

## Markup Terminology

**HTML** (Hypertext Markup Language), **XHTML** (Extensible Hypertext Markup Language), and **XML** (Extensible Markup Language) are all *markup languages*. They each share a common set of ideas that are embodied by a standard set of terms. Understanding this terminology will make switching between these technologies simple.

---

**Element:** An element is a single unit. It is the smallest whole unit of the language. An element can exist on it's own but typically exists in relation to other elements. In HTML, a <TD> element is a table cell, but it typically exists inside a <TR> (table row) and the table row exists inside a <table> element. Except for a few exceptions, there is generally no limit to the number of times an element can be used.

In the physical world, the equivalent to an element is any noun. A car, a cup, a book could all be elements in the fictional markup that describes the world around you.

*Elements were formerly known as tags.*

---

**Attribute:** An attribute is used to describe an element. An attribute cannot exist without the element that describes it. If the attribute is not provided then that value remains unspecified.

Attributes have two parts. These are the *attribute* and the *attribute value*.

An attribute value is any valid specification for an attribute. Many attributes can be used across a variety of elements. The HTML attribute *align*, for example, may be used with <TD> and <H1> elements. Its attribute values include center, left and right. In each of the markup languages attributes are described in the following format

Attribute name = "attribute value"

Only **1** attribute is valid per element. In HTML, the web browser chooses and uses only 1 attribute. In XML the document is invalid if the same attribute is specified more than once in an element.

As a whole unit, the attribute and the attribute value are the equivalent of an adjective in the physical world. For a red car, car is the element while red is the attribute. In the fictional markup language for the physical world red car may be described as follows:

```
<car color="red" />
```

