## HTML Attributes

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

## The href Attribute

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

### Example

<a href="https://www.w3schools.com">This is a link</a>

## The src Attribute

HTML images are defined with the <img> tag.

The filename of the image source is specified in the src attribute:

### Example

<img src="img\_girl.jpg">

## The width and height Attributes

  HTML images also have width and height attributes, which specifies the width and height of the image:

### Example

<img src="img\_girl.jpg" width="500" height="600">

The width and height are specified in pixels by default; so width="500" means 500 pixels wide.

## The alt Attribute

The alt attribute specifies an alternative text to be used, if an image cannot be displayed.

The value of the alt attribute can be read by screen readers. This way, someone "listening" to the webpage, e.g. a vision impaired person, can "hear" the element.

### Example

<img src="img\_girl.jpg" alt="Girl with a jacket">

The alt attribute is also useful if the image cannot be displayed (e.g. if it does not exist):

### Example

See what happens if we try to display an image that does not exist:

<img src="img\_typo.jpg" alt="Girl with a jacket">

## The title Attribute

Here, a title attribute is added to the <p> element. The value of the title attribute will be displayed as a tooltip when you mouse over the paragraph:

### Example

<p title="I'm a tooltip">

This is a paragraph.  
</p>

# Paragraph

The HTML <p> element defines a **paragraph**:

**Note:** Browsers automatically add some white space (a margin) before and after a paragraph.

## HTML Display

You cannot be sure how HTML will be displayed.

Large or small screens, and resized windows will create different results.

With HTML, you cannot change the output by adding extra spaces or extra lines in your HTML code.

The browser will remove any extra spaces and extra lines when the page is displayed:

### Example

<p>  
This paragraph  
contains a lot of lines  
in the source code,  
but the browser  
ignores it.  
</p>  
  
<p>  
This paragraph  
contains         a lot of spaces  
in the source         code,  
but the        browser  
ignores it.  
</p>

## Don't Forget the End Tag

Most browsers will display HTML correctly even if you forget the end tag:

### Example

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

The example above will work in most browsers, but do not rely on it.

**Note:** Dropping the end tag can produce unexpected results or errors.

## 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:

### Example

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

The <br> tag is an empty tag, which means that it has no end tag.

## The Poem Problem

This poem will display on a single line:

### Example

<p>  
  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.  
</p>

## 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:

### Example

<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>

## HTML Formatting Elements

HTML also defines special **elements** for defining text with a special **meaning**.

HTML uses elements like <b> and <i> for formatting output, like **bold** or *italic* text.

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> - Small text
* <del> - Deleted text
* <ins> - Inserted text
* <sub> - Subscript text
* <sup> - Superscript text

# Codes:

* **Tags** 
  + Headings
  + Paragraph (<b>, <i>, <u>, <font>, <pre>)
  + Marquee

1. **Assignment (Task)**
2. Display a paragraph with following effects:

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

1. Display image in title bar with title.
2. Apply different attributes on marquee tag.