

# The <time> element

## INTRODUCTION

The <time> element is useful for marking a time or a duration in a document.

It provides both a human readable part (the part between <time> and </time>) and a machine readable part contained within a `datetime` attribute. Dates are expressed as YYYY-MM-DD.



Source: Jerrod Arnold

The machine readable part adds semantics that can be used by search engines for indexing, by browsers or by browser extensions, or by JavaScript code. Useful scenarios include generating alerts for birthdays, automatically adding dates or events that contain <time> elements in a calendar, etc.

External resources:

- W3C specification: <http://www.w3.org/TR/html5/text-level-semantic.html#the-time-element>
- Interesting article by Bruce Lawson: <http://www.brucelawson.co.uk/2012/best-of-time/>

Example:

We open at <time>10:00</time> every morning.  
I have a meeting the <time datetime="2012-02-14">Monday 14/02/2012.</time>.  
Blog posts from the year <time datetime="2012">2012</time>.  
Archives, blog posts for <time datetime="2012-04">April 2012</time>  
This recipe was published by Michel the <time datetime="2012-04-16">April 16, 2012</time>.

## THE DATETIME ATTRIBUTE

The `datetime` attribute can be used for indicating a date/time or a duration.

### Date/time values

Supports different specifications of time such as "a year", "a month in a year", "a week in a year", "a time", etc...

Here are some examples:

Different syntaxes of the `datetime` attribute

datetime attribute values	Interpretation
<code>&lt;time datetime="1905"&gt;</code>	The year 1905
<code>&lt;time datetime="1905-11"&gt;</code>	November 1905
<code>&lt;time datetime="11-13"&gt;</code>	November 13th (any year)
<code>&lt;time datetime="1905-W21"&gt;</code>	Week 21 from year 1905
<code>&lt;time datetime="1905-11-13 09:00"&gt;</code>	November 13th year 1905, time = 9:00
<code>&lt;time datetime="1905-11-13T09:00"&gt;</code>	Same as previous example, both syntaxes are supported, with and without the "T" between date and time.
<code>&lt;time datetime="09:00Z"&gt;</code>	9:00 in the morning, GMT
<code>&lt;time datetime="09:00-05"&gt;</code>	9:00 in the morning, GMT minus 5 hours
<code>&lt;time datetime="09:00+05:45"&gt;</code>	9:00 in the morning, GMT plus 5 hours 45 minutes, (for example, Nepal is 5:45 ahead of GMT)

## DURATION VALUES

Duration values use the prefix "P" for "period" as in `<time datetime="P4D">` (period = four days)...











So you start the attribute string value with a "P", followed by a duration value that ends with another letter indicating the unit used: "D" for "days", "H" for hours, "M" for minutes and "S" for seconds.

You can separate the different elements "P", value and unit with spaces, but this is optional. So `<time datetime="P4D">` is a duration of 4 days, as is `<time datetime="P 4 D">`.

Using a "T" after the "P" marker allows you to indicate a more accurate duration time: `<time datetime="PT4H 6M 12.55S">` is a duration of 4 hours, 6 minutes and 12.55 seconds.

Alternatively, you could use also a duration time component.

From Bruce Lawson's article : *"Whichever you choose, it's represented internally as a number of*

Name	Note	Rest
Whole Note		
Half Note		
Quarter Note		
<b>Non-HTML5 duration values</b>		
Eighth Note		
Sixteenth Note		

seconds. Because of this, you can't specify a duration in terms of months, because a month isn't a precise number of seconds; a month can last from 28 to 31 days. Similarly, a year isn't a precise number of seconds; it's 12 months and February sometimes has an extra day.

You still can't represent dates before the Christian era, as years can't be negative. Neither can you indicate date ranges. To mark up From "21/02/2012 to 25/02/2012", use two separate `<time>` elements."

Examples:

```
<h2>Recipe:</h2>
<ul>
  <li> Preparation time: <time datetime="P30M">30 minutes</time> </li>
  <li> Cooking time:    <time datetime="P10M">10 minutes</time> </li>
</ul>
```

## <TIME> ELEMENT WITH NO ATTRIBUTES

Used without attributes, the value between the opening `<time>` and closing `</time>` should follow the syntax given by the specification so that machines can understand it (same syntax as the one presented for the `datetime` attribute in the previous section). However it is recommended to use `adatetime` attribute, as it gives more freedom in the way you can display the date/time/duration in a human-readable form.

## The `<mark>` element



The HTML `<mark>` tag is used for indicating text as marked or highlighted for reference purposes, due to its relevance in another context.

Some use cases:

- Display search results with search strings highlighted in the results.
- Highlight important parts of a text, such as "quoting parts", etc.
- Replace `<strong>` and `<em>` with `<mark>` when suitable.

Example1: <http://jsbin.com/otekov/3/edit>

Project is due in .zip format next monday.

Source code:

```
<!DOCTYPE html>
<html>
<head>
<meta charset=utf-8 />
<title>JS Bin</title>
</head>
<body>
<p>Project is due in <mark>.zip format</mark>next monday.</p>
</body>
10. </html>
```

Example 2:

```
var i = 3;
```

The var keyword is used to declare a variable in JavaScript.

Source code:

```
<body>
<pre>
<code><mark>var</mark> i = 3;</code>
</pre>
<p>The var keyword is used to declare a variable in JavaScript.</p>
</body>
```

## CHANGE THE DEFAULT STYLE OF THE <MARK>ELEMENT

If you don't like the default yellow background, you may use CSS to change the style of the <mark> element:

For example:

```
var i = 3;
```

The var keyword is used to declare a variable in JavaScript.

Can be obtained with this CSS rule:

```
mark {  
  background-color: green;  
  color: yellow;  
}
```

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### KNOWLEDGE CHECK 1.4.3 (NOT GRADED)

When would you use the mark element?

- ☐ To download a file
  - ☐ To highlight a text
  - ☐ To add a link
  - ☐ To make a text bigger
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