# HTML <a href> for Hypertext Links

#a href# creates a hypertext link. #a# description, syntax, usage, attributes and examples. HTML-5.com is a great guide for web developers. <u>TV Series & Actors and Actresses</u>. Follow <u>TV Series</u> and <u>HTML 5</u> on Google+.

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itemscopehttp://data-vocabulary.org/Breadcrumb<span itemprop="title">Examples</span>

# The <a href> Tag in HTML 5

The <a href> tag is used to define a hypertext link. It is one of the <u>tags for interactive content</u> in HTML. If a user clicks on the link, the referenced document will be loaded by the browser or other web client. Only the <a href> version of the anchor tag is described here since the <u><a name></u> version is no longer used (see <u>Changes in HTML 5</u> below)

<a rel="nofollow" href="index.pdf">...</a>

## Breadcrumb trail using <a> tags

A series of inline hypertext links can be used to create a <dfn>breadcrumb trail</dfn>:

## <u>HTML 5</u> > <u>HTML Tags</u> > **HTML <a> tag**

This is an actual working demo of the <u><a href> example code</u> below.

## **HTML Anchors**

The href attribute of the <a> tag can reference the id attribute of one of the HTML tags to link to a specific point within a web page, automatically scrolling the browser window if necessary to make that section of the web page appear in the currently visible area. To specify the target location, include a hash symbol ("#") followed by the id of the target location in the href attribute of the <a> tag. The URLs of bookmarks or favorites can also point to specific locations in a web page.

The tags that are involved in creating the document outline, which include the <u><section> tag</u>, <u><hgroup> tag</u> and <u>heading tag</u> would be some examples of good places for HTML anchors:

The <a/>
tag was originally used to define a fixed point (hence the name <dfn>anchor</dfn>
and element type name **a**) in a document for the target of a hypertext link. However, starting
with <u>HTML version 4</u> (1997), any HTML element can be used as an anchor simply by
including an <u>id</u> <u>attribute</u> on the element start tag or the <u>standalone tag</u> of a <u>void element</u>.
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From <span class="nobr"><cite>http://www.w3.org/TR/html401/struct/links.html#h-12.2.3</ cite>:</span>

<br/><blockquote cite="http://www.w3.org/TR/html401/struct/links.html#h-12.2.3">The id attribute<br/>may be used to create an anchor at the start tag of any element (including the A element).</br>

Note that as a result of how the HTML specifications have evolved, the <a> tag should *not* be used as an anchor, and in order to avoid confusion, probably should not be called the <q>anchor tag</q>.

## k> tag for links to related documents

In addition to the <a> tag for hypertext links, the <u>HTML <link> tag</u> can be used to reference other things, such as profiles of the web page author(s), related to the current HTML web page.

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# <a href> Tag Syntax

```
<a mode="pre" href="../body-tag/index.html#syntax"><body></a>
...
<a mode="pre" href="../html-tag-list.html#flow-content-model">... flow content expected ...</a>
<b mode="pre"><a href="target-URI" ...></b>
<a mode="pre" href="../html-tag-list.html#flow-content">... flow content expected ...</a>
<b mode="pre" href="../a></b>
...
<b mode="pre" href="../html-tag-list.html#phrasing-content-model">... flow content ...</a>
<b mode="pre" href="../html-tag-list.html#phrasing-content-model">... flow content expected ...</a>
<b mode="pre" href="../html-tag-list.html#phrasing-content-model">... flow content ...</br/></br/></br/></br/></br/></br/></br/></br/></br/></br/></br/>
```

## Rules for coding the HTML a element

Make sure you understand the <u>difference between a tag and element</u> and are familiar with the <u>definitions</u> of <u>namespace</u> and other <u>HTML terms</u>.

1. Code the **a** element for a hypertext link where either <u>flow content</u> is expected or <u>phrasing</u> <u>content</u> is expected.

2. Begin the **a** element with a starting <a> tag. The element name uses lower case letters and should be in the <u>HTML namespace</u>, which it will pick up automatically from the <u>xmlns</u> <u>attribute</u> on the <u><html> tag</u>.

3. Code an <u>href</u> attribute with the hash of an id within the same page, a URL of another web page or a URI such as a mailto: link.

4. Include any other <u>attributes</u> of the  $\langle a \rangle$  tag as appropriate.

5. Inside the **a** element, code the text or other <u>phrasing content</u> that is to appear as the hypertext link. If the  $\langle a \rangle$  tag is coded where <u>flow content</u> is permitted, then the <u>inner HTML</u> of the  $\langle a \rangle$  tag may contain <u>flow content</u> also.

6. End the **a** <u>element</u> with a matching  $\langle a \rangle$  closing tag.

## <a href/> Content Model

## Contents of the <a href/> Tag

## When coded in <u>flow content</u>

When coded in <u>flow content</u>, the content of the **a** element can include <u>HTML comments</u>, <u>text</u> <u>content</u> and any <u>HTML tags that can be used in flow content</u>.

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#### When coded in phrasing content

When coded in <u>phrasing content</u>, the content of the **a** element can include <u>HTML comments</u>, <u>text content</u> and only those <u>HTML tags that can be used in phrasing content</u>.

#### Recommendation

The <a> tag can be combined with many other phrasing content tags, such as:

#### <abbr>

when the text in the link is an acronym or abbreviation

#### <cite>

for a link to a web site whose content is being cited, or to a web site related to a creative work being cited

#### <code>

when the text in the link represents computer code, such as when the pages on this site link to the description and syntax of tags in the tag reference

#### <u><img></u>

when the link is an image rather than text

#### <kbd>

when the text in the link represents keyboard input

#### <mark>

when the text in the link represents the search term(s) in search results

#### <output>

when the text in the link represents computer output

#### <time>

when the text in the link represents a time, which may be used to link to the full description of an entry in the chronological summary of some type of log or a blog

#### <u><var></u>

when the text in the link represents a variable that is to be replaced with an actual value

When their content is to be applied to the entire link, the <a> tag can be nested inside those tags, if their <u>content model allows phrasing content</u>, or those tags can be nested inside the <a> tag. For <u>tags with no allowable content</u>, such as the <u><img> tag</u>, those tags *must* be coded *inside* the <a> tag. Our recommendation is to always code them inside the <a> tag, since that makes it easier to make changes to the HTML code later. For example:

```
According to <a href="http://www.AuthoringHTML.com/"><cite>Authoring

HTML</cite></a>,
    the &lt;cite&gt; tag should be used for the title of a creative work, not
```

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To make it clear that the citation comes from a *book*, you would simply need to add the word "book" between the <cite> tag and the ending </a> tag.

```
According to the <a href="http://www.AuthoringHTML.com/"><cite>Authoring

HTML</cite> book</a>,

    the <cite&gt; tag should be used for the title of a creative work, not

the cited content.
```

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# <a href> Tag Attributes

## Attributes of the <a> tag

<u>global attributes</u>	In addition to the personal attributes of the <a> tag below, any of the <u>common HTML</u> <u>attributes</u> can also be coded.</a>
href=" <i>target-URL</i> " href="# <i>placemark</i> " href=" <i>any-URI-ref</i> "	URL of target page, a hash symbol and fragment identifier for another location within the current page or any other URI reference (or IRI reference depending on the encoding) such as a mailto: link
	Use <u>percent escape codes</u> as explained in the <u>URL Encoding Tutorial</u> for any special characters in the <u>URI reference</u> .
	If the value of the href attribute resolves to an <u>HTTP URI</u> , it may contain any of the following components:
	<ol> <li>protocol scheme, typically http: or else https:</li> <li>username, followed by an "@"</li> <li>host name or IP address</li> <li>port number, which defaults to 80 for the http scheme and 443 for the https scheme</li> <li>absolute or relative path</li> <li>search query, indicated by "?"</li> <li>fragment identifier, indicated by "#"</li> </ol>
	If the protocol scheme, username, host name/IP address and port number are omitted the default is the current host - the same server as the base of the current document. If the path starts with a slash /, it is an absolute path from the document root directory (AKA " <dfn>web root</dfn> ") on the server. A relative path will be resolved relative to the base of the current document. A URI with a "#" but no

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	fragment identifier points to the top of the document.
hreflang=" <i>xx</i> " hreflang=" <i>xx-XX</i> " for example: hreflang="en-US"	ISO 639 country code with optional ISO 3166 country code
media="screen" media="print" media="handheld"	whether the target URL is designed for desktop web browsers, printer-friendly or designed for mobile devices
ping="http://ClickedLink.com/"	If a user clicks on this link, the URLs in the ping attribute will be sent asynchronous notifications of the event. The list of URLs to be notified are separated by spaces. Each of the URLs will be notified via a HTTP POST request. The address of the current document will be sent in a Ping-From header, and, if the target is from the same domain, in a Referer [sic] header also. The target URL of the hypertext link from the href attribute will be sent in a Ping-To header.
rel="acquaintance" rel="alternate" rel="archives" rel="author"	The rel attribute specifies the purpose of the link. It may contain a single keyword, or a list of rel attribute keyword values separated by spaces.
rel="bookmark"	acquaintance
rel="child" rel="co-resident" rel="co-worker" rel="colleague" rel="contact"	The person described by the document containing the link considers the person described by the referenced document to be an acquaintance.
rel="crush" rel="date"	alternate
rel="external" rel="feed" rel="feed alternate" rel="first" rel="friend" rel="help" <span class="incorrect">rel="icon"</span> rel="index" rel="license" rel="license" rel="license" rel="me" rel="me" rel="me" rel="muse"	The referenced document is an alternate representation of the document containing the link. This should only be used when the referenced document has content similar to the current document but published in an alternate form, such as a syndicated feed for a list of blog posts (see <u>rel="feed alternate"</u> ). If the document has been translated into other languages, the language of the translation should be indicated in an <u>hreflang</u> attribute (not the <u>lang</u> attribute).
rel="neighbor"	

<u>rel="next"</u> <u>rel="nofollow"</u> <u>rel="noreferrer"</u> <u>rel="parent"</u> <u>rel="pingback"</u>	archives The referenced document is a list of previously created versions of related documents, such as the archives of a blog.
rel="prefetch" rel="prev" rel="search" rel="sibling" rel="sidebar" rel="spouse" <span class="incorrect">rel="stylesheet"<!--<br-->span&gt; rel="sweetheart" rel="tag" rel="up"</span>	author The link references a resource about the author of the document. For search engine optimization, Google recommends using a link to the author's Google Profile or a page about the author on the same domain as the link. It could also be a link to another type of resource, such as a mailto: link to the email address of the author. See the <u>rel="author"</u> <u>Tutorial</u> .
	<b>bookmark</b> Provides a permanent link to the document or to a section within the document.
	<b>child</b> The person described by the referenced document is a child of the person described by the document containing the link.
	co-resident
	The person described by the referenced document lives in the same place as the person described by the document containing the link.
	co-worker
	The person described by the referenced document works for the same company or organization as the person described by the document containing the link.
	colleague
	The person described by the referenced document works in the same field of employment as the person described by the document containing the link.

## contact

The person described by the referenced document is someone who might be contacted by the person described by the document containing the link.

## crush

The person described by the document containing the link has a crush on the person described by the referenced document.

#### date

The person described by the document containing the link has been dating the person described by the referenced document.

#### external

Indicates that the link is to a external resource on a different web site.

## feed

For feed autodiscovery, links to a syndicated feed channel for the document or the web site. Do not use or include rel="alternate" unless the current document and the feed are alternate forms of the same content; if the current entry is a subset of the feed, such as a single blog post, use rel="feed" without "alternate" in the attribute.

## feed alternate

Used when the referenced document is the syndicated feed for the current content, such as the feed for a list of blog posts in an HTML page (but not a single blog post, which would be an <entry> or <item> in the feed rather than the entire feed).

## first

Links to the first document in a series of articles.

frie	nd
	The person described by the document containing the link considers the person described by the referenced document to be a friend.
hel	<b>b</b>
	Links to a document that provides helpful information related to the content of the document containing the link (not a general help page).
inde	ex
	Links to a table of contents or index document that includes the document containing the link as well as others in the same collection of documents.
kin	
	The person described by the document containing the link and the one described by the referenced document are members of the same extended family.
last	
	Links to the last document in a series of articles.
lice	nse
	Links to a document that describes the copyright license that applies to the document(s) in which the link to the license page appears.
me	
	The person described by the referenced document is the same person as the one described by the document containing the link. They are two pages describing the same person.
met	
	The person described by the document containing the link claims to have met the person described by the referenced document.

## muse

The person described by the referenced document provides inspiration to the person described by the document containing the link.

## neighbor

The person described by the referenced document lives near the person represented by the document containing the link.

#### next

In a series of documents, the referenced document is the next one in sequence following the document containing the link.

#### parent

The person described by the referenced document is a parent of the person described by the document containing the link.

## pingback

Used in a link that provides the URL of the resource to handle a pingback for the document containing the link.

#### prev

In a series of documents, the referenced document is the previous one in sequence prior to the document containing the link.

## search

**New** Links to a document that provides information that can be used by search engines. This could be an XML file conforming to the <u>OpenSearch</u> <u>Description Document</u> specification.

## sibling

For a pair or siblings; the person described by the referenced document is a brother or sister of the person described by the document containing the link.

si	idebar
	Indicates that the referenced document should be loaded into the web browser's sidebar if the link is activated by the user.
s	pouse
	The person described by the referenced document is the husband or wife of the person represented by the document containing the link.
S	weetheart
	The person described by the document containing the link considers the person described by the referenced document to be their sweetheart.
ta	a
	Specifies a <u>URI</u> that is a "tag", which describes the subject of a page. The tag may be a <u>URL</u> , which leads to a web-accessible page, or just a standalone identifier.
u j	p
	Links to the document at the next higher level in a tree hierarchy. The value up may be specified more than once: rel="up" points to the parent document, rel="up up" points to the grandparent, and so forth. This can be used to create a <u>breadcrumb trail</u> , for example.
prefetch	
,	Indicates that the referenced document should be automatically preloaded into cache.
	ofollow
	Indicates to search engine crawlers and other robots that they should not follow the link to the referenced resource and process the document there. This can be used to indicate that the linked document should not be considered to be a recommended resource when determining the search

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	engine rank for the linked page. This may help the page where the link appears from being penalized for "recommending" less desirable pages, such as for links to an affiliate site.
	noreferrer
	Indicates that the user agent should not identify the referring page to the server handling the request for the target page. If this value is omitted or ignored, the URL of the page containing the link will most likely be included in the Referer [sic] header of the HTTP request for the referenced page.
target="_blank" target="_top" target="_parent" target="_self"	the window where the target url specified by the href attribute is to be displayed
type=" <i>media-type</i> " for example: type="text/html"	RFC 2046 MIME media type and subtype

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# HTML <a> Anchor Tag Examples

## Examples of the <a href> tag in HTML 5

<a href="#">back to top</a>
<a href="#target-within-page">link within document</a>
<a href="another-page.html">another page</a>
<a href="another-section/">another section</a>
<a href="http://www.ExampleOnly.com/"><a mode="pre" href="http://www.ExampleOnly.com/">Example
<a href="http://www.ExampleOnly.com/">com/">Example</a>
<a href="http://www.ExampleOnly.com/">com/">Example</a>
<a href="http://www.ExampleOnly.com/">com/">Example</a>
<a href="http://www.ExampleOnly.com/">com/">Example</a>
<a href="http://www.ExampleOnly.com/">com/">Example</a>
<a href="http://www.ExampleOnly.com/">Example</a>

The example link with href="#target-within-page" shows how to direct a link to another place in the same document. The target of the link is specified by coding an <u>id</u> <u>attribute</u> on any HTML element at the target location (*not* an <u><a name/></u> or <u><a id/></u> element, which have been deprecated):

```
id="target-within-page"</b> >This paragraph is the target of the example lin
```

To keep the link text from breaking to wrap onto a separate line, include the <u>white-</u> <u>space: nowrap</u> style:

<a href="another-page.html" <b mode="pre">style="white-space: nowrap"</b> >another page</a>
<a href="/another-section/" <b mode="pre">style="white-space: nowrap"</b> >another section</a>

## HTML Link With Target

To open the page that a link references in a new window or tab rather than replacing the current page, add the <u>target attribute</u>. This can be used to allow a user to view pages from another site without leaving the current site.

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<a href="http://www.ExampleOnly.com/" <b mode="pre">target="offsite"</b> >Example Only</a>

#### **HTML Link Without Underline**

To suppress the underline that indicates a hypertext link created by an HTML **a** element, add a <u>style="text-decoration: none"</u> attribute to the starting <a> tag.

#### Example of a breadcrumb trail

```
<nav>
        <a rel="up up" href="../../">HTML 5</a>&#160;&gt;&#160;
        <a rel="up" href="../">HTML Tags</a>&#160;&gt;&#160;
        <b>HTML &lt;a&gt; tag</b>
</nav>
```

#### Example of an id attribute for the target of a link

This paragraph is the target of a hypertext link.

The <u>fragment identifier</u> is <u>examples</u>. The browser should automatically scroll to that location on the page if a hypertext link includes a hash symbol (#) with the fragment identifier:

<a href="http://www.HTML-5.com/tags/a-tag/#examples#"><a mode="pre" href="http://www.HTML-5.com/tags/a-tag/#examples#">http://www.HTML-5.com/tags/a-tag/#examples#">http://www.HTML-5.com/tags/a-tag/#examples#">http://www.HTML-5.com/tags/a-tag/#examples#">http://www.HTML-5.com/tags/a-tag/#examples#">http://www.HTML-5.com/tags/a-tag/#examples#"</a>

#### Examples of the <a> tag with other protocol schemes

<a href="tel:+18775543210">Call our feedback line at +1-877-554-3210</a>

Example of link with an image using the HTML <img> tag

```
Click this image to view the <video&gt; tag

demo<br/>
Click this image to view the &lt;video&gt; tag

demo<br/>
Click this image to view the &lt;video&gt; tag

demo<br/>
Click this image to view the &lt;video&gt; tag

demo<br/>
Click this image to view the &lt;video&gt; tag

demo<br/>
Click this image to view the &lt;video&gt; tag
```

This example uses the <img> tag to put an image inside an <a> tag that links to the <u>HTML</u> <u>5 <video> demo</u>. Also shows how to resize an image; in this case the size of the image is changed from 320x240 to 160x120.

Click this image to view the <video> tag demo <img src="/media/deep-impact-movie.png" width="160" height="120" alt="picture from deep impact movie"></img>

## Search Engine Friendly Breadcrumb Trail Example

Some search engines, particularly Google, may include a breadcrumb trail in their search engine results if the links include microdata properties for a breadcrumb trail.

# HTML <a href> Tag

Description, syntax, usage, attributes and examples of the HTML <a href> tag.

<cite> www.html-5.com HTML Tags HTML <a href> Tag Examples </cite>

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To code the <u>breadcrumb trail microdata</u> the breadcrumb trail list of links must include some <u>microdata properties</u>:

• elements with <u>itemscope="itemscope"</u> (a <u>boolean attribute</u>) and

itemtype="http://data-vocabulary.org/Breadcrumb" identifying each link in the breadcrumb trail

• an **a href** element with <u>itemprop="url"</u> indicating the target URL of each breadcrumb link

• an element with <a>itemprop="title"</a> that provides the text for each breadcrumb link

```
itemscope="itemscope" itemtype="http://data-vocabulary.org/Breadcrumb">
    <a itemprop="url" rel="up up up" href="/">
       <span itemprop="title">HTML 5</span>
    </a>
  itemscope="itemscope" itemtype="http://data-vocabulary.org/Breadcrumb">
    <a class="nobr" itemprop="url" rel="up up" href="/tags/">
       <span itemprop="title">HTML Tags</span>
    </a>
  itemscope="itemscope" itemtype="http://data-vocabulary.org/Breadcrumb">
    <a itemprop="url" rel="up" href="./">
       <span itemprop="title">HTML <a href> Tag</span>
    </a>
  <a itemprop="url" href="#examples#">
       <span itemprop="title">Examples</span>
    </a>
```

#### <a href> tag with a mailto: link

```
<a mode="pre" href="../body-tag/"><body></a>
Sy <address>
<b mode="pre" href="mailto:John.Doe@ExampleOnly.com">John Doe (contact the author)</a
</address>
...
</body>
<a mode="pre" href="../article-tag/"><article></a>
<how the author)</a>
</body>
<a mode="pre" href="../article-tag/"><article></a>
<how the author)</a>

Fublished: Friday, April 1, 2011
By: <a mode="pre" href="../address-tag/"><address></a>
<b mode="pre" href="../address-tag/"><address></a>
<br/><b mode="pre" href="mailto:John Doe &lt;John.Doe@ExampleOnly.com&gt;">John Doe (contact the author)</a>

(a mode="pre" href="../article-tag/">

(a mode="pre" href="../article-tag/"><article></a>

(a mode="pre" href="../article-tag/"><article></a>

(a mode="pre" href="../address-tag/"><address></a>

(a mode="pre" href="mailto:John Doe &lt;John.Doe@ExampleOnly.com&gt;">John Doe (contact the author)</a>

(a mode="pre" href="../article-tag/">
```

The <a href> tag is coded inside an <u>address element</u> indicating that the address is for the author of the content. The value of the <u><a href></u> attribute starts with the <u>mailto</u> scheme followed by a semicolon (:). The "To" address follows it and can be coded as:

- the e-mail address
- a <dfn>display name</dfn>, which may include special characters if enclosed in quotes
   ("), which must be encoded as &quot; in an attribute value, and the e-mail address

enclosed in angle brackets (<...>), which must be encoded with the <u>HTML character</u> entities <u>&lt;</u> and <u>&gt;</u>.

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# Changes in HTML 5 - <a> Tag

#### What's new in HTML 5

The media attribute has been added for consistency with the link> tag.

The target attribute has been resurrected in HTML 5. It really did not exist in either HTML 4 or XHTML, although it was the easiest way to open a web page in a new window. As a result, it was used on many web pages, which therefore would fail validation.

In HTML 5, you can put the <a> tag around block elements in addition to inline elements. This means that links can appear where they couldn't before. For example, you can turn a whole <u>HTML table row</u> into a link:

```
Label:
Data...

...
...

conclick="location=this.getElementsByTagName('a')[0]">

<a href="new-row.html"/>

Add a Row
```

#### Differences between HTML 5 and earlier versions of HTML

The <a> tag with a name or id attribute is no longer used as a placemark for the target of a hypertext link. Most HTML tags may now include an id attribute for that purpose. Therefore, whenever there is an <a> tag with an id or name attribute but no href attribute, the value of the attribute should be coded as the id attribute of the tag following it:

```
<span mode="pre" class="incorrect"><a id="whats-new"/></span>
<span mode="pre" class="incorrect">New features of HTML 5 include ....</span>
New features of HTML 5 include ....
<code lass="#whats-new">What's New in HTML 5</code lass="#whats-new"></code lass="#whats-new">#what's New in HTML 5</code lass="#whats-new"></code lass="#whats-new">#</code lass="#whats-new">#</code lass="#whats-new">#</code lass="#whats-new">#</code lass="#whats-new">#</code lass="#whats-new">#</code lass=##</code lass=##
```

An <a> tag without an href attribute is now only a placeholder that may later be turned into a hypertext link via dynamic JavaScript code.

The following attributes should *not* be coded on the <a> tag because they either have been deprecated or were never officially supported:

• <u>name</u> - if the tag is being used for both a hypertext link and the target of a reference from somewhere else, use the <u>id</u> <u>attribute</u> instead; if it's not a hypertext link, code the <u>id</u> attribute on a different tag at the target location as shown above

- charset
- coords
- ref
- shape

# HTML-5.com HTML <a href> for Hypertext Links

The 2000-2010 Recommendations from the W3C HTML Working Group defined the HTML namespace for the **a** element type name along with the names of all HTML element types. In older (pre-2000) versions of HTML, element type names were not associated with a namespace.

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# THE END