**HTML Basic & Advanced**

**HTML:**

* Hypertext Markup Language is a markup language designed, documented and maintained by the World Wide Web Consortium (W3C).
* HTML 5 is the latest version of HTML available today for the World Wide Web.
* It is a new specification that builds on the previous HTML 4.01 and XHTML 1.1 specifications providing tools to produce next generation of websites.
* HTML is used to define structure and layout of a web document using HTML tags.

Ex: <p> </p>

<html> and </html> 🡪 Stands for opening and closing of the html document.

<head> and </head> 🡪 The head tag is the place where information about the document is

placed. We use elements likr title , meta, style, script and links here.

<h1> <h2> <h3>

<h4> <h5> <h6> 🡪 Six level headings.

<body> </body> 🡪 Body of the web page which is visible on the web page.

<p> </p> 🡪 Paragraph.

**Declare HTML Version in advance:** Strict OR Transitional.

<!DOCTYPE HTML PUBLIC “-//W3C//DTD HTML 4.01 Transitional//EN” “http://www.w3.org/TR/ html4/ loose.dtd”>.

<!DOCTYPE html>

**Program 1: Sample HTML file with essential tags.**

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http:// www .w3. org /TR/html4/loose.dtd">

<html>

<head>

<title> This is the title of the webpage </title>

</head>

<body>

<h1>This is heading first </h1>

<h2>This is heading first </h2>

<h3>This is heading first </h3>

<h4>This is heading first </h4>

<h5>This is heading first </h5>

<h6>This is heading first </h6>

<p>This is paragraph</p>

<a href="http://www.google.co.in/">This is a link to Google Web site</a>

<a href= "http://www.google.com" target = "\_blank">Google</a>

</body>

</html>

**Program 2: Demonstrating usage of Address tag, Abbreviation tag, Pre-formatted and target attribute.**

<html>

<head>

<title>Address tag, Abbreviation tag, Pre-formatted & target attribute usage </title>

</head>

<body>

<h2>Address tag, Abbreviation tag, Pre-formatted and target attribute usage </h2>

<h4>Address Tag Example:</h4>

<address>INFOSYS Plot No. 44, Hosur Road, Electronics City, Bengaluru, Karnataka,560100</address>

<h4>Abbrevation Tag Example:</h4>

<p>I work for <abbr title="British Broadcasting Corporation">BBC</abbr></p>

<h4>Pre-formatted Tag Example:</h4>

<pre>

function addFunction($num1, $num2){

$sum = $num1 + $num2;

echo "Sum of the two numbers is : $sum";

}

addFunction(10, 20);

</pre>

<h4>Target attribute usage:</h4>

<p><a href="http://www.yahoo.com/" target="\_blank">Yahoo Click me to open in new tab</a></p>

</body>

</html>

**List:**

They are used to add list of items in your web pages. We can create three type of list in HTML.

* Unordered list.
* Ordered list.
* Definition lists.

**Unordered list:** Unordered list typically is a bulleted list of items.

<ul>

<lh>Fruits</lh>

<li>Apple</li>

<li>Grapes</li>

<li>Orange</li>

</ul>

**Ordered list:** An ordered list typically is a numbered list of items.

<ol>

<lh>Fruits</lh>

<li>Apple</li>

<li>Grapes</li>

<li>Orange</li>

</ol>

**Definition list:** A definition list is a list of terms with corresponding definitions.

<dl>

<dt>Byte</dt> //definition term

<dd>The Standard size of data in a computer – 8bits </dd> //definition description

<dt>Cache</dt>

<dd>Storing data in memory to access quickly</dd>

</dl>

**Using the type attribute we can change the ordering of list items from the default numbers to other ones.**

**Value for type Attribute Description Examples**

1 Arabic numerals (the default) 1, 2, 3, 4, 5

A Capital Letters A, B, C, D, E

a Small Letters a, b, c, d, e

I Large Roman numerals I, II, III, IV, V

i Small Roman numerals i, ii, iii, iv, v

Ex:

<ol type=”i” >

<li>Point number one</li>

<li>Point number two</li>

<li>Point number three</li>

</ol>

**Program 3: Program to show list elements; Ordered, Unordered and definition list.**

<html>

<head>

<title> ADDING LIST</title>

</head>

<body>

<h3>Unordered list, which is just a bulletted list</h3>

<ul>

<li>Bullet point number one </li>

<li>Bullet point number two </li>

<li>Bullet point number three </li>

</ul>

<h3>An ordered list typically is a numbered list of items</h3>

<ol>

<li>Point number one</li>

<li>Point number two</li>

<li>Point number three</li>

</ol>

<h4>Here we use type attribute to list ordered list with small letters</h4>

<ol type="a">

<li>Point number one</li>

<li>Point number two</li>

<li>Point number three</li>

</ol>

<h4>Here we use start attribute to change the Starting Number in Ordered Lists</h4>

<ol type="A" start="4">

<li> Point number one </li>

<li> Point number two </li>

<li> Point number three </li>

</ol>

<h3>A definition list is a list of terms with corresponding definitions</h3>

<dl>

<lh> All Type Lists</lh>

<dt>Unordered List </dt>

<dd> A list of bullet points </dd>

<dt>Ordered List </dt>

<dd> This will create a list of ordered list </dd>

<dt>Definition List </dt>

<dd> This will list the terms along with short description </dd>

</dl>

</body>

</html>

**NESTING LISTS:** Lists are used to group related pieces of information together. List containing another entire list is known as nesting lists.

**Program 4: Program to show nesting lists.**

<html>

<head>

<title>NESTING LIST</title>

</head>

<body>

<h4> Nested ordered list </h4>

<ol type="I">

<li> Item One </li>

<li> Item Two </li>

<li> Item Three </li>

<li> Item Four </li>

<ol type="i">

<li>Item 4.1</li>

<li>Item 4.2</li>

<li>Item 4.3</li>

</ol>

<li> Item five </li>

</ol>

</body>

</html>

**HTML 5: Program: Writing list in reverse order in HTML 5.**

<!DOCTYPE html><meta charset="utf-8">

<title>Ordered list in reverse order </title>

<h1> Ordered list in reverse order </h1>

<ol reversed="reversed">

<li>America</li>

<li>Canada </li>

<li>Denmark</li>

<li>Russia</li>

<li>India</li>

</ol>

**Usage of character entities also referred as escape characters to represent special characters:**

Some special characters have special meaning to HTML and we don’t find any key equivalent in our keyboard to enter. So to add these special characters into our document we use numeric entity for that character, and some also have named entites.

**Character Numeric Entity Named Entity**

“ &#034; &quot;

& &#038; &amp;

< &#060; &lt;

> &#062; &gt;

‘ &lsquo;

**Program 5: Program to show Text Editing Elements – ins and del.**

<html>

<head>

<title> Usage of Text Editing Element </title>

</head>

<body>

<h3>Usage of Text Editing Elements - &lt;ins&gt; and &lt;del&gt; Element </h3>

<p> The DEL element allows revision control in HTML <del>docs</del>

<ins>documents.</ins> The browsers usually crosses on the deleted

words and where as underlines for the inserted words. </p>

</body>

</html>

**<div> Element:** The HTML <div> element is a block level element that can be used as a container for grouping other HTML elements.

<div style="color:#0000FF">  
  <h3>This is a heading</h3>  
  <p>This is a paragraph.</p>  
</div>

**<span> Element:** This is used to specify some styles to certain parts of the text in html document.

Ex: <p>My mother has <span style="color:blue">blue</span> eyes.</p>

**The <meta> Element:** Earlier Meta tag was used to provide more information about the web page such as page description, keywords, author of the document, last modified and other metadata. But Google and other search engines no more use Meta tag keywords to index and hence meta tag lost its values in terms of indexing by search engines.

* **To indicate the encoding to the web browser, we use following meta tag:**

<meta http-equiv = “content-type” content = “text/html; charset=utf-8” />

*The same in HTML 5 simplified as <meta charset= “utf-8”> and works fine in all browsers.*

* **Refresh document every 30 seconds:**

<meta http-equiv = “refresh” content = “30”>

* **Refresh document and redirect to some other URL:**

<meta http-equiv="refresh" content="5;URL=http://www.yahoo.com/" />

**Program 6: Exploring tags - <meta>, <div> and <span> elements.**

<html>

<head>

<meta charset= "utf-8" />

<meta http-equiv="refresh" content="6;URL=http://www.yahoo.com/" />

<title> Exploring meta div and span tag </title>

<style>

span{color:blue; }

.one{ color: green; }

</style>

</head>

<body>

<h1>Usage of Text Editing Elements - &lt;div&gt; &lt;span&gt; &lt;meta&gt; Elements </h1>

<div class = "one">

<p>There can be many sources of learning..

But Observation is the cheapest one..!! </p>

<p>Never explain yourself.

your friends don’t need it and your enemies won’t believe it. </p>

</div>

<p>My mother is having <span>blue</span> eyes. </p>

</body>

</html>

**WORKING WITH IMAGES, AUDIO AND VIDEO**

**Image element <img> :**

<img src = “construction.jpg” alt = “Page Under Construction” />

<img src = “[https://lh6.googleusercontent.com/-FLdWHpl96zs/AAAAAAAAAAI/ AAAAAAAAAAA /8heahIZo06I/s128-c-k/photo.jpg](https://lh6.googleusercontent.com/-FLdWHpl96zs/AAAAAAAAAAI/%20AAAAAAAAAAA%20/8heahIZo06I/s128-c-k/photo.jpg)” alt = “Satish Chandra” />

**Using images as logo links:**

<a href = “index.html”> <img src = “logo.jpg” alt= “microsoft.com logo” />

**Program 7: Usage of image element**

<html>

<head>

<title>Usage of graphics in web page</title>

</head>

<body>

<h3>Usage of graphics in web page</h3>

<img src="construction.jpg" alt="Page Under Construction" />

<h3>Usage of logo as a link to home page</h3>

<a href="index.html"><img src="microsoft.jpg" alt="Microsoft logo" />

</body>

</html>

**Adding audios, videos and flash to your web page.**

**Using Object and Param tag:**

We use object tag for embedding any multimedia files and where as we param tag to pass parameters to plugins that have been embedded using the <object> tag. But to use <param> tag, we need to nest it into <object> tag.

**Program 8: Adding YouTube in webpage using object, param and embed tag.**

<html>

<head>

<title> You Tube insertion in website </title>

</head>

<body>

<object width="425" height="350">

<param name="movie" value="http://www.youtube.com/v/s555OVgV0l8" />

<embed src="http://www.youtube.com/v/s555OVgV0l8"

type="application/x-shockwave-flash" width="425" height="350" />

</object>

</body>

</html>

**Program 9: Adding YouTube in webpage using iframe.**

<html>

<head>

<title> You Tube insertion in website </title>

</head>

<body>

<iframe width="560" height="315"

src="http://www.youtube.com/v/0\_NmMhBuz68" frameborder="0">

</iframe>

</body>

</html>

**Adding videos to you site:**

MIME type (MIME stands for Multipurpose Internet Main Extensions).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **File Format** | **File**  **Extension** | **Mime Type** | **Windows PC** | **MAC PC** |
| Flash Video | .swf / .flv | application/ x-shockwave – flash | Flash Player | Flash Player |
| MPEG | .mpg OR .mpeg | video/mpeg | windows Media Player | Quick Time Player |
| Windows Media Videos | .wmv | video/x-ms-wmv | Windows media player | User must download windows media components |
| Quick Time Movie | .mov | video / quicktime | User must download plug-in | Quicktime player |
| AVI | .avi | video / x- msvideo | Windows media player | User must download windows media player |
| Real Media | .rm | Application/vnd.rn-realmedia | Real Player | Real player |

**Adding audios and videos to your website using <video> and <audio> tags:**

<video src="one.mp4" width="100" height="150" controls preload="auto" autobuffer> </video>

<audio src="two.mp3" controls preload="auto" autobuffer></audio>

**Program 10: Usage of video tag to play video stored in your own website.**

<html>

<head>

<title>Adding an MP3 without specifying player</title>

</head>

<body>

<video src="one.mp4" width="100" height="150" controls preload="auto" autobuffer> </video>

</body>

</html>

**Program 11: Adding audio to a web page using <audio> element.**

<html>

<head>

<title>Adding an MP3 without specifying player</title>

</head>

<body>

<audio src="bestfriend.mp3" width="100" height="150" controls preload="auto" autobuffer> </audio>

</body>

</html>

**Program 12: Program to add MP3 audio song to a web page using object, param and embed tag.**

<html>

<head> <title>Adding an MP3 without specifying player</title> </head>

<body>

<object width="300" height="100" type="audio/mpeg">

<param name="src" value="bestfriend.mp3" />

<param name="autoplay" value="true" />

<param name="autostart" value="1" />

<embed src="bestfriend.mp3" width="300" height="100" > </embed>

</object>

</body>

</html>

**Link / Hyperlink:**

<a href = “index.html”>home page</a>

<p> Download a PDF file here <a href = “info.pdf”>Download</a></p>

<a href = [http://www.yahoo.com/>](http://www.yahoo.com/%3e) Yahoo</a>

<a href = <http://www.google.co.in/> title= “search the web with Google” > Google </a>

**Program 1: Creating a simple website.**

<html>

<head>

<title>Zoo</title>

<link href="animal.css" type="text/css" rel="stylesheet" />

</head>

<body>

<div class="whole">

<div class="links">

<a href="index.html">Home</a>

<a href="aboutus.html">About Us</a>

<a href="gallery.html">Gallery</a>

<a href="contactus.html">Contact Us</a>

</div>

<br/><br />

<div class="picture">

<img src="images/elephant.jpg" width="160" height="166" alt="Elephant" />

<img src="images/lion.jpg" width="160" height="166" alt="Elephant" />

<img src="images/tiger.jpg" width="160" height="166" alt="Elephant" />

<h3> Animals Zoo Address </h3>

<p><address> <font color="blue">

Bannerghatta Biological Park <br />

Bannerghatta, Bangaluru <br />

Karnataka. Pin 560083 </font><br />

</address>

</p>

<p> <b>Look Us in Google Map:</b></p>

<iframe src="https://www.google.com/maps/embed?pb=!1m14!1m8!1m3!1d249032.26927767866!2d77.56777!3d12.77012!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x0%3A0x4f6f2e78ffa13a5f!2sBannerghatta+National+Park!5e0!3m2!1sen!2sin!4v1425387844306"

width="400" height="300" frameborder="0" style="border:0"></iframe>

</div>

</div>

</body>

</html>

<html>

<head>

<title>Zoo</title>

<link href="animal.css" type="text/css" rel="stylesheet" />

</head>

<body>

<div class="whole">

<div class="links">

<a href="">Home</a>

<a href="aboutus.html">About Us</a>

<a href="gallery.html">Gallery</a>

<a href="contactus.html">Contact Us</a>

</div>

<br/><br />

<div class="picture">

<img src="images/elephant.jpg" width="160" height="166" alt="Elephant" />

<img src="images/lion.jpg" width="160" height="166" alt="Elephant" />

<img src="images/tiger.jpg" width="160" height="166" alt="Elephant" />

<h3> Animals Zoo </h3>

<p class="para">The Bannerghatta Biological Park, popularly known as BBP, has been an integral part of Bannerghatta

National Park and emerged out as an independent establishment during the year 2002. It is in order to

meet the growing demand for eco-recreation, eco-tourism and conservation, an area of 545.00 Ha of forest

from National park was set aside to constitute as Biological Park originally and later extended to

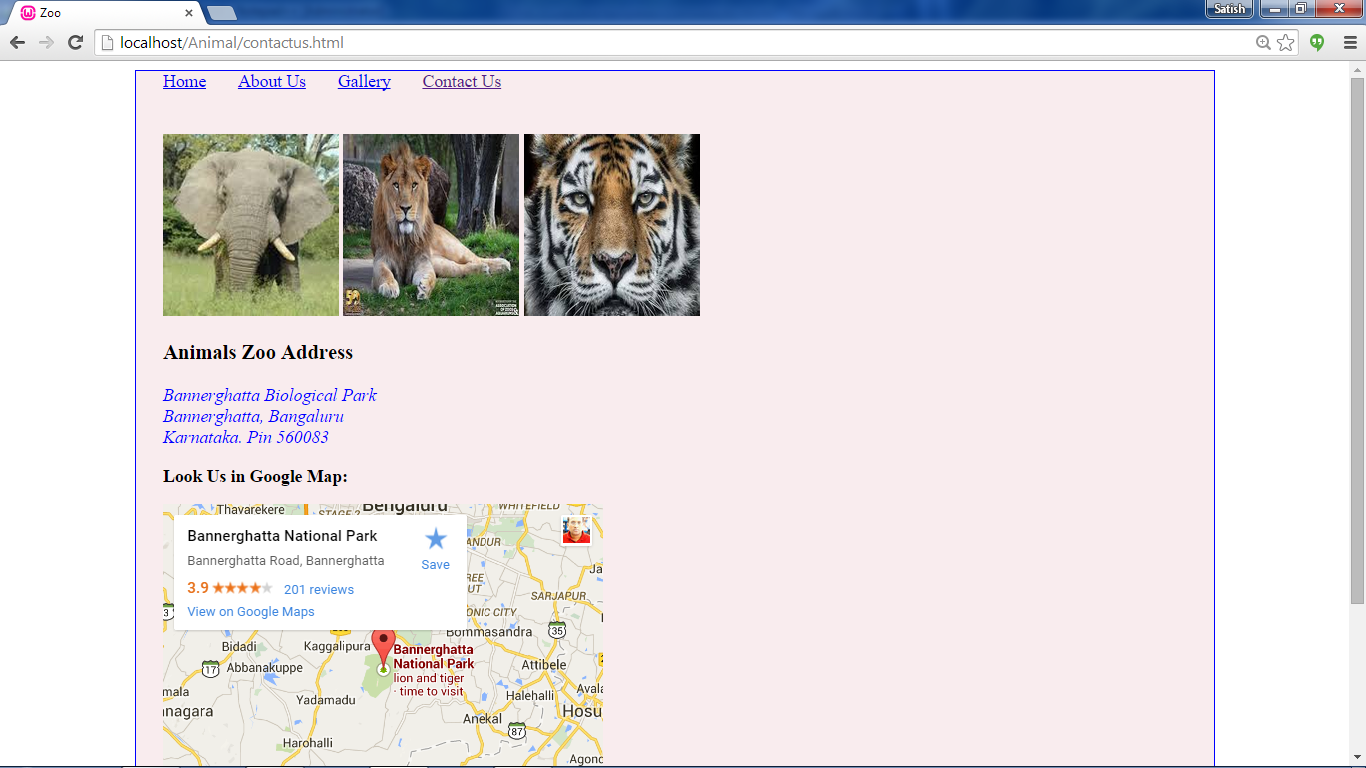
731.88 Ha </p>

</div>

</div>

</body>

</html>



.whole{ margin: 0 auto; width:980px; border:blue 1px solid; height:800px; background-color:rgb(249, 236, 238);}

.picture{ margin-left:25px;}

.links a{margin-left:25px;}

.para{text-align:justify; margin:10px; color:rgb(4, 61, 16);}

**UNDERSTANDING URL’S:**

* The Schema ….. The protocol used.
  + http:// …….. Schema
  + www ………. host ( Server over Net) OR localhost without net in our local system.

* The host address …… The Server
  + [hotmail](http://www.hotmail.com)……..address (domain name)
  + .com / .net / .org top-level domain (TLD)

* The filepath. ……. Directory File and page
  + /index.html ……………file path.

<http://www.hotmail.com/index.html>

**Absolute and Relative url’s:**

<http://www.exampleNewsite.com/Entertainment/Film/index.html>

Film/index.html

**Creating the links – Source Anchor and Destination Anchor:**

**Program 2: To demonstrate the Source Anchor and Destination Anchor in the same webpage.**

<html>

<head>

<title> A link to a specific part of a page </title>

</head>

<body>

<h4><a name="top">This page covers the following topics:</a></h4>

<ul>

<li><a href="#one">HTML</a></li>

<li><a href="#two">CSS</a></li>

<li><a href="#three">JavaScript</a></li>

<li><a href="#four">PHP</a></li>

</ul>

<h2><a id="one">Html</a></h2>

<p>Hypertext Markup Language is a marup language used to create

web pages using HTML tags. The web browser is used to execute HTML

documents and compose them into visible or audible web pages.

HTML is controlled and maintained by W3C and the latest version is

HTML5.

</p>

<p><a href="#top">click to go to top</a></p>

<h2><a id="two">Css </a></h2>

<p>Cascading style sheets is a style sheet language used for describing

the look of HTML document. The latest version of CSS is CSS 3 and is

controlled and maintained by W3C.

</p>

<p><a href="#top">Click to go to top</a></p>

<h2><a id="three">Javascript</a></h2>

<p>JavaScript is a client side scripting language which allows users to

interact, alter document content that is displayed, control the browser etc. It is also used as server side programming, game development and the creation of desktop and mobile applications. Some of the popular JavaScript frameworks are Angular, Backbone, Ember which are all open source and built on top of JQuery JavaScript Framework.

</p>

<p><a href="#top">Click to go to top</a></p>

<h2><a id="four">php</a></h2>

<p>Hypertext Preprocessor is a server side scripting language designed

for web development. It can do all of sorts of things such as evaluate data submitted through form from a browser,

build custom web content to serve the browser, talk to a database

etc.

PHP code is interpreted and executed by PHP interpreter which we call as parsing and the output of parsing is simple text file with HTML code. Some of the popular frameworks

which are built on PHP are; Zend Framework, Symfony, Cake PHP, YII etc. </p>

<p><a href="#top">Click to go to top</a></p>

</body>

</html>

AREA in a clickable map: Used to define an area “hotzone” known as clickable map.

<area shape = “rect” coords= “x1y1x2y2” href= “URL” alt= “text description of the image” />

|  |  |  |  |
| --- | --- | --- | --- |
| **SHAPE value** | **Form of area** | **Syntax of COORDS** | **Meaning of COORDS** |
| SHAPE=RECT | Rectangle | COORDS=“x1, y1, x2, y2 ” | x and y coordinates of the upper left and lower right corner |
| SHAPE=CIRCLE | Circle | COORDS= “x0,y0,r” | x and y coordinates of the center and length of the radius |

Map tag: The map tag is used to define a client side image map which is nothing but the image with clickable areas. The name attribute of the map element is associated with the <img>’s usemap attribute and creates a relationship between the image and the map.

Program 3: To demonstrate usage of image map with clickable area by using <area> tag.

<!DOCTYPE html>

<html>

<head>

<title>usage of image map with clickable area </title>

</head>

<body>

<img src="indiamap.jpg" width="313" height="337" alt="indian map" usemap="#indiamap">

<map name="indiamap">

<area shape="rect" coords="70,260,100,275" href="karnatakamap.jpg" target="\_blank" alt="Karnatka Map">

<area shape="circle" coords="100,100, 20" href="delhimap.jpg" target="\_blank" alt="Delhi Map" >

</map>

</body>

</html>

**Inline Frames or Floating Frames with <iframe>:**

**Program 4: Program for INLINE FRAME with iframe tag**

<html>

<head>

<title>INLINE FRAME TAG</title>

</head>

<body>

<h1> Usage of inline frame with ifram tag </h1>

<h2><font color="#660303">Information technology in India</font></h2>

<iframe src="frame1.html" align="right" style="margin-left:10px;"></iframe>

<p>Information technology in India is an industry consisting of two major components:

IT Services and business process outsourcing (BPO). The sector has increased its contribution to

India's GDP from 1.2% in 1998 to 7.5% in 2012. According to NASSCOM, the sector aggregated revenues

of US$100 billion in 2012, where export and domestic revenue stood at US$69.

1 billion and US$31.7 billion respectively, growing by over 9%.</p>

<hr />

</body>

</html>

<html>

<head>

<title>On Target Games - News Flash!</title>

</head>

<body >

<h2><font color="#060366">NASSCOM </font></h2>

<p>The National Association of Software and Services Companies (NASSCOM) is a trade

association of Indian Information Technology (IT) and Business Process Outsourcing (BPO) industry.

Established in 1988, NASSCOM is a non-profit organisation.</p>

</body>

</html>

**Program 4: This demonstrate inline frame.**

<html>

<head>

<title>An inline frame</title>

</head>

<body>

<h1>iframe</h1>

<p>Here you can see us in google map.<br />

<iframe src="https://www.google.com/maps/embed?pb=!1m14!1m8!1m3!1d3889.9251639707904!2d77.665256!3d12.84811!3m2!1i1024!2i768!4f13.1!3m3!1m2!1s0x0%3A0x11406271cbac49c8!2sInfosys!5e0!3m2!1sen!2sin!4v1425552910210"

width="600" height="450" frameborder="0" style="border:0"></iframe>

</p>

</body>

</html>

**TABLES**

**Introduction to tables:**

<table> element:

<tr> element:

<td> element:

<th> element:

**Program 1: Creating a basic table with heading.**

<html>

<head>

<title>CREATING A BASIC TABLE</title>

</head>

<body>

<table border="1" bordercolor="red">

<caption>Countries with Capital and Population</caption>

<tr>

<th>Country</th><th>Australia</th><th>Canada</th><th>China</th><th>France</th>

</tr>

<tr>

<th>Capital</th><td>Canberra</td><td>Ottawa</td><td>Beijing</td><td>Paris</td>

</tr>

<tr> <th>Population</th><td>23,539,900</td><td>35,427,524</td><td>1,365,270,000</td> <td>65,906,000</td>

</tr>

</table>

</body>

</html>

**Grouping sections of a table using rowspan and colspan attributes:**

**The <colspan> and <rowspan> Attribute:**

**Program 4: Spanning columns using the colspan attributes and spanning rows using rowspan attribute.**

<html>

<head>

<title>Spanning columns</title>

</head>

<body>

<table border="3">

<caption>colspan and rowspan attributes</caption>

<tr>

<td rowspan="2" bgcolor="#778899" width="100" height="100">&nbsp;</td>

<td bgcolor="#FFFFFF" width="100" height="100">&nbsp;</td>

<td bgcolor="#FFFFFF" width="100" height="100">&nbsp;</td>

</tr>

<tr>

<td bgcolor="#FFFFFF" width="100" height="100">&nbsp;</td>

<td bgcolor="#FFFFFF"> &nbsp;</td>

</tr>

<tr>

<td colspan="3" bgcolor="#808080" height="100">&nbsp;</td>

</tr>

</table>

</body>

</html>

**Splitting up Tables Using a Head, Body and Foot:**

We use this in some occasions like where we want to distinguish between the body of the table from heading and footers.

Example: Bank Statement.

The three elements for separating the head, body and foot of a table are:

* <thead> used to create a separate table header
* <tbody> used to create the main body of the table
* <tfoot> used to create a separate table footer.

**Example: Program for Splitting up tables using a Head, Body and Foot.**

<html>

<head>

<title>Dividing a table into head, body and footer.</title>

</head>

<body>

<table border="3">

<thead>

<th>Transaction Date</th><th>Payment type</th>

<th>PAID OUT</th><th>PAID IN </th><th>BALANCE</th>

</thead>

<tfoot>

<tr>

<td></td><td></td><td>$1970.27</td>

<td>$2450.00</td><td>$8940.88</td>

</tr>

</tfoot>

<tbody>

<tr>

<td>12 Jun 09</td><td>Amazon.com</td>

<td>$49.99</td> <td></td><td>$8411.16</td>

</tr>

<tr>

<td>17 Jun 09</td><td>Murco</td>

<td>$60.00</td><td></td>

<td>$9315.88</td>

</tr>

<tr>

<td>18 Jun 09</td><td>Times India</td>

<td></td><td>$1000.00 </td>

<td> $10315.88</td>

</tr>

<tr>

<td>18 Jun 09</td><td>McLellans Bakery</td>

<td>$25.00</td><td></td>

<td>$10290.88</td>

</tr>

<tr>

<td>18 Jun 09</td><td>Apple Store</td>

<td>$1350.00</td><td></td><td>$8940.88</td>

</tr>

</tbody>

</table>

</body>

</html>

3 HTML FORMS

**Forms:** We use forms to collect information from visitors. We use form controls such as textboxes, checkboxes, select boxes etc.

**Program 1: Usage of form with its essential attributes.**

<html>

<head>

<title>Sample for form creating</title>

</head>

<body>

<form action="http://www.example.com/login.php" method="get"

enctype= "Application/x-www-form-urlencoded">

<table>

<tr><td>Username:</td>

<td><input type="text" name="Username" value="" size="20" maxlength="25" /></td>

</tr>

<tr><td>Password:</td>

<td><input type="password" name="Passwordname" value="" size="20" maxlength="25" /></td>

</tr>

<tr><td></td><td><input type="submit" /></td></tr>

</table>

</form>

</body>

</html>

**Enctype Attribute:**

**Types:**

* **Application/x-www-form-urlencoded:** Here a browser replaces some characters such as spaces, the plus sign, and some other non-alphanumeric characters by other characters which are used to represent them.
* **Multipart/form-data**: This allows data to be sent in parts with respect to form controls. Such as uploading files, photos to the server.

**FORM CONTROLS:**

1. **text inputs**:Text inputs are used to enter text.

**Types:**

* **Single line text input controls:**

These are referred as textboxes and created using <input> element with **type = “text”**

<input type="text" name="txtUsername" value="" size="20" maxlength="25"><br/>

* **Password input controls:**

These are again created using <input> element with **type = “password”**

<input type="password" name="pwdPassword" value="" size="20" maxlength="25"><br/>

* **Multiline text input controls:** These are created using <textarea> element.

**Here <text area> </textarea>** .

<textarea name="txtfeedback" rows="20" cols="50">Enter your feedback here</textarea>

**Program 1: Program to demonstrate text inputs with single line, Password input control and multiline text input control.**

<html>

<head>

<title>Sample for input type text, password and textarea</title>

</head>

<body>

<form action="http://www.example.com/login.php" method="get"

enctype= "Application/x-www-form-urlencoded">

<table>

<tr><td><b>Username:</b></td>

<td><input type="text" name="txtUsername" value=" " size="20" maxlength="25"></td>

</tr>

<tr><td><b>Password:</b></td>

<td><input type="password" name="pwdPassword" value="" size="20" maxlength="25"></td>

</tr>

<tr><td colspan="2">Please tell us what you think of the site and then click submit:</td>

</tr>

<tr><td colspan="2"><textarea name="txtFeedback" rows="8" cols="39"> Enter your feedback here.</textarea></td>

</tr>

<tr><td colspan="2"><input type="submit" value ="Log in" /></td>

</tr>

</table>

</form>

</body>

</html>

**Buttons:**

* Using an <input type = submit> / <input type = reset> / <input type = button>.
* Using an <input type = “image”> element with a type attributes whose value is an image.
* Using a <button> element.

**Program 2: To demonstrate a button with type submits, reset and button.**

<html>

<head>

<title>Creating different kinds of buttons</title>

</head>

<body>

<form action="http://example.com/feedback.php" method="post">

<input type="submit" name="india" value="Vote for India"/><br /><br />

<input type="button" name = "china" value="Vote for China"/><br /><br />

<input type="reset" value="Click to Reset"/>

<input type="image" src="facebook.jpg" alt="submit" name="facebook" />

</body>

</html>

**CHECKBOXES:** Here we use <input type = “checkbox” name = “ ” value= “ ” /> .

**Program 3: To demonstrate Checkbox and checked attribute.**

<html>

<head>

<title>Check Box</title> </head>

<body>

<form action="one.php" method="get" name="frmcv">

Which of the following skills do you possess? Select all that apply. <br />

<input type="checkbox" name="chkskills" value="html" />HTML <br/>

<input type="checkbox" name="chkskills" value="CSS" />CSS <br />

<input type="checkbox" name="chkskills" value="JavaScript" />JavaScript <br />

<input type="checkbox" name="chkAcceptTerms" checked="checked" />

I accept the terms and conditions</a>. <br />

<input type="submit" value = “submit” />

</form>

</body>

</html>

**Radio Buttons:**

Here we use <input type = radio>.

**Program 4: Program to demonstrate Radio Button**

<html>

<head>

<title>Radio Buttons</title>

</head>

<body>

<form >

Please select which class of travel you wish to fly:<br />

<input type="radio" name="radclass" value="First" />First Class <br />

<input type="radio" name="radclass" value="Business" />Second Class <br />

<input type="radio" name="radclass" value="Economy" />Economy Class <br />

<input type="submit" value = "Click Me" />

</form>

</body>

</html>

**Select Boxes:** A drop-down select box is contained by a <select> element, while each individual option within that list is contained within an <option> element.

**Program 5: Program to demonstrate select boxes.**

<html>

<head>

<title>SELECT BOX</title>

</head>

<body>

<form action= [“colors.php](http://www.magnumdot.com/colors.php)” method="get" name = " frm">

<select size="4" name="selDay" multiple =“ multiple”>

<option value="Mon">Monday</option>

<option value="Tue">Tuesday</option>

<option value="Wed">Wednesday</option>

<option value="Thu">Thursday</option>

<option value="Fri">Friday</option>

<option value="Sat">Saturday</option>

<option value="Sun">Sunday</option>

</select>

<select name="selcolor">

<option selected="selected" value="">select color</option>

<option value="red">red</option>

<option value="green">green</option>

<option value="blue">blue</option>

</select>

<input type="submit" value = "Click Me" />

</form>

</body>

</html>

**Grouping Options with the <optgroup> Element:**

**Program 6: Program to demonstrate grouping of related items.**

<html>

<head>

<title>Select boxes with the &lt;optgroup&gt; element</title>

</head>

<body>

<form >

Please select the product you are interested in:<br />

<select name="selInformation">

<optgroup label="Hardware">

<option value="Desktop">Desktop computers</option>

<option value="Laptop">Laptop computers</option>

</optgroup>

<optgroup label="Software">

<option value="OfficeSoftware">Office software</option>

<option value="Games">Games</option>

</optgroup>

<optgroup label="Peripherals">

<option value="Monitors">Monitors</option>

<option value="InputDevices">Input Devices</option>

<option value="Storage">Storage</option>

</optgroup>

</select>

<br /><br />

<input type="submit" value="Click Me" />

</form>

</body>

</html>

File Select Boxes:This form control is known as file upload box. This is created using <input type= “file” accept= “” /> element with the type attribute a value of file. Also we should use post method for this.

**Program 7: Program to demonstrate File Select Boxes**

<html>

<head>

<title>Creating a file upload control</title></head>

<body>

<form action = “imageUpload.php" method="post"

name="fromImageUpload" enctype="multipart/form-data">

<input type="file" name="fileUpload" accept="image/\*" />

<br /><br />

<input type="submit" value="Submit" />

</form>

</body>

</html>

**Exercise: Create a form control to make up contact form.**

<html>

<head>

<title>Contact Us</title>

</head>

<body>

<h1>Contact Us</h1>

<table>

<tr><td>Your email</td>

<td><input type="text" name="txtForm" id="emailForm" size="20" maxlength="250" /></td>

</tr>

<tr><td>Message</td>

<td><textarea name="textBody" id="emailBody" cols="50" rows="10"></textarea></td>

</tr>

<tr><td>How did you hear of us?</td>

<td>

<select name="selReferrer">

<option value="google">Google</option>

<option value="ad">Local newspaper</option>

<option value="friend">Friend</option>

<option value="other">Other</option>

</select>

</td>

</tr>

<tr><td>Newsletter</td>

<td><input type="checkbox" name="chkBody" id="chkBody" checked="checked" />Ensure this box is checked if you would like to receive email updates</td>

</tr>

</table>

<input type="submit" value="Send message" />

</body>

</html>

**HTML <datalist> element:** The HTML <datalist> element contains a set of <options> elements that represents the possible options for the value of other controls.

**Program 8 : Program for datalist element**.

<!DOCTYPE html>

<html>

<body>

<form action="demo\_form.php" method="get">

<input list="browsers" name="browser">

<datalist id="browsers">

<option value="Internet Explorer">

<option value="Firefox">

<option value="Chrome">

<option value="Opera">

<option value="Safari">

</datalist>

<input type="submit">

</form>

<p><strong>Note:</strong> The datalist tag is not supported in Internet Explorer 9 and earlier versions, or in Safari.</p>

</body>

</html>

**Creating Labels for Controls using the <label> Element:**

Program 9: Program for usage of label element with form control.

<html>

<head>

<title>Using the label element</title>

</head>

<body>

<form action="login.php" method="post" name="frmLogin">

<table>

<tr><td><label for="Uname">User name</label></td>

<td><input type="text" id="Uname" name="txtUserName" /></td>

</tr>

<tr><td><label for="Pwd">Password</label></td>

<td><input type="password" id="Pwd" name="pwdPassword" /></td>

</tr>

<tr><td></td><td><input type="submit" value="Click Me" /></td>

</tr>

</table>

</form>

</body>

</html>

**Structuring Forms with <fieldset> and <legend> Elements**

**Program 10: Program for usage of <fieldset> and <legend> elements.**

<html>

<head>

<title>organising elements with &lt;fieldset&gt; and &lt; legend &gt; Elements </title>

</head>

<body>

<form >

<fieldset>

<legend><em>Contact Information</em></legend>

<label>First name: <input type="text" name="txtFName" size="20" /></label><br />

<label>Last name: <input type="text" name="txtLName" size="20" /></label><br />

<label>E-mail Us: <input type="text" name="txtEmail" size="20" /></label><br />

</fieldset>

<fieldset>

<legend><em>Competition Question</em></legend>

How tall is the Eiffel Tower in Paris, France?<br />

<label><input type="radio" name="radAnswer" value="584" />584 ft</label><br />

<label><input type="radio" name="radAnswer" value="784" />784 ft</label><br />

<label><input type="radio" name="radAnswer" value="984" />984 ft</label><br />

<label><input type="radio" name="radAnswer" value="1184" />1184 ft</label><br />

</fieldset>

<fieldset>

<legend><em>Tiebreaker Question</em></legend>

<label>In 25 words or less, say why you would like to win $10,000: <br />

<textarea name="txtTiebreaker" rows="10" cols="40"></textarea>

</label>

</fieldset>

<fieldset>

<legend><em>Enter competition</em></legend>

<input type="submit" value="Enter Competition" />

</fieldset>

</form>

</body>

</html>

**Read-Only Control:**

**Program: Program for demonstrating Read Only Control.**

<html>

<body>

<form action="form\_action.php" method="get">

Name: <input type="text" name="fullname" /><br />

Email: <input type="text" name="email" /><br />

Country: <input type="text" name="country" value="Norway" readonly="readonly" /><br />

<input type="submit" value="Submit" />

</form>

</body>

</html>