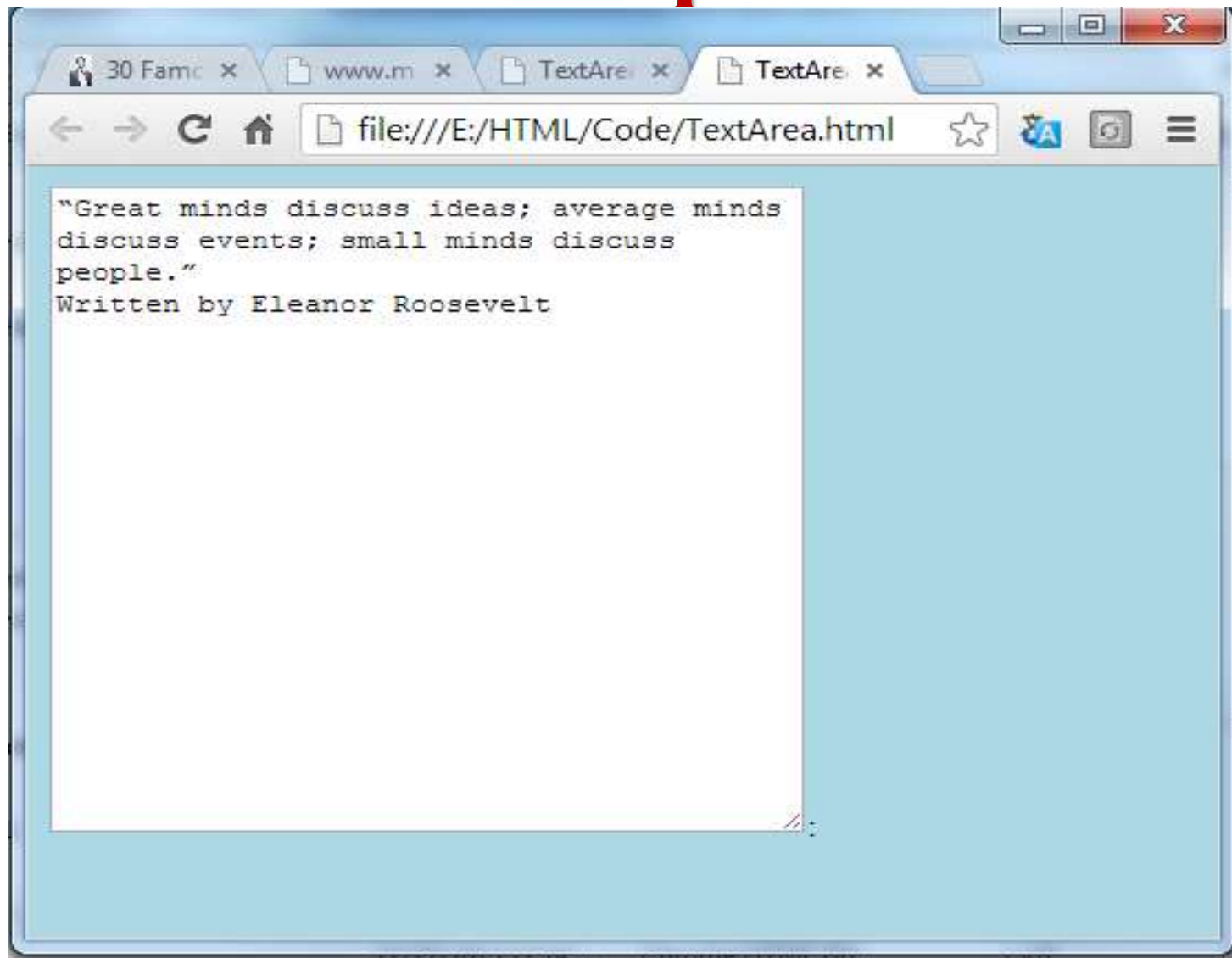
A screenshot of a web browser window showing a text area. The text area contains the text "HTML Course which includes Javascript and DHTML". The text area has a vertical scrollbar on the right side.

- 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

- `<BODY bgcolor=lightblue>`
- `<form>`
- `<TEXTAREA COLS=40 ROWS=20
Name="comments" >`
- “Great minds discuss ideas; average minds discuss events; small minds discuss people.”
- Written by Eleanor Roosevelt
- `</TEXTAREA>`:
- `</form>`
- `</BODY>`

Output



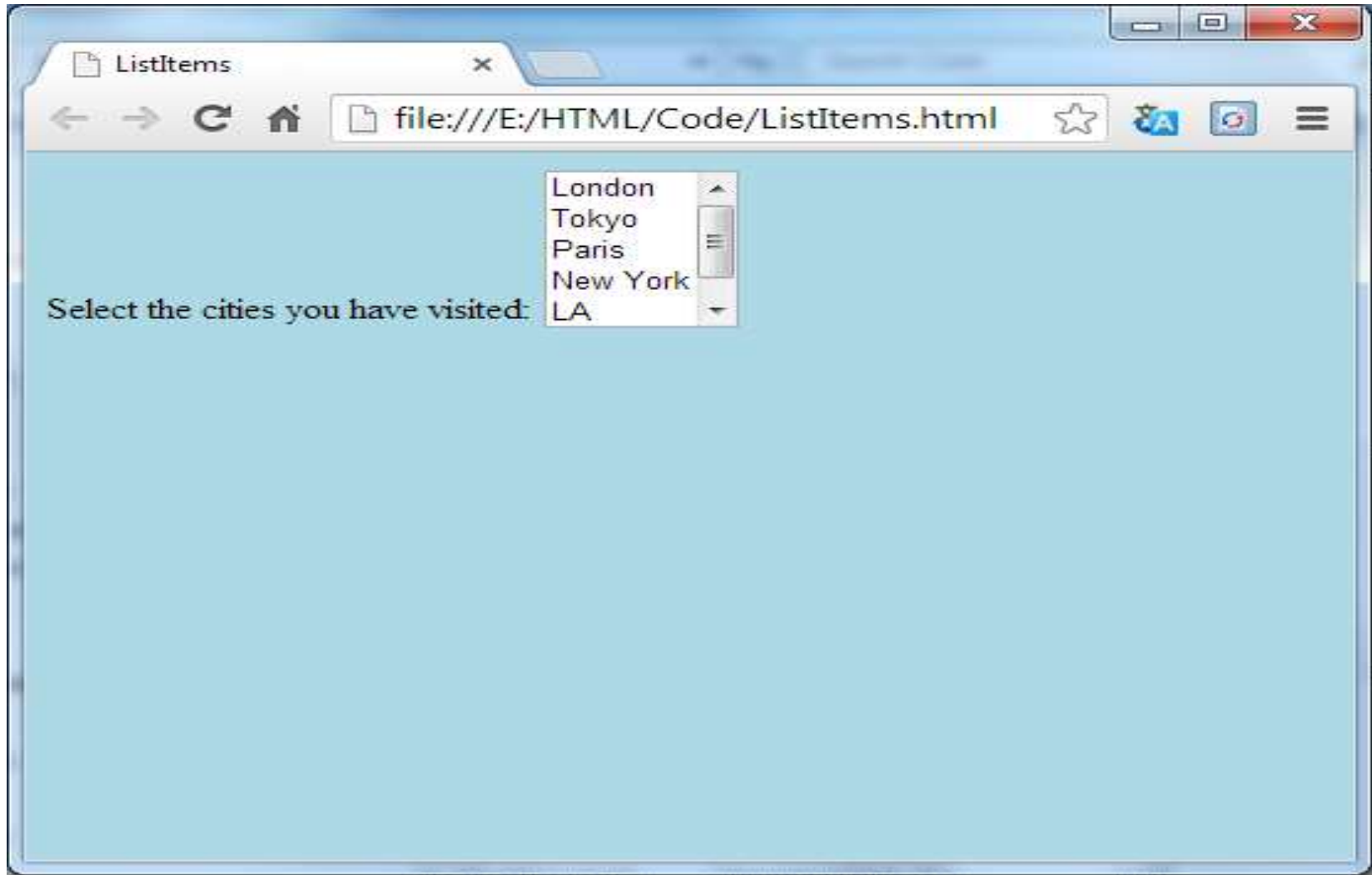
Other Elements used in Forms

- 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

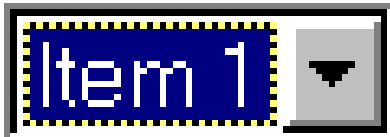
- `<BODY bgcolor=lightblue>`
- `<form>` Select the cities you have visited:
- `<SELECT name="list" size=5>`
- `<option> London</option>`
- `<option> Tokyo</option>`
- `<option> Paris</option>`
- `<option> New York</option>`
- `<option> LA</option>`
- `<option> KL</option>`
- `</SELECT>`
- `</form> </BODY>`

Other Elements used in Forms



Other Elements used in Forms

- Drop Down List:



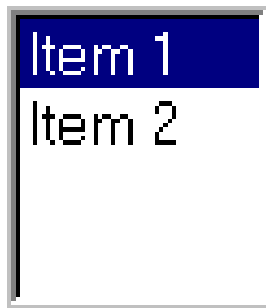
- **Name:** is the name of the variable to be sent to the CGI application.
- **Size:** 1.

Other Elements used in Forms

- `<body>`
- `<select>`
- `<option value="volvo">Volvo</option>`
- `<option value="saab">Saab</option>`
- `<option value="opel">Opel</option>`
- `<option value="audi">Audi</option>`
- `</select>`
-
- `</body>`

Other Elements used in Forms

- List Box:



- **Name**: is the name of the variable to be sent to the CGI application.
- **SIZE**: is greater than one.

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.

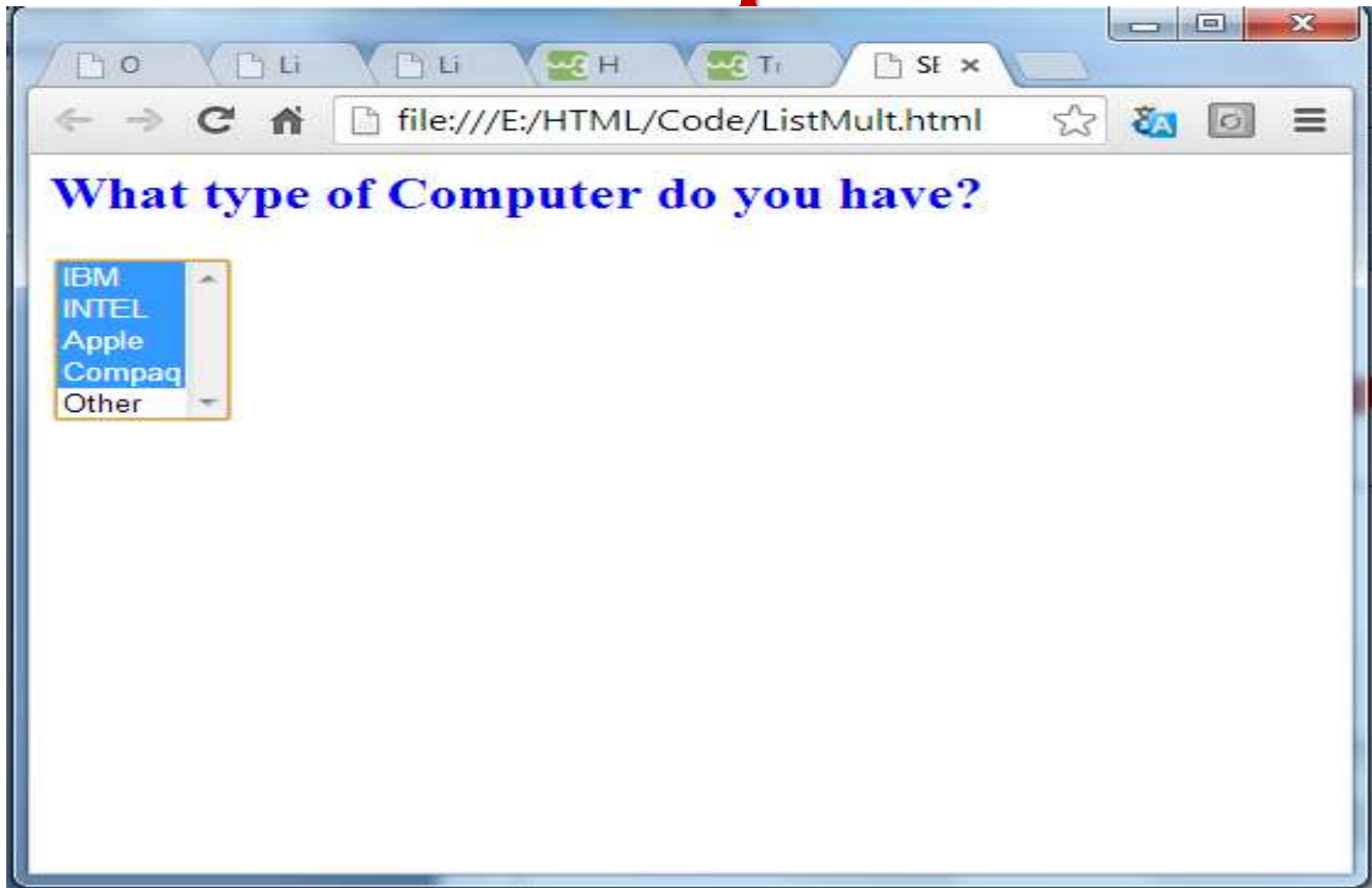
Other Elements used in Forms

- `<BODY>`
- `<FORM>`
- `<SELECT NAME="ComputerType" size=4>`
- `<OPTION value="IBM" SELECTED>`
`IBM</OPTION>`
- `<OPTION value="INTEL"> INTEL</OPTION>`
- `<OPTION value=" Apple"> Apple</OPTION>`
- `<OPTION value="Compaq">`
`Compaq</OPTION>`
- `</SELECT>`
- `</FORM></BODY></HTML>`

Other Elements used in Forms

- `<FORM>`
- `<SELECT NAME="ComputerType" size=5 multiple>`
- `<OPTION value="IBM" > IBM</OPTION>`
- `<OPTION value="INTEL"> INTEL</OPTION>`
- `<OPTION value=" Apple"> Apple</OPTION>`
- `<OPTION value="Compaq" SELECTED>`
`Compaq</OPTION>`
- `<OPTION value=" other"> Other</OPTION>`
- `</SELECT>`
- `</FORM>`

Output



There are eleven different types of form elements:

Button

Checkbox

☐

FileUpload

Hidden

Password

Radio

☐

Reset object

Select object

Submit object

Text

Textarea