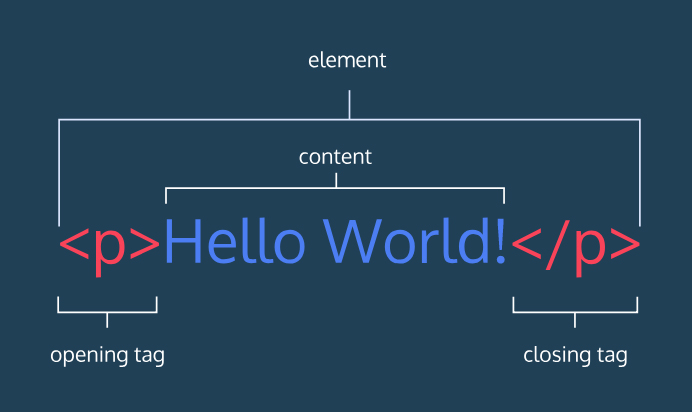
**HTML – Hyper Text Markup**

HyperText is text displayed on a computer or device that provides access to other text through links, also known as hyperlinks.

Learning HTML is the first step in creating websites, but even a bit of knowledge can help you inject code snippets into newsletter, blog or website templates. As you continue learning, you can layer HTML with CSS and JavaScript to create visually compelling and dynamic websites

# <h1>Gabriela</h1> | Gabriela



É a estrutura para o conteúdo que aparece num website; imagens, texto, vídeos.

Para ver o código html, clicar botão direito do rato e escolher ‘inspect’.

*Markup* language, é a linguagem de computador que define a estrutura e apresentação do texto cru.

Opening tag: **<p>** e closing tag: **</p>**

**Content -** é o que está escrito no meio:

The **Body**

Only content inside the opening and closing body tags can be displayed to the screen. Here's what opening and closing body tags look like:

**<body>**

**<p**>"Life is very short and what we have to do must be done in the now." - Audre Lorde**</p>**

**</body>**

HTML  is organized as a collection of family tree relationships, including parent-child and siblings

When an element is contained inside another element, it is considered the child of that element. The child element is said to be nested inside of the parent element:

**<body>**

**<p>**This paragraph is a child of the body element**</p>**

**</body>**

Since there can be multiple levels of nesting, this analogy can be extended to grandchildren, great-grandchildren and beyond. The relationship between elements and their ancestor and descendent elements is known as hierarchy.

In this example, the <body>element is the parent of the <div> element. Both the <h1>and <p> elements are children of the <div> element. Because the <h1> and <p> elements are at the same level, they are considered siblings and are both grandchildren of the <body>element.

<body>

<div>

<h1>Sibling to p</h1>

<p>Grandchild of body</p>

</div>

</body>

HEADINGS, are similar to headings in other types of media. For example, in newspapers, large headings are typically used to capture a reader's attention.

In HTML, there are six different headings, or heading elements.

The following is the list of heading elements available in HTML. They are ordered from largest to smallest in size.

1. <h1> — used for main headings. All other smaller headings are used for subheadings.
2. <h2>
3. <h3>
4. <h4>
5. <h5>
6. <h6>

# The Brown Bear

## About Brown Bears

### Species

### Features

## Habitat

### Countries with Large Brown Bear Populations

### Countries with Small Brown Bear Populations

## Media

<body>

<h1>The Brown Bear</h1>

<h2>About Brown Bears</h2>

<h3>Species</h3>

<h3>Features</h3>

<!--Add your code below!-->

<h2>Habitat</h2>

<h3>Countries with Large Brown

Bear Populations</h3>

<h3>Countries with Small Brown

Bear Populations</h3>

<h2>Media</h2>

</body>

**Divs**, is short for "division" or a container that divides the page into sections. These sections are very useful for grouping elements in your HTML together.

<body>

<h1>The Brown Bear</h1>

<div>

<h2>About Brown Bears</h2>

<h3>Species</h3>

<h3>Features</h3>

</div>

<div>

<h2>Habitat</h2>

<h3>Countries with Large Brown Bear Populations</h3>

<h3>Countries with Small Brown Bear Populations</h3>

</div>

<div>

<h2>Media</h2>

</div>

</body>

**Attributes**, are content added to the opening tag of an element and can be used in several different ways, from providing information to changing styling. Attributes are made up of the following two parts:

* The *name* of the attribute
* The *value* of the attribute

One commonly used attribute is the id. We can use the id attribute to specify different content (such as <div>s) and is really helpful when you use an element more than once.

When we add an id to a <div>, we place it in the opening tag:

<div id="intro">

<h1>Introduction</h1>

</div>

Example with the **id** Attribute inside de opening <div> tag:

<body>

<h1>The Brown Bear</h1>

<div id="introduction">

<h2>About Brown Bears</h2>

<h3>Species</h3>

<h3>Features</h3>

</div>

<div id="habitat">

<h2>Habitat</h2>

<h3>Countries with Large Brown Bear Populations</h3>

<h3>Countries with Small Brown Bear Populations</h3>

</div>

<div id="media">

<h2>Media</h2>

</div>

</body>

**Displaying Text**:

Se se quiser expôr text em HTML, pode usa-se um **paragraph** ou **span**.

* *Paragraphs* (<p>) contain a block of plain text.
* <span> contains short pieces of text or other HTML. They are used to separate small pieces of content that are on the same line as other content.

<div>

<h1>Technology</h1>

</div>

<div>

<p><span>Self-driving cars</span> are anticipated to replace up to 2 million jobs over the next two decades.</p>

</div>

In the example above, there are two different <div>. The second <div> contains a <p> with <span>Self-driving cars</span>. This <span> element separates "Self-driving cars" from the rest of the text in the paragraph.

It's best to use a <span> element when you want to target a specific piece of content that is inline, or on the same line as other text. If you want to divide your content into blocks, it's better to use a <div>.

Below the <h2> element that says About Brown Bears, add <p> opening and closing tags, and inside of the tags put the following text:

# The Brown Bear

## About Brown Bears

"The brown bear (Ursus arctos) is native to parts of northern Eurasia and North America. Its conservation status is currently Least Concern. There are many subspecies within the brown bear species, including the Atlas bear and the Himalayan brown bear."

### Species

### Features

"Brown bears are not always completely brown. Some can be reddish or yellowish. They have very large, curved claws and huge paws. Male brown bears are often 30% larger than female brown bears. They can range from 5 feet to 9 feet from head to toe."

## Habitat

### Countries with Large Brown Bear Populations

### Countries with Small Brown Bear Populations

"Some countries with smaller brown bear populations include Armenia, Belarus, Bulgaria, China, Finland, France, Greece, India, Japan, Nepal, Poland, Romania, Slovenia, Turkmenistan, and Uzbekistan"

## Media

<body>

<h1>The Brown Bear</h1>

<div id="introduction">

<h2>About Brown Bears</h2>

<p>"The brown bear (Ursus arctos) is native to parts of northern Eurasia and North America. Its conservation status is currently Least Concern. There are many subspecies within the brown bear species, including the Atlas bear and the Himalayan brown bear."</p>

<h3>Species</h3>

<h3>Features</h3>

<p>"Brown bears are not always completely brown. Some can be reddish or yellowish. They have very large, curved claws and huge paws. Male brown bears are often 30% larger than female brown bears. They can range from 5 feet to 9 feet from head to toe."</p>

</div>

<div id="habitat">

<h2>Habitat</h2>

<h3>Countries with Large Brown Bear Populations</h3>

<h3>Countries with Small Brown Bear Populations</h3>

<p>"Some countries with smaller brown bear populations include Armenia, Belarus, Bulgaria, China, Finland, France, Greece, India, Japan, Nepal, Poland, Romania, Slovenia, Turkmenistan, and Uzbekistan"</p>

</div>

<div id= "media">

<h2>Media</h2>

</div>Styling text

</body>

**Styling Text:**

A tag **<em>** enfatiza o texto, enquanto a tag **<strong>** destaca o texto importante:

* The <em> tag will generally render as *italic* emphasis.
* The <strong> will generally render as **bold** emphasis.

Exemplo:

<p><strong>The Nile River</strong> is the <em>longest</em> river in the world, measuring over 6,850 kilometers long (approximately 4,260 miles).</p>

**The Nile River** is the longest river in the world, measuring over 6Line,850 kilometers long (approximately 4,260 miles).

**Line Breaks**:

The spacing between code in an HTML file doesn't affect the positioning of elements in the browser. If you are interested in modifying the spacing in the browser, you can use HTML's line break element: <br>.

The line break element is unique because it is only composed of a starting tag. You can use it anywhere within your HTML code and a line break will be shown in the browser.

<p>The Nile River is the longest river <br> in the world, measuring over 6,850 <br> kilometers long (approximately 4,260 <br> miles).</p>

The Nile River is the longest river  
in the world, measuring over 6,850  
kilometers long (approximately 4,260  
miles).

Dois line breaks seguidos saltam uma linha, **<br><br>**

**Unordered Lists**

Em HTML, podemos usar uma unordered list tag (<ul>) , criar uma lista não ordenada de elementos. A lista não ordenada de elementos vai aparecer listada por bullet points.

The <ul> element should not hold raw text and won't automatically format raw text into an unordered list of items. Individual list items must be added to the unordered list using the <li> tag. The <li>or list item tag is used to describe an item in a list.

<ul>

<li>Limes</li>

 Limes

 Tortillas

 Chicken

<li>Tortillas</li>

<li>Chicken</li>

</ul>

The list was created using the <ul> tag and all individual list items were added using <li> tags.

**Ordered Lists**

As listas ordenadas <ol> são como as listas não ordenadas, á excepção que cada item é listado por número. São úteis quando precisamos de listar diferentes passos de um processo ou hierarquia:

<ol>

<li>Preheat the oven to 350 degrees.</li>

<li>Mix whole wheat flour, baking soda, and salt.</li>

<li>Cream the butter, sugar in separate bowl.</li>

<li>Add eggs and vanilla extract to bowl.</li>

</ol>

1. Preheat the oven to 350 degrees.
2. Mix whole wheat flour, baking soda, and salt.
3. Cream the butter, sugar in separate bowl.
4. (cabeçalhosAdd eggs and vanilla extract to bowl.

**Images**

Todos os elementos que aprendemos até agora (cabeçalhos, parágrafos, listas e spans) partilham uma ocis em comum: são todos compostos inteiramente de texto. E se quisermos adicionar imagens?

A tag <img> permeite adicionar imagem á web page. Esta tag auto fecha-se (self-closing tag). Tanto pode ter no fim da tag um travessão / ou não que funciona:

<img src="image-location.jpg" />

A tag <img> requere o uso de um atributo chamado src. Este atributo tem de ser posto na image’s *source*, ou seja, a localização da imagem.

In this case, the value of src must be the uniform resource locator (URL) of the image. A URL is the web address or local address where a file is stored. Eis um exemplo:

</div>

<div id="media">

<h2>Media</h2>

<img src="https://s3.amazonaws.com/codecademy-content/courses/web-101/web101-image\_brownbear.jpg"/>

</div>

</body>

Q - Rather than using a url to link to images that exist on the web, can I link to images that are stored locally on my own computer?

A -Yes you can! In fact, developers often work locally before pushing their code to production. When dealing with assets like images, we will often want to include them in a folder which will also contain our HTML document. With a properly arranged directory or folder structure, we can create a path which points to our image and is relative to our HTML document. In this scenario, this relative path will be the value of the <img> src attribute.

Q - How can I store my own images online so that I can link to their urls within my own websites?

A - There are sites that allow you to upload your images to the web. Once your image is uploaded, you can then use its web address as the value for the <img> element’s src attribute. More commonly, images and project assets are stored within a folder that also contains our HTML document. This allows developers to create paths to be used as src values that are relative to the HTML document. In other words, images and HTML files often exist on the same server or computer.

**Image Alts**

Part of being an exceptional web developer is making your site accessible to users of all backgrounds. In order to make the Web more inclusive, we need to consider what happens when assistive technologies such as screen readers come across image tags.

The alt attribute, which means alternative text (texto alternativo), brings meaning to the images on our sites. The altattribute can be added to the image tag just like the srcattribute. The value of alt should be a description of the image.

<img src="#" alt="A field of yellow sunflowers" />

The alt attribute also serves the following purposes:

* If an image fails to load on a web page, a user can mouse over the area originally intended for the image and read a brief description of the image. This is made possible by the description you provide in the alt attribute.
* Visually impaired users often browse the web with the aid of screen reading software. When you include the altattribute, the screen reading software can read the image's description out loud to the visually impaired user.
* The alt attribute also plays a role in Search Engine Optimization (SEO), because search engines cannot "see" the images on websites as they crawl the internet. Having descriptive altattributes can improve the ranking of your site.

If the image on the web page is not one that conveys any meaningful information to a user (visually impaired or otherwise), the alt attribute should be left empty, ex:

<div id="media">

<h2>Media</h2>

<img src="https://s3.amazonaws.com/codecademy-content/courses/web-101/web101-image\_brownbear.jpg" alt="A Brown Bear"/>

</div>

Q - Is there free screen reading software I can use to get a sense for how a visually impaired user experiences the web?

A - Indeed there are several free programs available. Windows users can install NonVisual Desktop Access and most Apple computers come with VoiceOver. If you are on a Mac right now, try pressing Command-F5 to open up VoiceOver (pressing Command-F5 again will turn it off).

Additionally, ChromeVox is available as an in-browser extension

**Videos**

HTML também suporta a colocação de vídeos, assim a tag <vídeo> requer o uso de um atributo src com um link para a source (origem) do vídeo. Diferentemente da tag <img>, a tag <video> requere uma tag de entrada e fechamento:

<video src="myVideo.mp4" width="320" height="240" controls>

Video not supported

</video>

In this example, the video source (src) is myVideo.mp4 The source can be a video file that is hosted alongside your webpage, or a URL that points to a video file hosted on another webpage.

After the src attribute, the width and height attributes are used to set the size of the video displayed in the browser. The controls attribute instructs the browser to include basic video controls: pause, play and skip.

The text, "Video not supported", between the opening and closing video tags will only be displayed if the browser is unable to load the video.

Q - Why doesn’t the controls attribute need a value, like all the other attributes we have seen thus far?

A - Why doesn’t the controls attribute need a value, like all the other attributes we have seen thus far?

**Review**

1. **HTML** stands for **H**yper**T**ext **M**arkup **L**anguage and is used to create the structure and content of a webpage.
2. Most HTML elements contain opening and closing tags with raw text or other HTML tags between them.
3. HTML elements can be nested inside other elements. The enclosed element is the child of the enclosing parent element.
4. Any visible content should be placed within the opening and closing <body> tags .
5. Headings and sub-headings, <h1> to <h6> tags, are used to enlarge text.
6. <p>, <span> and <div> tags specify text or blocks.
7. The <em> and <strong> tags are used to emphasize text.
8. Line breaks are created with the <br> tag.
9. Ordered lists (<ol>) are numbered and unordered lists (<ul>) are bulleted.
10. Images (<img>) and videos (<video>) can be added by linking to an existing source.