

HTML Tags

Intro

HTML structures documents by using elements. Elements can stand on their own or be nested within other elements. For example, a paragraph element might exist within a section element or a table row will be within a table. Everything in HTML is an element. The way elements are represented in HTML is by using tags. Here is an example of a tag.

```
<section class="example">Hello World!</section>
```

Below we will talk about the various pieces of this tag, what else could be added to it and what could be removed from it.

Anatomy of a Tag

Let's look again at tag from the introduction and talk about the various pieces.

```
<section class="example">Hello World!</section>
```

Every single tag is going to open with a `<` symbol followed by the name of the tag. In this case it is a section tag. Some tags like a line break `
` consist only of the opening and closing angle bracket and the name. But most tags also require a closing tag. This is a tag that opens with `</` instead of `<`. So in the above example, the closing tag is `</section>`. Everything between the opening tag and the closing tag is the content of the tag. In this case, the content is `Hello World!`.

In addition to basic opening and closing tags, additional information can be provided using attributes. In the above example, the section belongs to the class "example". This is usually specified using the syntax of `attribute-name="attribute-value"` or `attribute-name='attribute-value'`. On occasion, you will see the quotation marks omitted or an attribute name with no associated value. For example, a check-box is checked if the attribute `checked` exists and it is unchecked if that attribute does not exist. The value of the checked attribute is meaningless.

For this class, if an attribute value exists, it should be wrapped in quotes. You can choose either single or double quotes, but be consistent throughout your HTML. Always use single quotes or always use double quotes.

Nesting Elements

Opening and closing tags act a lot like parenthesis. If a tag has both an opening and closing tag, those must both appear at the right depth inside the tree of elements. For example, you could have two paragraphs, one of which has emphasized text, inside a section like this:

```
<section>
  <p>I am paragraph 1.</p>
  <p>I <em>am</em> paragraph 2.</p>
</section>
```

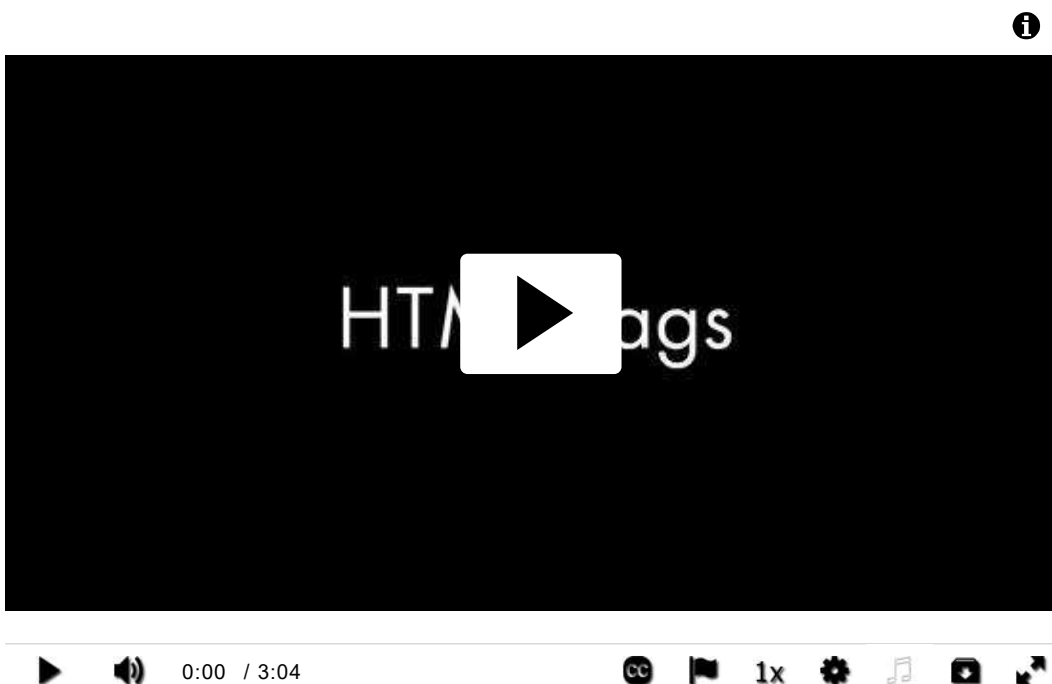
As it turns out, in certain circumstances, the ending tag of a paragraph can be omitted so this would also be valid:

```
<section>
  <p>I am paragraph 1.
  <p>I <em>am</em> paragraph 2.
</section>
```

However, the following would not be valid because the emphasized text `` opens inside of the paragraph but closes outside of it:

```
<section>
  <p>I am paragraph 1.</p>
  <p>I <em>am paragraph 2.</p></em>
</section>
```

Many text editors will highlight issues with mismatched tags. There are also on-line validators (<http://validator.w3.org/>) which can scan your HTML document and find errors like this.



W3C official HTML specification (<http://www.w3.org/TR/html5/>)

Activity

The following code sample has some issues. You should fix the tags so that it is valid. In addition to fixing the tags, you should give the inner section a *class* attribute with the value of *content*. In addition, we can optionally replace the quotation marks with opening and closing `q` tags because they represent actual quotes. Finally fix the emphasis tag (`em`) tag so that it only emphasizes that the business was in danger.

Edit in JSFiddle

- [HTML](#)
- [Result](#)

```
<section>
  <h1>Tags Exercise</h1>
  <section>
    <p>Milk production at a dairy farm was low and <em>the business was in danger. The farm
    <p class="dialogue">"The farmer replied "Great what is it?"
    <p class="dialogue">"First we must assume spherical cows on an infinite frictionless pl.
  </section>
</section>
```

Solution

Switch to HTML view to see the solution code.

Edit in JSFiddle

- [Result](#)
- [HTML](#)

Tags Exercise

Milk production at a dairy farm was low
and *the business was in danger*. The
farmer had hired vets, biologists,

Review

This should get your familiar with the syntax and various pieces of HTML tags. We still don't know what specific tags do or why we want to give them things like IDs or classes, but that is coming very soon!