**Html notes**

**Html** means hypertext markup language. It is standard language for markup web pages and to describe the structure of the web pages. It consists of number of elements which give instructions to browser how to display the content.

**Elements**

**Heading:** It is of six levels; Heading 1, Heading 2, Heading 3, Heading 4, Heading 5, Heading 6, which are used to give headings in different size and style.

Syntax: <h1> text</h1> and similar for other just number of heading is to be changed.

**Paragraph:** this element is used to write paragraphs.

Syntax: <p> this is a paragraph</p>

**<html>:** this element is the root element and it defines the whole HTML document.

It has a start tag <html> and an end tag </html>.

**Body:** Then, inside the <html> element there is a <body> element

The <body> element defines the document's body. It has a start tag <body> and an end tag </body>.

**Attribute**

All HTML elements can have **attributes.** Attributes provide **additional information** about elements. Attributes are always specified in **the start tag**. Attributes usually come in name/value pairs like: **name="value"**

**The href Attribute**: The <a> tag defines a hyperlink. The href attribute specifies the URL of the page the link goes to:

<a href="others.html">others</a>

## The src Attribute: The <img> tag is used to embed an image in an HTML page. The src attribute specifies the path to the image to be displayed.

## The width and height Attributes: The <img> tag should also contain the width and height attributes, which specifies the width and height of the image (in pixels).

## The alt Attribute: The required alt attribute for the <img> tag specifies an alternate text for an image, if the image for some reason cannot be displayed. This can be due to slow connection, or an error in the src attribute, or if the user uses a screen reader.

## <img src ="me.png" width="150px" height="150px" alt="prabhjeet's image">

## The style Attribute: The style attribute is used to change the style.

## <p style="color:red;">This is a red paragraph.</p>

**The lang Attribute:** You should always include the lang attribute inside the <html> tag, to declare the language of the Web page. This is meant to assist search engines and browsers. The following example specifies English as the language:

<!DOCTYPE html>  
<html lang="en">  
<body>  
...  
</body>  
</html>

## The title Attribute: The title attribute defines some extra information about an element. The value of the title attribute will be displayed as a tooltip when you mouse over the element: <p title=”I’m a tooltip”>This is a paragraph.</p>

## Table:

The <table> tag defines an HTML table.

Each table row is defined with a <tr> tag. Each table header is defined with a <th> tag. Each table data/cell is defined with a <td> tag.

By default, the text in <th> elements are bold and centered.

By default, the text in <td> elements is regular and left-aligned.

Example: <table id="t01">  
  <tr>  
    <th>Firstname</th>  
    <th>Lastname</th>  
    <th>Age</th>  
  </tr>  
  <tr>  
    <td>Eve</td>  
    <td>Jackson</td>  
    <td>94</td>  
  </tr>  
</table>

**CSS:**

Cascading Style Sheets (CSS) is used to format the layout of a webpage.

With CSS, you can control the color, font, size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more.

CSS can be added to HTML documents in 3 ways:

* **Inline** - by using the style attribute inside HTML elements
* **Internal** - by using a <style> element in the <head> section
* **External** - by using a <link> element to link to an external CSS file

The most common way to add CSS, is to keep the styles in external CSS files. However, in this tutorial we will use inline and internal styles, because this is easier to demonstrate, and easier for you to try it yourself.

## Inline CSS

An inline CSS is used to apply a unique style to a single HTML element.

An inline CSS uses the style attribute of an HTML element.

The following example sets the text color of the <h1> element to blue, and the text color of the <p> element to red.

Example:

<h1 style="color:blue;">A Blue Heading</h1>  
  
<p style="color:red;">A red paragraph.</p>

## Internal CSS

An internal CSS is used to define a style for a single HTML page.

An internal CSS is defined in the <head> section of an HTML page, within a <style> element.

The following example sets the text color of ALL the <h1> elements (on that page) to blue, and the text color of ALL the <p> elements to red. In addition, the page will be displayed with a "powderblue" background color:

<!DOCTYPE html>  
<html>  
<head>  
<style>  
body {background-color: powderblue;}  
h1   {color: blue;}  
p    {color: red;}  
</style>  
</head>  
<body>  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>  
</html>

## External CSS

An external style sheet is used to define the style for many HTML pages.

To use an external style sheet, add a link to it in the <head> section of each HTML page:

<!DOCTYPE html>  
<html>  
<head>  
  <link rel="stylesheet" href="styles.css">  
</head>  
<body>  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>  
</html>

The external style sheet can be written in any text editor. The file must not contain any HTML code, and must be saved with a .css extension.

Here is what the "styles.css" file looks like:

body {  
  background-color: powderblue;  
}  
h1 {  
  color: blue;  
}  
p {  
  color: red;  
}

## CSS Colors, Fonts and Sizes

Here, we will demonstrate some commonly used CSS properties. You will learn more about them later.

The CSS color property defines the text color to be used.

The CSS font-family property defines the font to be used.

The CSS font-size property defines the text size to be used.

<!DOCTYPE html>  
<html>  
<head>  
<style>  
h1 {  
  color: blue;  
  font-family: verdana;  
  font-size: 300%;  
}  
p {  
  color: red;  
  font-family: courier;  
  font-size: 160%;  
}  
</style>  
</head>  
<body>  
  
<h1>This is a heading</h1>  
<p>This is a paragraph.</p>  
  
</body>  
</html>

## CSS Border

The CSS border property defines a border around an HTML element.

p {  
  border: 2px solid powderblue

}

**Lists**

HTML lists allow web developers to group a set of related items in lists.

## Unordered HTML List

An unordered list starts with the <ul> tag. Each list item starts with the <li> tag.

The list items will be marked with bullets (small black circles) by default:

<ul>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ul>

## Ordered HTML List

An ordered list starts with the <ol> tag. Each list item starts with the <li> tag.

The list items will be marked with numbers by default:

<ol>  
  <li>Coffee</li>  
  <li>Tea</li>  
  <li>Milk</li>  
</ol>

## HTML Description Lists

HTML also supports description lists.

A description list is a list of terms, with a description of each term.

The <dl> tag defines the description list, the <dt> tag defines the term (name), and the <dd> tag describes each term:

<dl>  
  <dt>Coffee</dt>  
  <dd>- black hot drink</dd>  
  <dt>Milk</dt>  
  <dd>- white cold drink</dd>  
</dl>

## Html Forms

## An HTML form is used to collect user input. The user input is most often sent to a server for processing.

**The <form> Element**

The HTML <form> element is used to create an HTML form for user input:

<form>  
.  
*form elements*  
.  
</form>

The <form> element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.

## The <input> Element

The HTML <input> element is the most used form element.

An <input> element can be displayed in many ways, depending on the type attribute.

## Text Fields

The <input type="text"> defines a single-line input field for text input.

## The <label> Element

Notice the use of the <label> element in the example above.

The <label> tag defines a label for many form elements.

The <label> element is useful for screen-reader users, because the screen-reader will read out loud the label when the user focus on the input element.

The <label> element also help users who have difficulty clicking on very small regions (such as radio buttons or checkboxes) - because when the user clicks the text within the <label> element, it toggles the radio button/checkbox.

The for attribute of the <label> tag should be equal to the id attribute of the <input> element to bind them together.

## Radio Buttons

The <input type="radio"> defines a radio button.

Radio buttons let a user select ONE of a limited number of choices.

## Checkboxes

The <input type="checkbox"> defines a **checkbox**.

Checkboxes let a user select ZERO or MORE options of a limited number of choices.

## The Submit Button

The <input type="submit"> defines a button for submitting the form data to a form-handler.

The form-handler is typically a file on the server with a script for processing input data.

The form-handler is specified in the form's action attribute.

## The Name Attribute for <input>

Notice that each input field must have a name attribute to be submitted.

If the name attribute is omitted, the value of the input field will not be sent at all.