**HTML Elements**

<!DOCTYPE html>  
<html>  
<body>  
  
<h1>My First Heading</h1>  
<p>My first paragraph.</p>  
  
</body>  
</html>

The <body> element defines the document's body.

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

Then, inside the <body> element there are two other elements: <h1> and <p>

**HTML Attributes**

* 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**

<!DOCTYPE html>

<html>

<body>

<h2>The href Attribute</h2>

<p>HTML links are defined with the a tag. The link address is specified in the href attribute:</p>

<a href="https://www.w3schools.com">Visit W3Schools</a>

</body>

</html>

<!DOCTYPE html>

<html>

<body>

<h2 title="I'm a header">The title Attribute</h2>

<p title="I'm a tooltip">Mouse over this paragraph, to display the title attribute as a tooltip.</p>

</body>

</html>

**The src Attribute**

<!DOCTYPE html>

<html>

<body>

<h2>The alt Attribute</h2>

<p>The alt attribute should reflect the image content, so users who cannot see the image get an understanding of what the image contains:</p>

<img src=" https://www.w3schools.com/images/img\_girl.jpg" alt="Girl with a jacket" width="500" height="600">

</body>

</html>

**HTML Headings**

<!DOCTYPE html>

<html>

<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>

**HTML Paragraphs**

The HTML <p> element defines a paragraph.

A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph.

<!DOCTYPE html>

<html>

<body>

<p>This is a paragraph.</p>

<p>This is a paragraph.</p>

<p>This is a paragraph.</p>

</body>

</html>

**HTML Horizontal Rules**

<!DOCTYPE html>

<html>

<body>

<h1>This is heading 1</h1>

<p>This is some text.</p>

<hr>

<h2>This is heading 2</h2>

<p>This is some other text.</p>

<hr>

<h2>This is heading 2</h2>

<p>This is some other text.</p>

</body>

</html>

**HTML Line Breaks**

The HTML <br> element defines a line break.

Use <br> if you want a line break (a new line) without starting a new paragraph:

<!DOCTYPE html>

<html>

<body>

<p>This is<br>a paragraph<br>with line breaks.</p>

</body>

</html>

**The HTML <pre> Element**

The HTML <pre> element defines preformatted text.

The text inside a <pre> element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:

<!DOCTYPE html>

<html>

<body>

<p>The pre tag preserves both spaces and line breaks:</p>

<pre>

My Bonnie lies over the ocean.

My Bonnie lies over the sea.

My Bonnie lies over the ocean.

Oh, bring back my Bonnie to me.

</pre>

</body>

</html>

**HTML Styles**

* Use the style attribute for styling HTML elements
* Use background-color for background color
* Use color for text colors
* Use font-family for text fonts
* Use font-size for text sizes
* Use text-align for text alignment

**Background Color**

The CSS background-color property defines the background color for an HTML element.

<!DOCTYPE html>

<html>

<body>

<h1 style="background-color:powderblue;">This is a heading</h1>

<p style="background-color:tomato;">This is a paragraph.</p>

</body>

</html>

**Text Color**

The CSS color property defines the text color for an HTML element:

<!DOCTYPE html>

<html>

<body>

<h1 style="color:blue;">This is a heading</h1>

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

</body>

</html>

**Fonts**

The CSS font-family property defines the font to be used for an HTML element:

<!DOCTYPE html>

<html>

<body>

<h1 style="font-family:verdana;">This is a heading</h1>

<p style="font-family:courier;">This is a paragraph.</p>

</body>

</html**>**

**Text Alignment**

## Text Alignment

The CSS text-align property defines the horizontal text alignment for an HTML element:

<!DOCTYPE html>

<html>

<body>

<h1 style="text-align:center;">Centered Heading</h1>

<p style="text-align:center;">Centered paragraph.</p>

</body>

</html>

**HTML Formatting Elements**

Formatting elements were designed to display special types of text:

* <b> - Bold text
* <strong> - Important text
* <i> - Italic text
* <em> - Emphasized text
* <mark> - Marked text
* <small> - Smaller text
* <del> - Deleted text
* <ins> - Inserted text
* <sub> - Subscript text
* <sup> - Superscript text

**HTML Forms**

**The <form> Element**

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

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

**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.

Here are some examples:

| **Type** | **Description** |
| --- | --- |
| <input type="text"> | Displays a single-line text input field |
| <input type="radio"> | Displays a radio button (for selecting one of many choices) |
| <input type="checkbox"> | Displays a checkbox (for selecting zero or more of many choices) |
| <input type="submit"> | Displays a submit button (for submitting the form) |
| <input type="button"> | Displays a clickable button |

<!DOCTYPE html>

<html>

<body>

<h2>Text input fields</h2>

<form>

<label for="fname">First name:</label><br>

<input type="text" id="fname" name="fname" value="John"><br>

<label for="lname">Last name:</label><br>

<input type="text" id="lname" name="lname" value="Doe">

</form>

<p>Note that the form itself is not visible.</p>

<p>Also note that the default width of text input fields is 20 characters.</p>

</body>

</html>

**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 focuses on the input element.

The <label> element also helps 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.

<!DOCTYPE html>

<html>

<body>

<h2>Radio Buttons</h2>

<p>Choose your favorite Web language:</p>

<form>

  <input type="radio" id="html" name="fav\_language" value="HTML">

  <label for="html">HTML</label><br>

  <input type="radio" id="css" name="fav\_language" value="CSS">

  <label for="css">CSS</label><br>

  <input type="radio" id="javascript" name="fav\_language" value="JavaScript">

  <label for="javascript">JavaScript</label>

</form>

</body>

</html>

<form>

<label for="name">Name:</label>

<input type="text" name="name"><br><br>

<label for="sex">Sex:</label>

<input type="radio" name="sex" id="male" value="male">

<label for="male">Male</label>

<input type="radio" name="sex" id="female" value="female">

<label for="female">Female</label> <br><br>

<label for="country">Country: </label>

<select name="country" id="country">

<option>Select an option</option>

<option value="nepal">Nepal</option>

<option value="usa">USA</option>

<option value="australia">Australia</option>

</select><br><br>

<label for="message">Message:</label><br>

<textarea name="message" id="message" cols="30" rows="4"></textarea><br><br>

<input type="checkbox" name="newsletter" id="newsletter">

<label for="newsletter">Subscribe?</label><br><br>

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

</form>