HTML COMMON TAGS

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1. HTML Lists

HTML provides a simple way to show un-ordered lists (bullet lists) or ordered lists (numbered lists).

Unordered Lists

An unordered list is a list of items marked with bullets (typically small black circles). An unordered list starts with the **<ul>** tag. Each list item starts with the **<li>** tag.

This Code	Output

<ul>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 2</li>
</ul>
	● Item 1
	● Item 2
	● Item 3

Ordered Lists

An ordered list is also a list of items. The list items are marked with numbers. An ordered list starts with the **<ol>** tag. Each list item starts with the **<li>** tag.

This Code	Output

<ol>
    <li>Item 1</li>
    <li>Item 2</li>
    <li>Item 2</li>
</ol>
	1. Item 1
	2. Item 2
	3. Item 2

Definition Lists

Definition lists consist of two parts: a **term** and a **description**. To mark up a definition list, you need three HTML elements;

- Container **<dl>**
- Definition term **<dt>**
- Definition description **<dd>**.

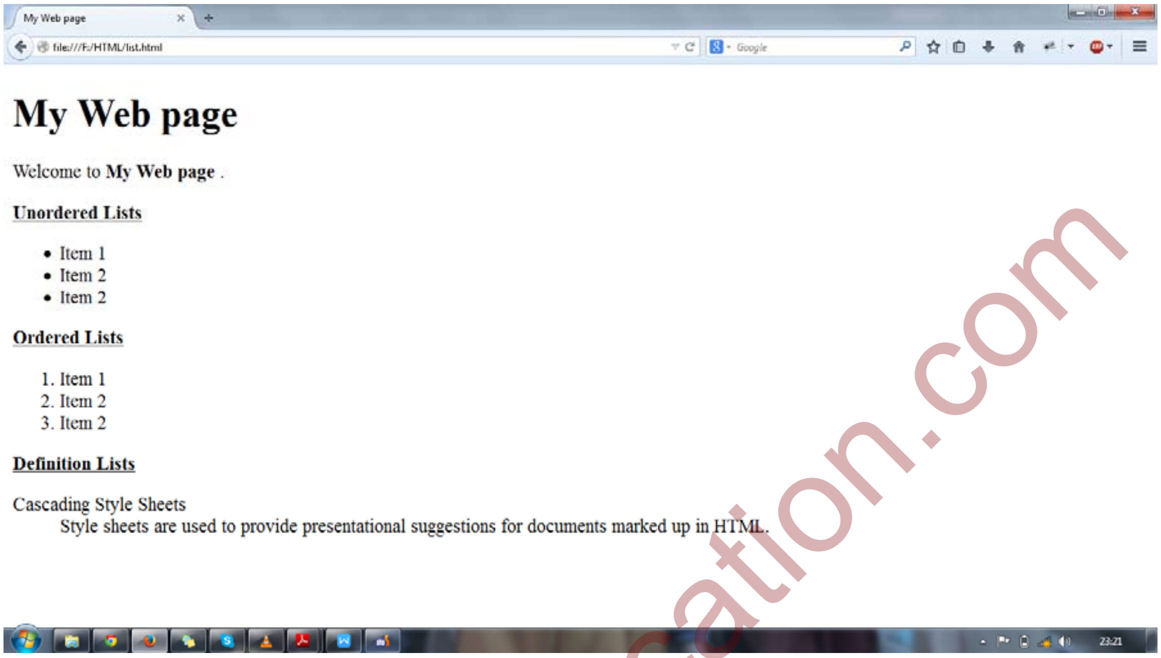
This Code	Output

`<dl>`
`<dt>Cascading Style Sheets</dt>`
`<dd>Style sheets are used to make the user interface better and beautiful.</dd>`
`</dl>`
	Cascading Style Sheets
	Style sheets are used to make the user interface better and beautiful.

Example Program for lists

```
<!DOCTYPE html>
<html>
      <head>
            <title>My Web page</title>
      </head>
      <body>
            <h1>My Web page</h1>
            <p>Welcome to <strong>My Web page</strong> . </p>
            <u><strong>Unordered Lists</strong></u>
            <ul>
                  <li>Item 1</li>
                  <li>Item 2</li>
                  <li>Item 2</li>
            </ul>
            <u><strong>Ordered Lists</strong></u>
            <ol>
                  <li>Item 1</li>
                  <li>Item 2</li>
                  <li>Item 2</li>
            </ol>
            <u><strong>Definition Lists</strong></u>
            <dl>
                  <dt>Cascading Style Sheets</dt>
                  <dd>Style sheets are used to provide presentational suggestions for
documents marked up in HTML. </dd>
            </dl>
      </body>
</html>
```

Output



My Web page

Welcome to **My Web page** .

Unordered Lists

- Item 1
- Item 2
- Item 2

Ordered Lists

1. Item 1
2. Item 2
3. Item 2

Definition Lists

Cascading Style Sheets
    Style sheets are used to provide presentational suggestions for documents marked up in HTML.

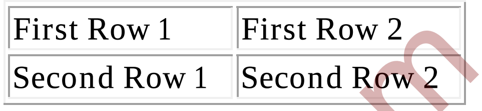
2. Tables

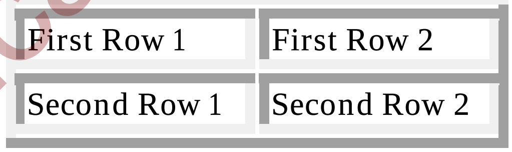
- Tables are defined with the <table> tag.
- A table is divided into rows (with the **<tr>** tag), and each row is divided into data cells (with the **<td>** tag).
- The letters td stands for table data, which is the content of a data cell.
- A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables, etc.

This Code	Output
<table> <tr> <td>First Row 1</td> <td>First Row 2</td> </tr> <tr> <td>Second Row 1</td> <td>Second Row 2</td> </tr> </table>	First Row 1 First Row 2 Second Row 1 Second Row 2

Tables and the Border Attribute

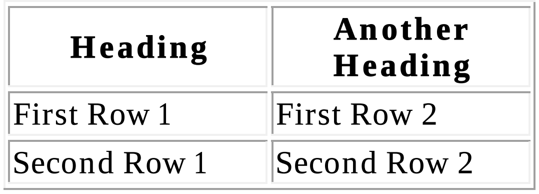
To display a table with borders, border attribute is used.

This Code	Output
<table border="1"> <tr> <td>First Row 1</td> <td>First Row 2</td> </tr> <tr> <td>Second Row 1</td> <td>Second Row 2</td> </tr> </table>	 First Row 1 First Row 2 Second Row 1 Second Row 2

This Code	Output
<table border="3"> <tr> <td>First Row 1</td> <td>First Row 2</td> </tr> <tr> <td>Second Row 1</td> <td>Second Row 2</td> </tr> </table>	 First Row 1 First Row 2 Second Row 1 Second Row 2

Headings in a Table

Headings in a table are defined with the **<th>** tag.

This Code	Output
<table border="1"> <tr> <th>Heading</th> <th>Another Heading</th> </tr> <tr> <td>First Row 1</td> <td>First Row 2</td> </tr> <tr> <td>Second Row 1</td> <td>Second Row 2</td> </tr> </table>	 **Heading** **Another Heading** First Row 1 First Row 2 Second Row 1 Second Row 2

Cell Padding and Spacing

The **<table>** tag has two attributes known as cell spacing and cell padding. Here is a table example without these properties. These properties may be used separately or together.

This Code

```
<table border="1">
        <tr>
                <th>Heading</th>
                <th>Another Heading</th>
        </tr>
        <tr>
                <td>First Row 1</td>
                <td>First Row 2</td>
        </tr>
        <tr>
                <td>Second Row 1</td>
                <td>Second Row 2</td>
        </tr>
</table>
```

Output

Heading	Another Heading
First Row 1	First Row 2
Second Row 1	Second Row 2

Cell spacing is the pixel width between the individual data cells in the table (The thickness of the lines making the table grid). The default is zero. If the border is set at 0, the cellspacing lines will be invisible

This Code

```
<table border="1" cellspacing="10">
        <tr>
                <th>Heading</th>
                <th>Another Heading</th>
        </tr>
        <tr>
                <td>First Row 1</td>
                <td>First Row 2</td>
        </tr>
        <tr>
                <td>Second Row 1</td>
                <td>Second Row 2</td>
        </tr>
</table>
```

Output

Heading	Another Heading
First Row 1	First Row 2
Second Row 1	Second Row 2

Cell padding is the pixel space between the cell contents and the cell border. The default for this property is also zero. This feature is not used often, but sometimes comes in handy when you have your borders turned on and you want the contents to be away from the border a bit for easy viewing. Cell padding is invisible, even with the border property turned on. Cell padding can be handled in a style sheet.

This Code	Output

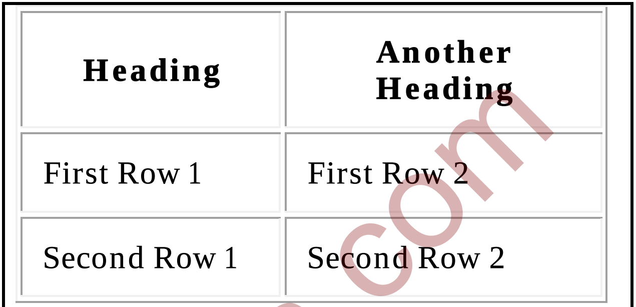
<table border="1" cellpadding ="10">
    <tr>
        <th>Heading</th>
        <th>Another Heading</th>
    </tr>
    <tr>
        <td>First Row 1</td>
        <td>First Row 2</td>
    </tr>
    <tr>
        <td>Second Row 1</td>
        <td>Second Row 2</td>
    </tr>
</table>
	
	Heading | **Another Heading**
	First Row 1 | First Row 2
	Second Row 1 | Second Row 2

Table Tags

Tag	Description
<table>	Defines a table
<th>	Defines a table header
<tr>	Defines a table row
<td>	Defines a table cell
<caption>	Defines a table caption
<colgroup>	Defines groups of table columns
<col>	Defines the attribute values for one or more columns in a table

Table Size

The width attribute can be used to define the width of your table. It can be defined as a fixed width or a relative width. A fixed table width is one where the width of the table is specified in pixels.

For example, this code, **<table width="500">**, will produce a table that is 500 pixels wide. A relative table width is specified as a percentage of the width of the visitor's viewing window. Hence this code, **<table width="70%">**, will produce a table that occupies 70 percent of the screen.

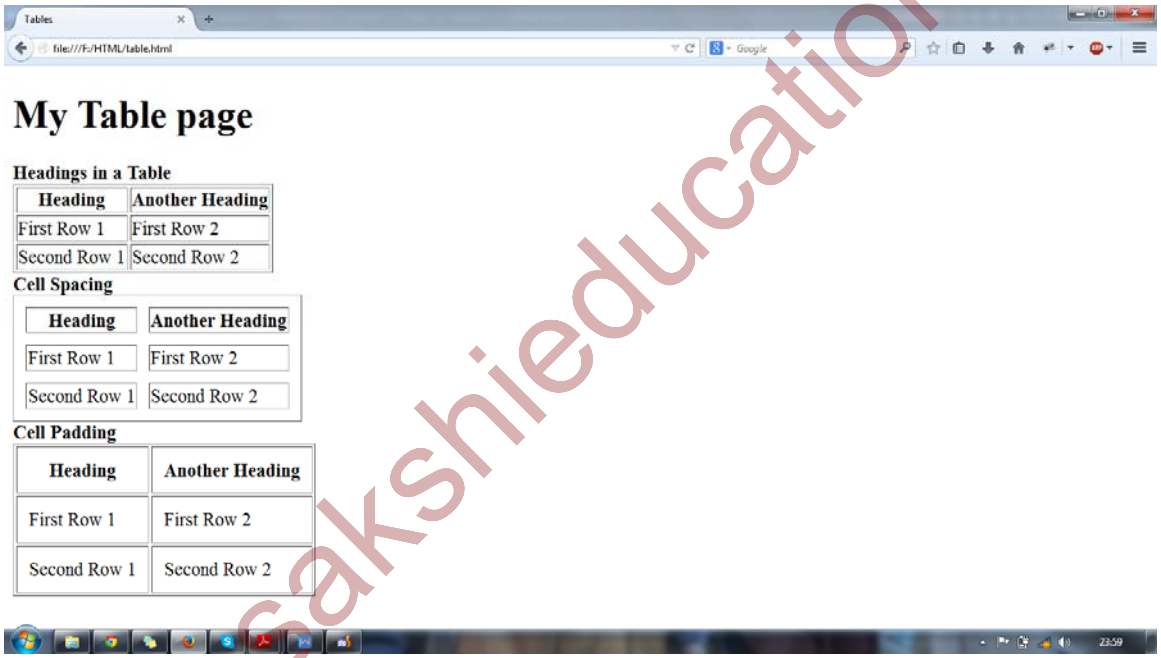
Example program

```
<!DOCTYPE html>
<html>
    <head>
        <title>Tables</title>
    </head>
    <body>
        <h1>My Table page</h1>
        <b>Headings in a Table</b>
        <table border="1">
            <tr>
                <th>Heading</th>
                <th>Another Heading</th>
            </tr>
            <tr>
                <td>First Row 1</td>
                <td>First Row 2</td>
            </tr>
            <tr>
                <td>Second Row 1</td>
                <td>Second Row 2</td>
            </tr>
        </table>

        <b>Cell Spacing</b>
        <table border="1" cellspacing="10">
            <tr>
                <th>Heading</th>
                <th>Another Heading</th>
            </tr>
            <tr>
                <td>First Row 1</td>
                <td>First Row 2</td>
            </tr>
            <tr>
                <td>Second Row 1</td>
                <td>Second Row 2</td>
            </tr>
        </table>

        <b>Cell Padding</b>
        <table border="1" cellpadding="10">
            <tr>
                <th>Heading</th>
                <th>Another Heading</th>
            </tr>
            <tr>
                <td>First Row 1</td>
                <td>First Row 2</td>
            </tr>
            <tr>
                <td>Second Row 1</td>
                <td>Second Row 2</td>
            </tr>
        </table>
    </body>
</html>
```

Output



My Table page

Headings in a Table

Heading	Another Heading
First Row 1	First Row 2
Second Row 1	Second Row 2

Cell Spacing

Heading	Another Heading
First Row 1	First Row 2
Second Row 1	Second Row 2

Cell Padding

Heading	Another Heading
First Row 1	First Row 2
Second Row 1	Second Row 2

3. HTML Images

The **<img>** tag is empty, which means that it contains only attributes and no closing tag. To display an image on a page, you need to use the '***src***' attribute. **Src** stands for "**source**". The value of the src attribute is the URL of the image you want to display on your page. The syntax of defining an image:

This Code	Output
<img src="images/cml1.jpg">	

Not only does the source attribute specify what image to use, but also the position. The above image, **images /cml1.jpg**, means that the browser will look for the image name **cml1.jpg** in a **images** folder in the same folder as the html document itself.

The Alt Attribute

The alt attribute is used to define an alternate text for an image. The value of the alt attribute is author-defined text:

```
<img src="images/cml1.jpg" alt="My Camel">
```

The alt attribute tells the reader what is missing on a page, if in the failure of the browser to load images. The browser will then display the alternate text instead of the image. It is a good practice to include the alt attribute for each image on a page, to improve the display and usefulness of your document for people who have text-only browsers or use screen readers.

Image Dimensions

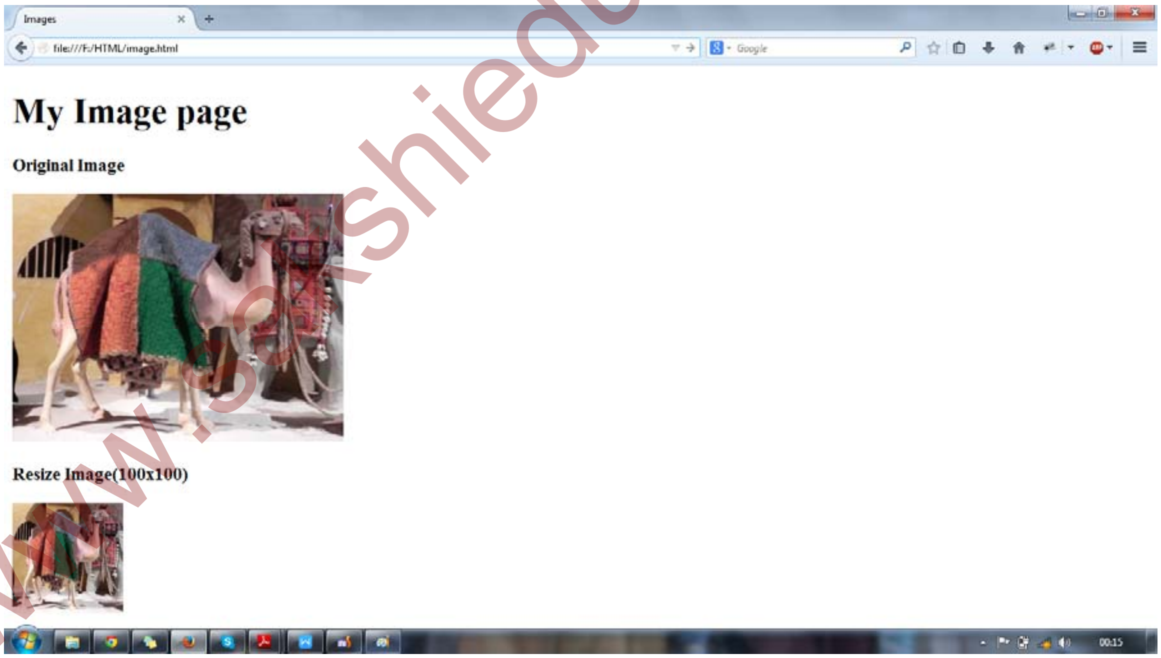
When you have an image, the browser usually figures out the resolution of the image by itself. If you specify the image dimensions in pixels, simply reserves space for the image, then loads the rest of the page. Once the entire page is loaded, it can go back and fill in the images. Without dimensions, when it runs into an image, the browser has to pause the loading of page, then load the image, then continue loading the page. The chef image would then be:

```
<img src="images/cml1.jpg" width="100" height="100" alt="My Camel 100x100">
```

Example Program

```
<!DOCTYPE html>
<html>
        <head>
                <title>Images</title>
        </head>
        <body>
                <h1>My Image page</h1>
                <p><b>Original Image</b></p>
                <img src="images/cml1.jpg" alt="My Camel 100x100">
                <p><b>Resize Image(100x100)</b></p>
                <img src="images/cml1.jpg" width="100" height="100" alt="My Camel
100x100">
        </body>
</html>
```

Output



My Image page

Original Image

Resize Image(100x100)

4. HTML Forms

HTML forms are used to pass data to a server. An HTML form can contain input elements like text fields, checkboxes, radio-buttons, submit buttons and more. A form can also contain select lists, textarea, fieldset, legend, and label elements.

The <form> tag is used to create an HTML form:

```
<form>
      Input elements.
</form>
```

The Input Element

The most important form element is the <input> element.

The <input> element is used to select user information.

An <input> element can vary in many ways, depending on the type attribute. An <input> element can be of type text field, checkbox, password, radio button, submit button, and more.

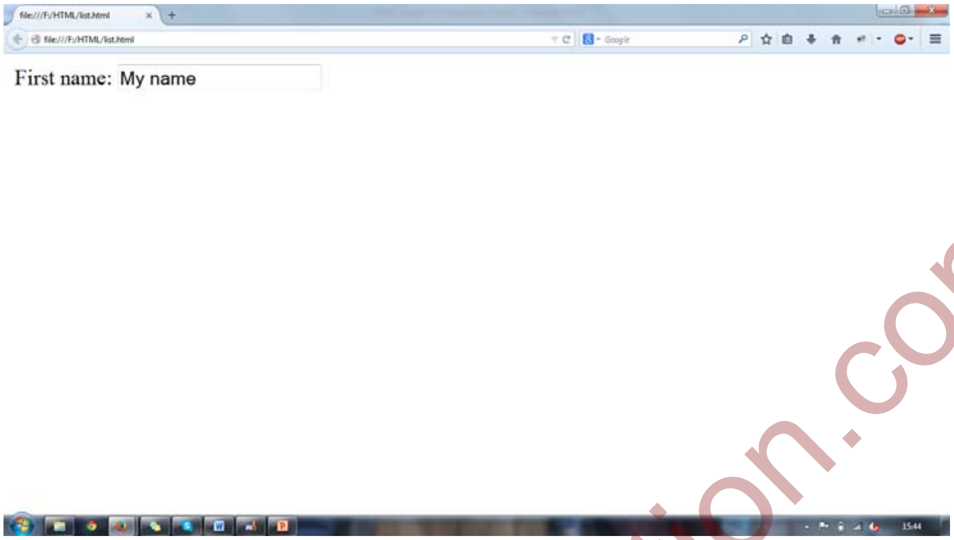
The most common input types are described below.

Text Fields

<input type="text"> defines a one-line input field that a user can enter text into:

```
<form>
      First name: <input type="text" name="firstname">
</form>
```

How the HTML code above looks in a browser:



First name: My name

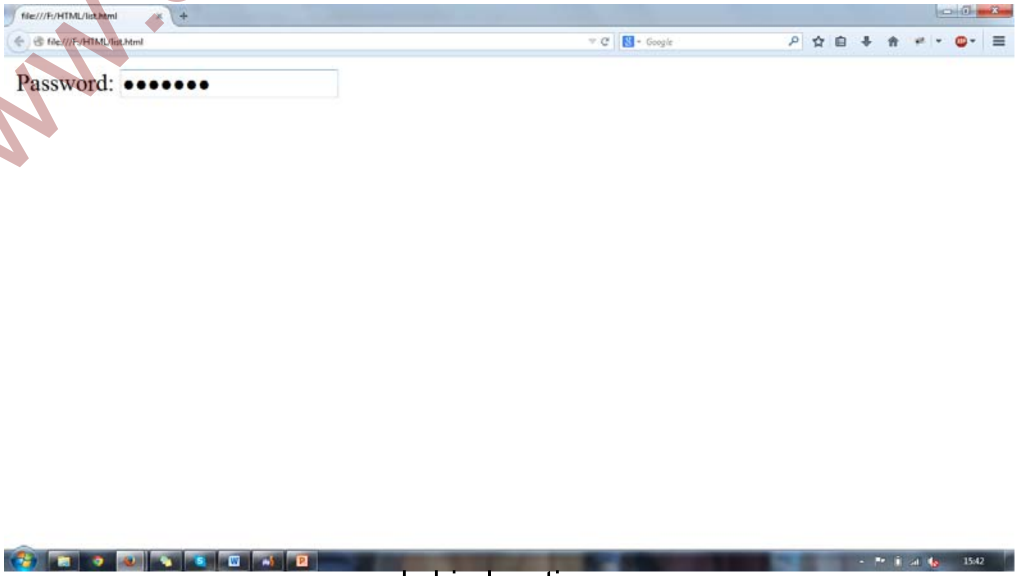
Note: The form itself is not visible. Also note that the default width of a text field is 20 characters.

Password Field

<input type="password"> defines a password field:

```
<form>
Password: <input type="password" name="password">
</form>
```

How the HTML code above looks in a browser:



Password: •••••••

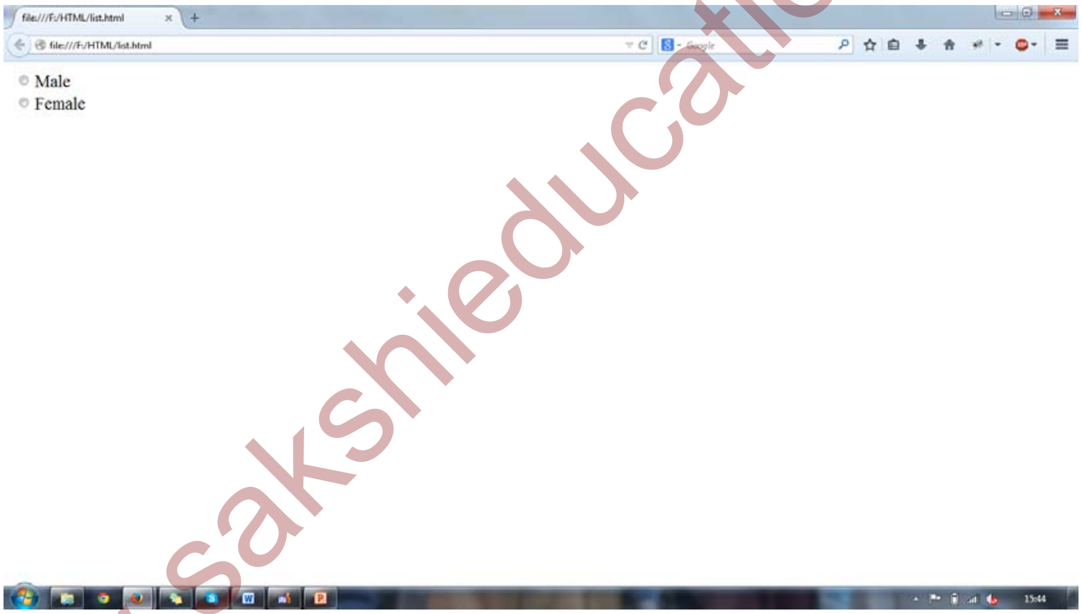
Note: The characters in a password field are masked (shown as asterisks or circles).

Radio Buttons

<input type="radio"> defines a radio button. Radio buttons let a user select ONLY ONE of a limited number of choices:

```
<form>
<input type="radio" name="sex" value="male">Male<br>
<input type="radio" name="sex" value="female">Female
</form>
```

How the HTML code above looks in a browser:



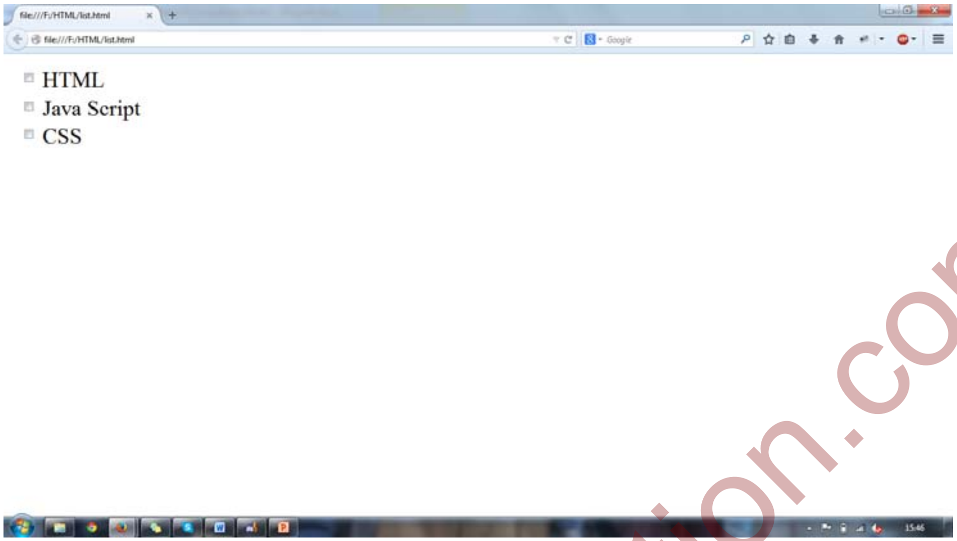
○ Male
○ Female

Checkboxes

<input type="checkbox"> defines a checkbox. Checkboxes let a user select ZERO or MORE options of a limited number of choices.

```
<form>
      <input type="checkbox" name="language"
value="Bike">HTML<br>
      <input type="checkbox" name="language" value="Bike">Java
Script<br>
      <input type="checkbox" name="language" value="Car">CSS
</form>
```

How the HTML code above looks in a browser:



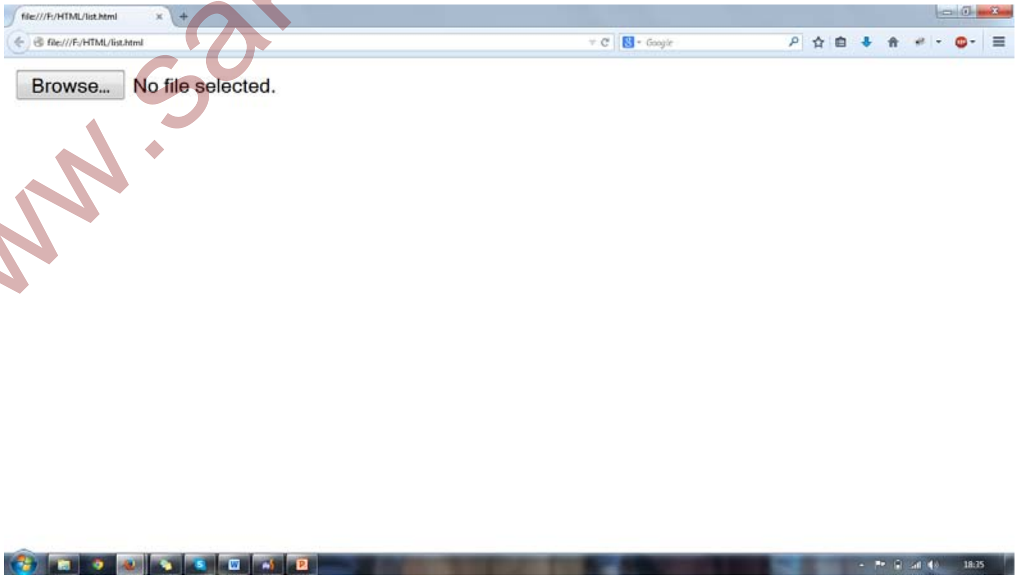
- □ HTML
- □ Java Script
- □ CSS

File upload

<input type="file"> defines a file upload. File let a user select an image or doc file and MORE files can select to send to the server.

```
<form>
      <input type="file" name="file">
</form>
```

How the HTML code above looks in a browser:



No file selected.

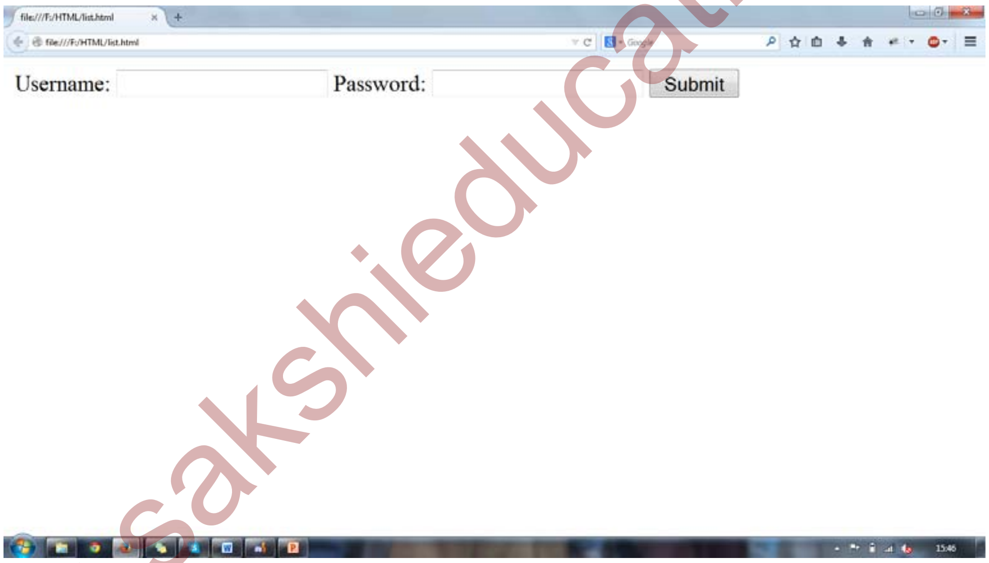
Submit Button

<input type="submit"> defines a submit button.

A submit button is used to send form data to a server. The data is sent to the page specified in the form's action attribute. The file defined in the action attribute usually does something with the received input:

```
<form name="input" action="login.php" method="get">
Username: <input type="text" name="user">
Password: <input type="password" name="password">
<input type="submit" value="Submit">
</form>
```

How the HTML code above looks in a browser:



If you type some characters in the text field above, and click the "Submit" button, the browser will send your input to a page called "login.php". The page will show you the received input.

Form attributes:

name – Form name.

target – Location of window where from responses are sent.

action – URL of webserver application that process form information.

enctype – By default this attribute has a value of application/x/www. It specifies how the data submitted in the form to be sent to the server.

Syntax: `<form enctype="value">`

application/x-www-form-urlencoded	can be set to multipart/form-data if the file upload element is used. Not all browsers support the latter encoding type.
multipart/form-data	Characters are not encoded.
text/plain	Spaces are converted to "+" symbols

method – A value of **get** or **post**, which determines how form information is sent

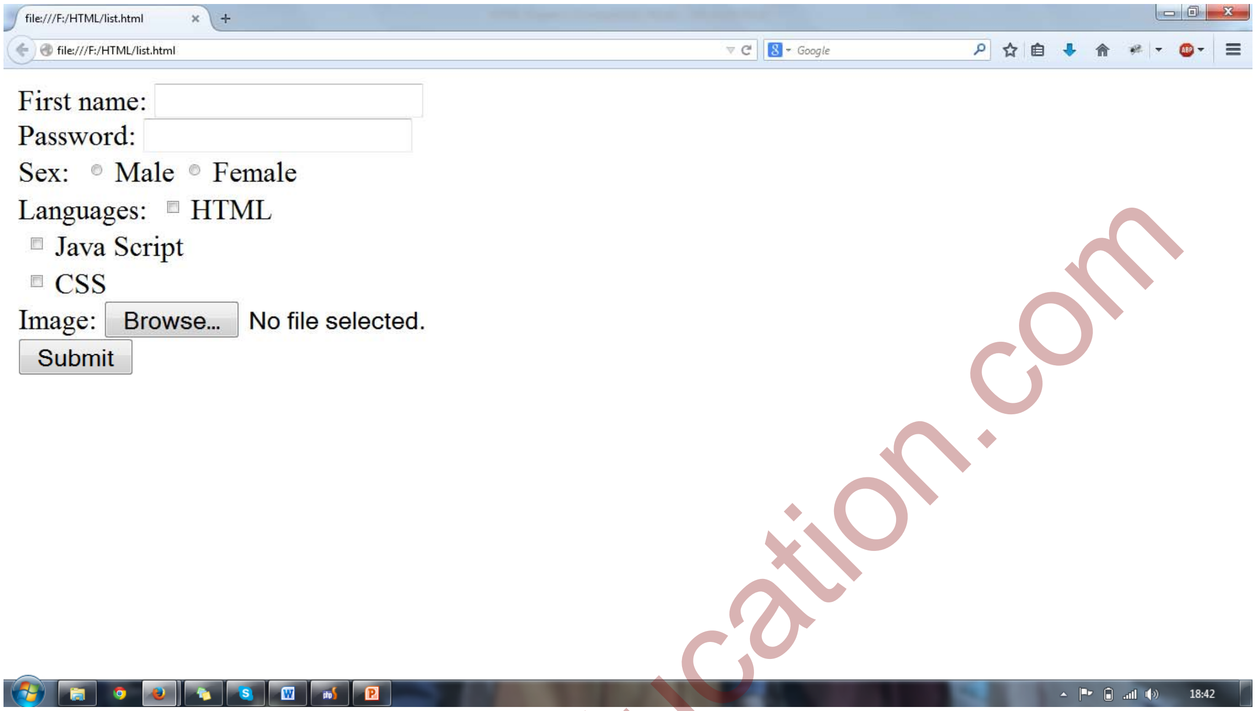
post: Post method sends the data without showing on the URL

get: Get method sends the data via URL

Example Program

```
<form action="send.php" method="post">
        First name: <input type="text" name="firstname"><br>
        Password: <input type="password" name="password"><br>
        Sex: <input type="radio" name="sex" value="male">Male<input type="radio" name="sex" value="female">Female<br>
        Languages: <input type="checkbox" name="language" value="Bike">HTML<br>
        <input type="checkbox" name="language" value="Bike">Java Script<br>
        <input type="checkbox" name="language" value="Car">CSS<br>
        Image: <input type="file" name="file"><br>
        <input type="submit" name="submit" value="Submit">
</form>
```

Output



First name:

Password:

Sex: ○ Male ○ Female

Languages: □ HTML

□ Java Script

□ CSS

Image: Browse... No file selected.

Submit

Frames

With frames, you can display more than one HTML document in the same browser window. Each HTML document is called a frame, and each frame is independent of the others.

The disadvantages of using frames are:

- The web developer must keep track of more HTML documents
- It is difficult to print the entire page

The Frameset Tag

- The <frameset> tag defines how to divide the window into various frames.
- Each frameset defines a set of rows **or** columns
- The values of the rows/columns indicate the amount of screen area each row/column will occupy

The Frame Tag

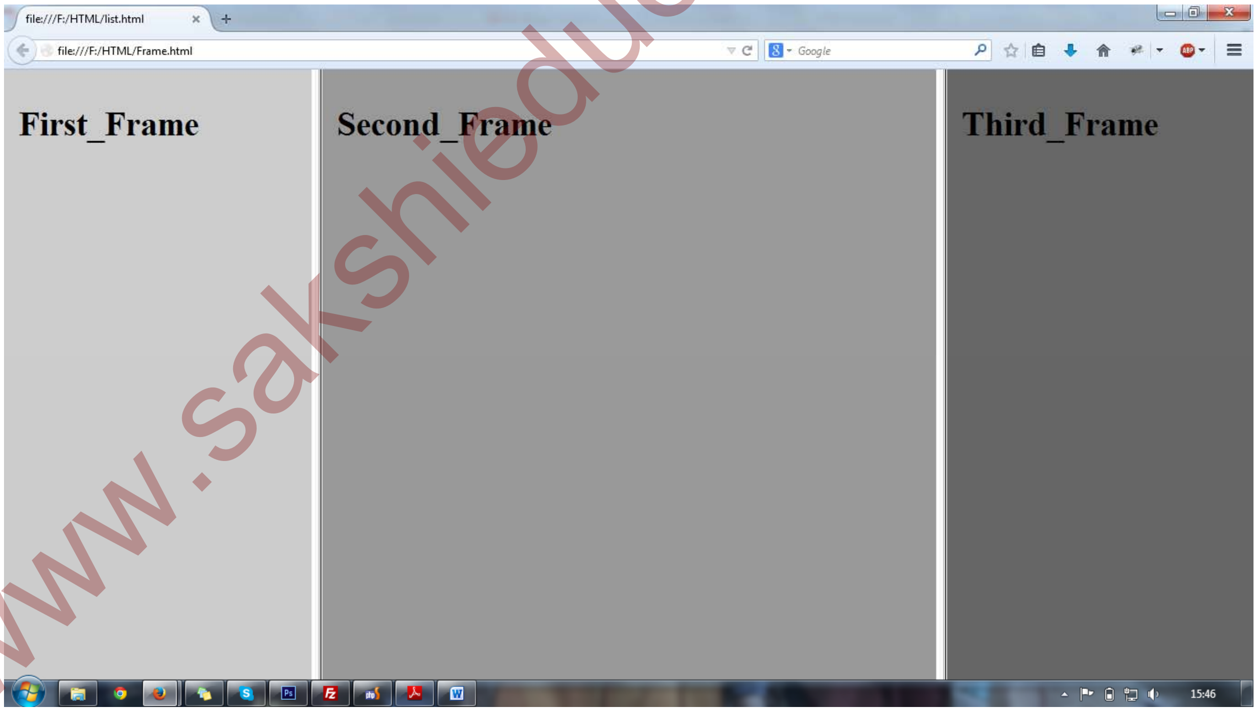
The <frame> tag defines what HTML document to put into each frame

In the example below we have a frameset with two columns. The first column is set to 25% of the width of the browser window. The second column is sets remaining 50% of the width of the browser window. The third column is set to 25% of the width of the browser window. The HTML document "First_Frame.html" is put into the first column, "Second_Frame.html" is put into the second column, and "Third_Frame.html" is put into the third column.

```
<!DOCTYPE html>
<html>

<frameset cols="25%,*,25%">
   <frame src="First_Frame.html">
   <frame src="Second_Frame.html">
   <frame src="Third_Frame.html">
</frameset>

</html>
```



First_Frame

Second_Frame

Third_Frame

Tips

Add the <noframes> tag for browsers that do not support frames. If a frame has visible borders, the user can resize it by dragging the border. To prevent a user from doing this, we can add noresize="noresize" to the <frame> tag.

Important: You can't use the **<body></body>** tags together with the <frameset></frameset> tags However, if you add a <noframes> tag containing some text for browsers that do not support frames, you will have to enclose the text in <body></body> tags.

Frame Tags

Tag	Description
<frameset>	Defines a set of frames
<frame>	Defines a sub window (a frame)
<noframes>	Defines a noframe section for browsers that do not handle frames
<iframe>	Defines an inline sub window (frame)

CSS(Cascading Style Sheets)

What is CSS?

- **CSS** stands for **C**ascading **S**tyle **S**heets
- Styles define how to display HTML elements
- Styles were added to HTML 4.0 to solve a problem
- External Style Sheets can save a lot of work
- External Style Sheets are stored in **CSS** files

Types of CSS

1. Internal / Embedded Styles

- Internal Styles are placed inside the head section of a particular web page via the style tag.
- Internal Styles are also called "Embedded Styles". We use the **<style>** tag to embed Internal Styles in the **<head>** section of a given web page.

Example

```
<!DOCTYPE html>
<html>
    <head>
        <title>Images</title>
        <style>
            .images{
                height: 40px;
                width: 60px;
                padding: 5px;
            }
        </style>
    </head>
</html>
```

2. Inline Styles

Inline Styles cannot be reused at all, period. Inline styles are placed directly inside an HTML element in the code. We cannot use the Style Builder to make an Inline Style. Instead, to purposely create an inline style requires you to go into the HTML code and type the style yourself.

Example

```
<!DOCTYPE html>
<html>
    <head>
        <title>Images</title>
    </head>
    <body style="background: #CCCCCC;width: 90%">

    </body>
</html>
```

3. External Style Sheet

For the most part, we will want to place the majority of our Style Rules on an External Style Sheet.This will allow us to reuse the styles as many times as we would like simply by linking the External Style Sheet to other web pages.

Example

Style.css

```
.images{
                    height: 40px;
                    width: 60px;
                    padding: 5px;
               }
```

```
<!DOCTYPE html>
<html>
     <head>
          <title>Images</title>
          <link href="style.css" type="text/css">
     </head>
     <body>

     </body>
</html>
```

Font and text CSS properties

CSS attribute	Sample Value
Font	Italic bold 18pt arial
Font-family	“times new roman” Arial
Font-size	Larger
Font-weight	800
Letter-spacing	0.1 em
Word-spacing	1.5em
Text-decoration	Underline
Text-transform	Capitalize
Text-align	Center
Text-indent	10%

Font-style	normal | italic | oblique
Font-variant	normal | small-caps

Padding and border CSS attributes

CSS attribute	Value
Border	Thick groove yellow
Border-color	Yellow red blue
Border-width	Thin thick
Border-style	Inset
Border-top	3px solid red (width,style,color)
Border-right	Yellow
Border-bottom	5px solid
Border-left	Solid
Border-top-style	Ridge
Border-bottom-style	Double
Border-left-style	None
Border-right-style	groove
Border-top-color	#FFFF00
Border-bottom-color	Black
Border-right-color	#0000CC
Border-left-color	Blue
Border-top-width	Thin
Border-left-width	Thick

Padding	12% 18px
Padding-left	18 px
Padding-right	0.25 in
Padding-top	4%
Padding-bottom	5px

The classifying and display CSS1 attributes

CSS1 Attribute	Value
Display	None
White-space	Pre
List-style	Square outside
List-style-type	Disc
List-style-image	url(someimage.jpg)
List-style-position	Inside
Width	150 px
Height	25%