



# Document Object Model (DOM) Level 2 HTML Specification

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Please refer to the errata for this document, which may include some normative corrections.

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## Abstract

This specification defines the Document Object Model Level 2 HTML, a platform- and language-neutral interface that allows programs and scripts to dynamically access and update the content and structure of [HTML 4.01] and [XHTML 1.0] documents. The Document Object Model Level 2 HTML builds on the Document Object Model Level 2 Core [DOM Level 2 Core] and is not backward compatible with DOM Level 1 HTML [DOM Level 1].

## Status of this document

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This is the 09 January 2003 of "DOM Level 2 HTML". This document has been reviewed by W3C Members, software developers, and other W3C groups and interested parties, and has been endorsed by the Director as a W3C Recommendation. It is a stable document and may be used as reference material or cited as a normative reference from another document. W3C's role in making the Recommendation is to draw attention to the specification and to promote its widespread deployment. This document enhances the interoperability of the Web.

Patent disclosures relevant to this specification may be found on the Working Group's public patent disclosure page.

This document has been produced as part of the W3C DOM Activity. The authors of this document are the DOM Working Group participants.

The English version of this specification is the only normative version. Information about translations of this document is available at <http://www.w3.org/2000/11/DOM-Level-2-translations>.

The list of known errors in this document is available at <http://www.w3.org/2000/11/DOM-Level-2-errata>

Comments on this document are invited and are to be sent to the public mailing list [www-dom@w3.org](mailto:www-dom@w3.org). An archive is available at <http://lists.w3.org/Archives/Public/www-dom/>.

An implementation report, based on the DOM Test Suite work, is available at <http://www.w3.org/2002/11/DOM-Level-2-HTML-Results>.

A list of current W3C Recommendations and other technical documents can be found at <http://www.w3.org/TR>.

**Note:** This specification renders the DOM Level 1 HTML Recommendation obsolete given that some changes from DOM Level 1 HTML are incompatible with that specification but represent more accurately the state of deployed software. W3C strongly suggests that developers and authors conform to DOM Level 2 HTML instead.

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# 1. Document Object Model HTML

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## 1.1. Introduction

This section extends the DOM Level 2 Core API [DOM Level 2 Core] to describe objects and methods specific to *HTML* [p.127] documents [HTML 4.01], and XHTML documents [XHTML 1.0]. In general, the functionality needed to manipulate hierarchical document structures, elements, and attributes will be found in the core section; functionality that depends on the specific elements defined in HTML will be found in this section.

The goals of the HTML-specific DOM API are:

- to specialize and add functionality that relates specifically to HTML documents and elements.
- to address issues of backwards compatibility with the *DOM Level 0* [p.127] .
- to provide *convenience* [p.127] mechanisms, where appropriate, for common and frequent operations on HTML documents.

The key differences between the core DOM and the HTML application of DOM is that the HTML Document Object Model exposes a number of *convenience* [p.127] methods and properties that are consistent with the existing models and are more appropriate to script writers. In many cases, these enhancements are not applicable to a general DOM because they rely on the presence of a predefined DTD. The transitional or frameset DTD for HTML 4.01, or the XHTML 1.0 DTDs are assumed. Interoperability between implementations is only guaranteed for elements and attributes that are specified in the HTML 4.01 and XHTML 1.0 DTDs.

More specifically, this document includes the following specializations for HTML:

- An `HTMLDocument` [p.15] interface, derived from the core `Document` interface. `HTMLDocument` specifies the operations and queries that can be made on a HTML document.
- An `HTMLElement` [p.20] interface, derived from the core `Element` interface. `HTMLElement` specifies the operations and queries that can be made on any HTML element. Methods on `HTMLElement` include those that allow for the retrieval and modification of attributes that apply to all HTML elements.
- Specializations for all HTML elements that have attributes that extend beyond those specified in the `HTMLElement` [p.20] interface. For all such attributes, the derived interface for the element contains explicit methods for setting and getting the values.

The DOM Level 2 includes mechanisms to access and modify style specified through CSS and defines an event model that can be used with HTML documents.

The interfaces found within this section are not mandatory. A DOM application may use the `hasFeature(feature, version)` method of the `DOMImplementation` interface with parameter values "HTML" and "2.0" (respectively) to determine whether or not this module is supported by the implementation. In addition to the feature string "HTML", the feature string "XHTML" (version string "2.0") can be used to check if the implementation supports XHTML (this is equivalent to checking the features "XML" and "HTML"). In order to fully support this module, an implementation must also support the "Core" feature defined [DOM Level 2 Core]. Please refer to additional information about *conformance* in the DOM Level 2 Core specification [DOM Level 2 Core].

A DOM application can use the `hasFeature` method of the `DOMImplementation` interface to determine whether they are supported or not. The feature string for all the interfaces listed in this section is "HTML" and the version is "2.0". In order to fully support this feature, an implementation needs also to support the "Core" feature defined in the Document Object Model Level 2 Core [DOM Level 2 Core] (see also *Conformance*).

The interfaces in this specification are designed for [HTML 4.01] documents, as well as for [XHTML 1.0] documents.

**Note:** This specification does not intend to define exactly how a user agent will respond to a change to any attribute on an element that directly or indirectly references external data, such elements are `HTMLAppletElement` [p.47], `HTMLFrameElement` [p.59], `HTMLFrameSetElement` [p.59], `HTMLIFrameElement` [p.60], `HTMLImageElement` [p.43], `HTMLLinkElement` [p.22], `HTMLObjectElement` [p.44], `HTMLParamElement` [p.46], and `HTMLScriptElement` [p.49].

## 1.2. HTML Application of Core DOM

### 1.2.1. Naming Conventions

The HTML DOM follows a naming convention for properties, methods, events, collections, and data types. All names are defined as one or more English words concatenated together to form a single string.

#### 1.2.1.1. Properties and Methods

The property or method name starts with the initial keyword in lowercase, and each subsequent word starts with a capital letter. For example, a property that returns document meta information such as the date the file was created might be named "fileDateCreated". In the ECMAScript binding, properties are exposed as properties of a given object. In Java, properties are exposed with get and set methods.

#### 1.2.1.2. Non-HTML 4.0 interfaces and attributes

While most of the interfaces defined below can be mapped directly to elements defined in the HTML 4.01 Recommendation, some of them cannot. Similarly, not all attributes listed below have counterparts in the HTML 4.01 specification (and some do, but have been renamed to avoid conflicts with scripting languages). Interfaces and attribute definitions that have links to the HTML 4.0 specification have corresponding element and attribute definitions there; all others are added by this specification, either for convenience or backwards compatibility with *DOM Level 0* [p.127] implementations.

## 1.3. XHTML and the HTML DOM

The DOM HTML Level 1 API [DOM Level 1] were originally intended to be used only for HTML 4.01 documents [HTML 4.01]. The APIs were defined well before XHTML 1.0 [XHTML 1.0] became a specification, or before it was worked on by the HTML Working Group.

From the DOM point of view, The biggest difference between HTML 4.01 (and earlier) and XHTML 1.0 is that XHTML is case sensitive, whereas HTML 4.01 is case insensitive. The HTML case insensitivity is also reflected in the DOM HTML API. For instance, element and attribute names are exposed as all uppercase (for consistency) when used on an HTML document, regardless of the character case used in the markup. Since XHTML is based on XML, in XHTML everything is case sensitive, and element and attribute names must be lowercase in the markup.

Developers need to take two things into account when writing code that works on both HTML and XHTML documents. When comparing element or attribute names to strings, the string compare needs to be case insensitive, or the element or attribute name needs to be converted into lowercase before comparing against a lowercase string. Second, when calling methods that are case insensitive when used on a HTML document (such as `getElementsByTagName()` and `namedItem()`), the string that is passed in should be lowercase.

**Note:** The interfaces provided in this document are only for [HTML 4.01] and [XHTML 1.0] documents and are not guaranteed to work with any future version of XHTML.

## 1.4. Miscellaneous Object Definitions

### Interface *HTMLCollection*

An `HTMLCollection` is a list of nodes. An individual node may be accessed by either ordinal index or the node's name or `id` attributes.

**Note:** Collections in the HTML DOM are assumed to be *live* [p.127] meaning that they are automatically updated when the underlying document is changed.

### IDL Definition

```
interface HTMLCollection {
    readonly attribute unsigned long    length;
    Node                               item(in unsigned long index);
    Node                               namedItem(in DOMString name);
};
```

### Attributes

`length` of type `unsigned long`, `readonly`  
This attribute specifies the length or *size* of the list.

### Methods

`item`  
This method retrieves a node specified by ordinal index. Nodes are numbered in tree order (depth-first traversal order).

**Parameters**

index of type `unsigned long`

The index of the node to be fetched. The index origin is 0.

**Return Value**

`Node` The `Node` at the corresponding position upon success. A value of `null` is returned if the index is out of range.

**No Exceptions**

`namedItem`

This method retrieves a `Node` using a name. With [HTML 4.01] documents, it first searches for a `Node` with a matching `id` attribute. If it doesn't find one, it then searches for a `Node` with a matching `name` attribute, but only on those elements that are allowed a `name` attribute. With [XHTML 1.0] documents, this method only searches for `Nodes` with a matching `id` attribute. This method is case insensitive in HTML documents and case sensitive in XHTML documents.

**Parameters**

name of type `DOMString`

The name of the `Node` to be fetched.

**Return Value**

`Node` The `Node` with a `name` or `id` attribute whose value corresponds to the specified string. Upon failure (e.g., no node with this name exists), returns `null`.

**No Exceptions****Interface *HTMLOptionsCollection*** (introduced in **DOM Level 2**)

An `HTMLOptionsCollection` is a list of nodes representing HTML option element. An individual node may be accessed by either ordinal index or the node's `name` or `id` attributes.

**Note:** Collections in the HTML DOM are assumed to be *live* [p.127] meaning that they are automatically updated when the underlying document is changed.

**IDL Definition**

```
// Introduced in DOM Level 2:
interface HTMLOptionsCollection {
    attribute unsigned long    length;
                                // raises(DOMException) on setting

    Node    item(in unsigned long index);
    Node    namedItem(in DOMString name);
};
```

**Attributes**

length of type unsigned long

This attribute specifies the length or *size* of the list.

**Exceptions on setting**

DOMException NOT\_SUPPORTED\_ERR: if setting the length is not allowed by the implementation.

**Methods**

item

This method retrieves a node specified by ordinal index. Nodes are numbered in tree order (depth-first traversal order).

**Parameters**

index of type unsigned long

The index of the node to be fetched. The index origin is 0.

**Return Value**

Node The Node at the corresponding position upon success. A value of null is returned if the index is out of range.

**No Exceptions**

namedItem

This method retrieves a Node using a name. It first searches for a Node with a matching id attribute. If it doesn't find one, it then searches for a Node with a matching name attribute, but only on those elements that are allowed a name attribute. This method is case insensitive in HTML documents and case sensitive in XHTML documents.

**Parameters**

name of type DOMString

The name of the Node to be fetched.

**Return Value**

Node The Node with a name or id attribute whose value corresponds to the specified string. Upon failure (e.g., no node with this name exists), returns null.

**No Exceptions**

## 1.5. Objects related to HTML documents

### Interface *HTMLDocument*

An *HTMLDocument* is the root of the HTML hierarchy and holds the entire content. Besides providing access to the hierarchy, it also provides some *convenience* [p.127] methods for accessing certain sets of information from the document.

The following properties have been deprecated in favor of the corresponding ones for the BODY element:

- alinkColor
- background
- bgColor
- fgColor
- linkColor
- vlinkColor

**Note:** In DOM Level 2, the method `getElementById` is inherited from the `Document` interface where it was moved to.

### IDL Definition

```
interface HTMLDocument : Document {
    attribute DOMString      title;
    readonly attribute DOMString  referrer;
    readonly attribute DOMString  domain;
    readonly attribute DOMString  URL;
    attribute HTMLCollection  body;
    readonly attribute HTMLCollection  images;
    readonly attribute HTMLCollection  applets;
    readonly attribute HTMLCollection  links;
    readonly attribute HTMLCollection  forms;
    readonly attribute HTMLCollection  anchors;
    attribute DOMString  cookie;
                                // raises(DOMException) on setting

    void      open();
    void      close();
    void      write(in DOMString text);
    void      writeln(in DOMString text);
    NodeList  getElementsByName(in DOMString elementName);
};
```

### Attributes

URL of type `DOMString`, `readonly`

The absolute URI [IETF RFC 2396] of the document.

anchors of type `HTMLCollection` [p.13], `readonly`

A collection of all the anchor (A) elements in a document with a value for the name attribute.

**Note:** For reasons of backward compatibility, the returned set of anchors only contains those anchors created with the name attribute, not those created with the `id` attribute. Note that in [XHTML 1.0], the name attribute (see section 4.10) has no semantics and is only present for legacy user agents: the `id` attribute is used instead. Users should prefer the iterator mechanisms provided by [DOM Level 2 Traversal] instead.



`applets` of type `HTMLCollection` [p.13] , readonly

A collection of all the `OBJECT` elements that include applets and `APPLET` (*deprecated*) elements in a document.

`body` of type `HTMLElement` [p.20]

The element that contains the content for the document. In documents with `BODY` contents, returns the `BODY` element. In frameset documents, this returns the outermost `FRAMESET` element.

`cookie` of type `DOMString`

This mutable string attribute denotes persistent state information that (1) is associated with the current frame or document and (2) is composed of information described by the `cookies` non-terminal of [IETF RFC 2965], Section 4.2.2.

If no persistent state information is available for the current frame or document document, then this property's value is an empty string.

When this attribute is read, all cookies are returned as a single string, with each cookie's name-value pair concatenated into a list of name-value pairs, each list item being separated by a `';` (semicolon).

When this attribute is set, the value it is set to should be a string that adheres to the `cookie` non-terminal of [IETF RFC 2965]; that is, it should be a single name-value pair followed by zero or more cookie attribute values. If no domain attribute is specified, then the domain attribute for the new value defaults to the host portion of an absolute URI [IETF RFC 2396] of the current frame or document. If no path attribute is specified, then the path attribute for the new value defaults to the absolute path portion of the URI [IETF RFC 2396] of the current frame or document. If no max-age attribute is specified, then the max-age attribute for the new value defaults to a user agent defined value. If a cookie with the specified name is already associated with the current frame or document, then the new value as well as the new attributes replace the old value and attributes. If a max-age attribute of 0 is specified for the new value, then any existing cookies of the specified name are removed from the cookie storage.

**Note:** See [IETF RFC 2965] for the semantics of persistent state item attribute value pairs.

**Note:** The precise nature of a user agent session is not defined by this specification.

### Exceptions on setting

`DOMException` `SYNTAX_ERR`: If the new value does not adhere to the cookie syntax specified by [IETF RFC 2965].

`domain` of type `DOMString`, readonly

The domain name of the server that served the document, or `null` if the server cannot be identified by a domain name.

`forms` of type `HTMLCollection` [p.13] , readonly

A collection of all the forms of a document.

`images` of type `HTMLCollection` [p.13] , readonly

A collection of all the `IMG` elements in a document. The behavior is limited to `IMG` elements for backwards compatibility.

**Note:** As suggested by [HTML 4.01], to include images, authors may use the OBJECT element or the IMG element. Therefore, it is recommended not to use this attribute to find the images in the document but `getElementsByTagName` with HTML 4.01 or `getElementsByTagNameNS` with XHTML 1.0.

`links` of type `HTMLCollection` [p.13] , readonly

A collection of all AREA elements and anchor (A) elements in a document with a value for the href attribute.

`referrer` of type `DOMString`, readonly

Returns the URI [IETF RFC 2396] of the page that linked to this page. The value is an empty string if the user navigated to the page directly (not through a link, but, for example, via a bookmark).

`title` of type `DOMString`

The title of a document as specified by the TITLE element in the head of the document.

### Methods

`close`

Closes a document stream opened by `open()` and forces rendering.

**No Parameters**

**No Return Value**

**No Exceptions**

`getElementsByName`

With [HTML 4.01] documents, this method returns the (possibly empty) collection of elements whose name value is given by `elementName`. In [XHTML 1.0] documents, this methods only return the (possibly empty) collection of form controls with matching name. This method is case sensitive.

**Parameters**

`elementName` of type `DOMString`

The name attribute value for an element.

**Return Value**

`NodeList` The matching elements.

**No Exceptions**

`open`

Open a document stream for writing. If a document exists in the target, this method clears it.

**Note:** This method and the ones following allow a user to add to or replace the structure model of a document using strings of unparsed HTML. At the time of writing alternate methods for providing similar functionality for both HTML and XML documents were being considered (see [DOM Level 3 Load and Save]).

**No Parameters**

**No Return Value**

**No Exceptions**

`write`

Write a string of text to a document stream opened by `open()`. Note that the function will produce a document which is not necessarily driven by a DTD and therefore might be produce an invalid result in the context of the document.

**Parameters**

text of type `DOMString`

The string to be parsed into some structure in the document structure model.

**No Return Value**

**No Exceptions**

`writeln`

Write a string of text followed by a newline character to a document stream opened by `open()`. Note that the function will produce a document which is not necessarily driven by a DTD and therefore might be produce an invalid result in the context of the document

**Parameters**

text of type `DOMString`

The string to be parsed into some structure in the document structure model.

**No Return Value**

**No Exceptions**

## 1.6. HTML Elements

### 1.6.1. Property Attributes

HTML attributes are exposed as properties on the element object. The DOM naming conventions always determine the name of the exposed property, and are independent of the case of the attribute in the source document. The data type of the property is in general determined by the type of the attribute as determined by the HTML 4.01 (transitional and frameset) and XHTML 1.0 DTDs. The attributes have the semantics (including case-sensitivity) given in the [HTML 4.01] and [XHTML 1.0] specifications.

The attributes are exposed as properties for compatibility with *DOM Level 0* [p.127]. This usage is deprecated because it can not be generalized to all possible attribute names for XML. We recommend the use of generic methods on the core `Element` interface for setting, getting and removing attributes.

<b>DTD Data Type</b>	<b><i>Object Model Data Type</i></b>
CDATA	<code>DOMString</code>
Value list (e.g., (left   right   center))	<code>DOMString</code>
one-value Value list (e.g., (disabled))	<code>boolean</code>
Number	<code>long int</code>

In an HTML document the return value of an attribute that has a data type that is a value list is normalized to lowercase (independent of the case of the value in the source document).

For example, if the value of the `align` attribute on a `P` element is "Left" (which is not a valid value in XHTML due to the case sensitivity of XHTML) then the value is returned as "left". For attributes with the CDATA data type, the case of the return value is that given in the source document.

The return value of an attribute that is unspecified and does not have a default value is the empty string if the return type is a `DOMString`, false if the return type is a boolean and 0 if the return type is a number.

## 1.6.2. Naming Exceptions

To avoid namespace conflicts, two attributes with the same name as a keyword in one of our chosen *binding languages* [p.127] were prefixed. The `for` attribute of the `LABEL` and `SCRIPT` elements collides with loop construct naming conventions and is renamed `htmlFor`. The `class` attribute of the `HTML` elements collides with class definitions naming conventions and is renamed `className`.

## 1.6.3. Exposing Element Type Names (`tagName`, (`nodeName`))

If the document is an HTML 4.01 document the element type names exposed through a property are in uppercase. For example, the body element type name is exposed through the `tagName` property as `BODY`. If the document is an XHTML 1.0 document the element name is exposed as it is written in the XHTML file. This means that the element type names are exposed in lowercase for XHTML documents since the XHTML 1.0 DTDs defines element type names as lowercase, and XHTML, being derived from XML, is case sensitive.

## 1.6.4. The `HTML`Element interface

### Interface `HTML`Element

All HTML element interfaces derive from this class. Elements that only expose the HTML core attributes are represented by the base `HTML`Element interface. These elements are as follows:

- special: `SUB`, `SUP`, `SPAN`, `BDO`
- font: `TT`, `I`, `B`, `U`, `S`, `STRIKE`, `BIG`, `SMALL`
- phrase: `EM`, `STRONG`, `DFN`, `CODE`, `SAMP`, `KBD`, `VAR`, `CITE`, `ACRONYM`, `ABBR`
- list: `DD`, `DT`
- `NOFRAMES`, `NOSCRIPT`
- `ADDRESS`, `CENTER`

**Note:** The `style` attribute of an HTML element is accessible through the `ElementCSSInlineStyle` interface which is defined in the CSS module [DOM Level 2 Style Sheets and CSS].

### IDL Definition

```

interface HTMLElement : Element {
    attribute DOMString    id;
    attribute DOMString    title;
    attribute DOMString    lang;
    attribute DOMString    dir;
    attribute DOMString    className;
};

```

**Attributes**

className of type DOMString

The class attribute of the element. This attribute has been renamed due to conflicts with the "class" keyword exposed by many languages. See the class attribute definition in HTML 4.01.

dir of type DOMString

Specifies the base direction of directionally neutral text and the directionality of tables. See the dir attribute definition in HTML 4.01.

id of type DOMString

The element's identifier. See the id attribute definition in HTML 4.01.

lang of type DOMString

Language code defined in RFC 1766. See the lang attribute definition in HTML 4.01.

title of type DOMString

The element's advisory title. See the title attribute definition in HTML 4.01.

## 1.6.5. Object definitions

**Interface *HTMLHtmlElement***

Root of an HTML document. See the HTML element definition in HTML 4.01.

**IDL Definition**

```

interface HTMLHtmlElement : HTMLElement {
    attribute DOMString    version;
};

```

**Attributes**

version of type DOMString

Version information about the document's DTD. See the version attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLHeadElement***

Document head information. See the HEAD element definition in HTML 4.01.

**IDL Definition**

```

interface HTMLHeadElement : HTMLElement {
    attribute DOMString    profile;
};

```

**Attributes**

profile of type DOMString

URI [IETF RFC 2396] designating a metadata profile. See the profile attribute definition in HTML 4.01.

**Interface *HTMLLinkElement***

The LINK element specifies a link to an external resource, and defines this document's relationship to that resource (or vice versa). See the LINK element definition in HTML 4.01 (see also the `LinkStyle` interface in the `StyleSheet` module [DOM Level 2 Style Sheets and CSS]).

**IDL Definition**

```
interface HTMLLinkElement : HTMLInputElement {
    attribute boolean        disabled;
    attribute DOMString      charset;
    attribute DOMString      href;
    attribute DOMString      hreflang;
    attribute DOMString      media;
    attribute DOMString      rel;
    attribute DOMString      rev;
    attribute DOMString      target;
    attribute DOMString      type;
};
```

**Attributes**

charset of type DOMString

The character encoding of the resource being linked to. See the charset attribute definition in HTML 4.01.

disabled of type boolean

Enables/disables the link. This is currently only used for style sheet links, and may be used to activate or deactivate style sheets.

href of type DOMString

The URI [IETF RFC 2396] of the linked resource. See the href attribute definition in HTML 4.01.

hreflang of type DOMString

Language code of the linked resource. See the hreflang attribute definition in HTML 4.01.

media of type DOMString

Designed for use with one or more target media. See the media attribute definition in HTML 4.01.

rel of type DOMString

Forward link type. See the rel attribute definition in HTML 4.01.

rev of type DOMString

Reverse link type. See the rev attribute definition in HTML 4.01.

target of type DOMString

Frame to render the resource in. See the target attribute definition in HTML 4.01.

type of type DOMString

Advisory content type. See the type attribute definition in HTML 4.01.

**Interface *HTMLTitleElement***

The document title. See the TITLE element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLTitleElement : HTMLElement {
    attribute DOMString    text;
};
```

**Attributes**

text of type DOMString  
The specified title as a string.

**Interface *HTMLMetaElement***

This contains generic meta-information about the document. See the META element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLMetaElement : HTMLElement {
    attribute DOMString    content;
    attribute DOMString    httpEquiv;
    attribute DOMString    name;
    attribute DOMString    scheme;
};
```

**Attributes**

content of type DOMString  
Associated information. See the content attribute definition in HTML 4.01.  
httpEquiv of type DOMString  
HTTP response header name [IETF RFC 2616]. See the http-equiv attribute definition in HTML 4.01.  
name of type DOMString  
Meta information name. See the name attribute definition in HTML 4.01.  
scheme of type DOMString  
Select form of content. See the scheme attribute definition in HTML 4.01.

**Interface *HTMLBaseElement***

Document base URI [IETF RFC 2396]. See the BASE element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLBaseElement : HTMLElement {
    attribute DOMString    href;
    attribute DOMString    target;
};
```

**Attributes**

href of type DOMString

The base URI [IETF RFC 2396]. See the href attribute definition in HTML 4.01.

target of type DOMString

The default target frame. See the target attribute definition in HTML 4.01.

### Interface *HTMLIsIndexElement*

This element is used for single-line text input. See the ISINDEX element definition in HTML 4.01. This element is deprecated in HTML 4.01.

#### IDL Definition

```
interface HTMLIsIndexElement : HTMLElement {
    readonly attribute HTMLFormElement form;
    attribute DOMString      prompt;
};
```

#### Attributes

form of type HTMLFormElement [p.25], readonly

Returns the FORM element containing this control. Returns null if this control is not within the context of a form.

prompt of type DOMString

The prompt message. See the prompt attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

### Interface *HTMLStyleElement*

Style information. See the STYLE element definition in HTML 4.01, the CSS module [DOM Level 2 Style Sheets and CSS] and the LinkStyle interface in the StyleSheets module [DOM Level 2 Style Sheets and CSS].

#### IDL Definition

```
interface HTMLStyleElement : HTMLElement {
    attribute boolean      disabled;
    attribute DOMString    media;
    attribute DOMString    type;
};
```

#### Attributes

disabled of type boolean

Enables/disables the style sheet.

media of type DOMString

Designed for use with one or more target media. See the media attribute definition in HTML 4.01.

type of type DOMString

The content type of the style sheet language. See the type attribute definition in HTML 4.01.

### Interface *HTMLBodyElement*



The HTML document body. This element is always present in the DOM API, even if the tags are not present in the source document. See the BODY element definition in HTML 4.01.

### IDL Definition

```
interface HTMLBodyElement : HTMLElement {
    attribute DOMString    aLink;
    attribute DOMString    background;
    attribute DOMString    bgColor;
    attribute DOMString    link;
    attribute DOMString    text;
    attribute DOMString    vLink;
};
```

### Attributes

aLink of type DOMString

Color of active links (after mouse-button down, but before mouse-button up). See the aLink attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

background of type DOMString

URI [IETF RFC 2396] of the background texture tile image. See the background attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

bgColor of type DOMString

Document background color. See the bgColor attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

link of type DOMString

Color of links that are not active and unvisited. See the link attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

text of type DOMString

Document text color. See the text attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

vLink of type DOMString

Color of links that have been visited by the user. See the vLink attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

### Interface *HTMLFormElement*

The FORM element encompasses behavior similar to a collection and an element. It provides direct access to the contained form controls as well as the attributes of the form element. See the FORM element definition in HTML 4.01.

### IDL Definition

```
interface HTMLFormElement : HTMLElement {
    readonly attribute HTMLCollection elements;
    readonly attribute long length;
    attribute DOMString name;
    attribute DOMString acceptCharset;
    attribute DOMString action;
    attribute DOMString enctype;
    attribute DOMString method;
```

```

        attribute DOMString      target;
void      submit();
void      reset();
};

```

**Attributes**

`acceptCharset` of type `DOMString`

List of character sets supported by the server. See the `accept-charset` attribute definition in HTML 4.01.

`action` of type `DOMString`

Server-side form handler. See the `action` attribute definition in HTML 4.01.

`elements` of type `HTMLCollection` [p.13], `readonly`

Returns a collection of all form control elements in the form.

`enctype` of type `DOMString`

The content type of the submitted form, generally "application/x-www-form-urlencoded". See the `enctype` attribute definition in HTML 4.01.

**Note:** The `onsubmit` even handler is not guaranteed to be triggered when invoking this method. The behavior is inconsistent for historical reasons and authors should not rely on a particular one.

`length` of type `long`, `readonly`

The number of form controls in the form.

`method` of type `DOMString`

HTTP method [IETF RFC 2616] used to submit form. See the `method` attribute definition in HTML 4.01.

`name` of type `DOMString`

Names the form.

`target` of type `DOMString`

Frame to render the resource in. See the `target` attribute definition in HTML 4.01.

**Methods**

`reset`

Restores a form element's default values. It performs the same action as a reset button.

**No Parameters**

**No Return Value**

**No Exceptions**

`submit`

Submits the form. It performs the same action as a submit button.

**No Parameters**

**No Return Value**

**No Exceptions**

**Interface *HTMLSelectElement***

The `select` element allows the selection of an option. The contained options can be directly accessed through the `select` element as a collection. See the `SELECT` element definition in HTML 4.01.

**IDL Definition**

```

interface HTMLSelectElement : HTMLElement {
  readonly attribute DOMString      type;
      attribute long                selectedIndex;
      attribute DOMString           value;
  // Modified in DOM Level 2:
      attribute unsigned long       length;
                                      // raises(DOMException) on setting

  readonly attribute HTMLFormElement form;
  // Modified in DOM Level 2:
  readonly attribute HTMLOptionsCollection options;
      attribute boolean             disabled;
      attribute boolean             multiple;
      attribute DOMString           name;
      attribute long                size;
      attribute long                tabIndex;

  void      add(in HTMLElement element,
               in HTMLElement before)
              raises(DOMException);

  void      remove(in long index);
  void      blur();
  void      focus();
};

```

**Attributes**

disabled of type boolean

The control is unavailable in this context. See the disabled attribute definition in HTML 4.01.

form of type HTMLFormElement [p.25] , readonly

Returns the FORM element containing this control. Returns null if this control is not within the context of a form.

length of type unsigned long, modified in **DOM Level 2**

The number of options in this SELECT.

**Exceptions on setting**

DOMException NOT\_SUPPORTED\_ERR: if setting the length is not allowed by the implementation.

multiple of type boolean

If true, multiple OPTION elements may be selected in this SELECT. See the multiple attribute definition in HTML 4.01.

name of type DOMString

Form control or object name when submitted with a form. See the name attribute definition in HTML 4.01.

options of type HTMLOptionsCollection [p.14] , readonly, modified in **DOM Level 2**

The collection of OPTION elements contained by this element.

selectedIndex of type long

The ordinal index of the selected option, starting from 0. The value -1 is returned if no element is selected. If multiple options are selected, the index of the first selected option is

returned.

size of type long

Number of visible rows. See the size attribute definition in HTML 4.01.

tabIndex of type long

Index that represents the element's position in the tabbing order. See the tabIndex attribute definition in HTML 4.01.

type of type DOMString, readonly

The type of this form control. This is the string "select-multiple" when the multiple attribute is true and the string "select-one" when false.

value of type DOMString

The current form control value (i.e. the value of the currently selected option), if multiple options are selected this is the value of the first selected option.

## Methods

add

Add a new element to the collection of OPTION elements for this SELECT. This method is the equivalent of the appendChild method of the Node interface if the before parameter is null. It is equivalent to the insertBefore method on the parent of before in all other cases. This method may have no effect if the new element is not an OPTION or an OPTGROUP.

### Parameters

element of type HTMLInputElement [p.20]

The element to add.

before of type HTMLInputElement

The element to insert before, or null for the tail of the list.

### Exceptions

DOMException NOT\_FOUND\_ERR: Raised if before is not a descendant of the SELECT element.

### No Return Value

blur

Removes keyboard focus from this element.

### No Parameters

### No Return Value

### No Exceptions

focus

Gives keyboard focus to this element.

### No Parameters

### No Return Value

### No Exceptions

remove

Remove an element from the collection of OPTION elements for this SELECT. Does nothing if no element has the given index.

### Parameters

index of type long

The index of the item to remove, starting from 0.

**No Return Value**

**No Exceptions**

### Interface *HTMLOptGroupElement*

Group options together in logical subdivisions. See the OPTGROUP element definition in HTML 4.01.

#### IDL Definition

```
interface HTMLOptGroupElement : HTMLElement {
    attribute boolean        disabled;
    attribute DOMString     label;
};
```

#### Attributes

disabled of type boolean

The control is unavailable in this context. See the disabled attribute definition in HTML 4.01.

label of type DOMString

Assigns a label to this option group. See the label attribute definition in HTML 4.01.

### Interface *HTMLOptionElement*

A selectable choice. See the OPTION element definition in HTML 4.01.

#### IDL Definition

```
interface HTMLOptionElement : HTMLElement {
    readonly attribute HTMLFormElement form;
    // Modified in DOM Level 2:
    attribute boolean        defaultSelected;
    readonly attribute DOMString text;
    // Modified in DOM Level 2:
    readonly attribute long   index;
    attribute boolean        disabled;
    attribute DOMString     label;
    attribute boolean        selected;
    attribute DOMString     value;
};
```

#### Attributes

defaultSelected of type boolean, modified in **DOM Level 2**

Represents the value of the HTML selected attribute. The value of this attribute does not change if the state of the corresponding form control, in an interactive user agent, changes. See the selected attribute definition in HTML 4.01.

disabled of type boolean

The control is unavailable in this context. See the disabled attribute definition in HTML 4.01.

form of type `HTMLFormElement` [p.25] , readonly

Returns the FORM element containing this control. Returns null if this control is not within the context of a form.

index of type long, readonly, modified in **DOM Level 2**

The index of this OPTION in its parent SELECT, starting from 0.

label of type `DOMString`

Option label for use in hierarchical menus. See the label attribute definition in HTML 4.01.

selected of type boolean

Represents the current state of the corresponding form control, in an interactive user agent. Changing this attribute changes the state of the form control, but does not change the value of the HTML selected attribute of the element.

text of type `DOMString`, readonly

The text contained within the option element.

value of type `DOMString`

The current form control value. See the value attribute definition in HTML 4.01.

### Interface *HTMLInputElement*

Form control.

**Note:** Depending upon the environment in which the page is being viewed, the value property may be read-only for the file upload input type. For the "password" input type, the actual value returned may be masked to prevent unauthorized use. See the INPUT element definition in [HTML 4.01].

### IDL Definition

```
interface HTMLInputElement : HTMLElement {
    attribute DOMString      defaultValue;
    attribute boolean        defaultChecked;
    readonly attribute HTMLFormElement form;
    attribute DOMString      accept;
    attribute DOMString      accessKey;
    attribute DOMString      align;
    attribute DOMString      alt;
    attribute boolean        checked;
    attribute boolean        disabled;
    attribute long           maxLength;
    attribute DOMString      name;
    attribute boolean        readOnly;
    // Modified in DOM Level 2:
    attribute unsigned long   size;
    attribute DOMString      src;
    attribute long           tabIndex;
    // Modified in DOM Level 2:
    attribute DOMString      type;
    attribute DOMString      useMap;
    attribute DOMString      value;
    void                    blur();
    void                    focus();
    void                    select();
    void                    click();
};
```

**Attributes**

`accept` of type `DOMString`

A comma-separated list of content types that a server processing this form will handle correctly. See the `accept` attribute definition in HTML 4.01.

`accessKey` of type `DOMString`

A single character access key to give access to the form control. See the `accesskey` attribute definition in HTML 4.01.

`align` of type `DOMString`

Aligns this object (vertically or horizontally) with respect to its surrounding text. See the `align` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

`alt` of type `DOMString`

Alternate text for user agents not rendering the normal content of this element. See the `alt` attribute definition in HTML 4.01.

`checked` of type `boolean`

When the `type` attribute of the element has the value "radio" or "checkbox", this represents the current state of the form control, in an interactive user agent. Changes to this attribute change the state of the form control, but do not change the value of the HTML `checked` attribute of the `INPUT` element.

**Note:** During the handling of a click event on an input element with a `type` attribute that has the value "radio" or "checkbox", some implementations may change the value of this property before the event is being dispatched in the document. If the default action of the event is canceled, the value of the property may be changed back to its original value. This means that the value of this property during the handling of click events is implementation dependent.

`defaultChecked` of type `boolean`

When `type` has the value "radio" or "checkbox", this represents the HTML `checked` attribute of the element. The value of this attribute does not change if the state of the corresponding form control, in an interactive user agent, changes. See the `checked` attribute definition in HTML 4.01.

`defaultValue` of type `DOMString`

When the `type` attribute of the element has the value "text", "file" or "password", this represents the HTML `value` attribute of the element. The value of this attribute does not change if the contents of the corresponding form control, in an interactive user agent, changes. See the `value` attribute definition in HTML 4.01.

`disabled` of type `boolean`

The control is unavailable in this context. See the `disabled` attribute definition in HTML 4.01.

`form` of type `HTMLFormElement` [p.25] , `readonly`

Returns the `FORM` element containing this control. Returns `null` if this control is not within the context of a form.

`maxLength` of type `long`

Maximum number of characters for text fields, when `type` has the value "text" or "password". See the `maxlength` attribute definition in HTML 4.01.

name of type DOMString

Form control or object name when submitted with a form. See the name attribute definition in HTML 4.01.

readOnly of type boolean

This control is read-only. Relevant only when type has the value "text" or "password". See the readonly attribute definition in HTML 4.01.

size of type unsigned long, modified in **DOM Level 2**

Size information. The precise meaning is specific to each type of field. See the size attribute definition in HTML 4.01.

src of type DOMString

When the type attribute has the value "image", this attribute specifies the location of the image to be used to decorate the graphical submit button. See the src attribute definition in HTML 4.01.

tabIndex of type long

Index that represents the element's position in the tabbing order. See the tabIndex attribute definition in HTML 4.01.

type of type DOMString, modified in **DOM Level 2**

The type of control created (all lower case). See the type attribute definition in HTML 4.01.

useMap of type DOMString

Use client-side image map. See the usemap attribute definition in HTML 4.01.

value of type DOMString

When the type attribute of the element has the value "text", "file" or "password", this represents the current contents of the corresponding form control, in an interactive user agent. Changing this attribute changes the contents of the form control, but does not change the value of the HTML value attribute of the element. When the type attribute of the element has the value "button", "hidden", "submit", "reset", "image", "checkbox" or "radio", this represents the HTML value attribute of the element. See the value attribute definition in HTML 4.01.

## Methods

blur

Removes keyboard focus from this element.

**No Parameters**

**No Return Value**

**No Exceptions**

click

Simulate a mouse-click. For INPUT elements whose type attribute has one of the following values: "button", "checkbox", "radio", "reset", or "submit".

**No Parameters**

**No Return Value**

**No Exceptions**

focus

Gives keyboard focus to this element.

**No Parameters**

**No Return Value**

**No Exceptions**



`select`

Select the contents of the text area. For `INPUT` elements whose `type` attribute has one of the following values: "text", "file", or "password".

**No Parameters**

**No Return Value**

**No Exceptions**

### Interface *HTMLTextAreaElement*

Multi-line text field. See the `TEXTAREA` element definition in HTML 4.01.

### IDL Definition

```
interface HTMLTextAreaElement : HTMLElement {
  // Modified in DOM Level 2:
  attribute DOMString      defaultValue;
  readonly attribute HTMLFormElement form;
  attribute DOMString      accessKey;
  attribute long           cols;
  attribute boolean        disabled;
  attribute DOMString      name;
  attribute boolean        readOnly;
  attribute long           rows;
  attribute long           tabIndex;
  readonly attribute DOMString type;
  attribute DOMString      value;

  void      blur();
  void      focus();
  void      select();
};
```

### Attributes

`accessKey` of type `DOMString`

A single character access key to give access to the form control. See the `accesskey` attribute definition in HTML 4.01.

`cols` of type `long`

Width of control (in characters). See the `cols` attribute definition in HTML 4.01.

`defaultValue` of type `DOMString`, modified in **DOM Level 2**

Represents the contents of the element. The value of this attribute does not change if the contents of the corresponding form control, in an interactive user agent, changes.

`disabled` of type `boolean`

The control is unavailable in this context. See the `disabled` attribute definition in HTML 4.01.

`form` of type `HTMLFormElement` [p.25], `readonly`

Returns the `FORM` element containing this control. Returns `null` if this control is not within the context of a form.

`name` of type `DOMString`

Form control or object name when submitted with a form. See the `name` attribute definition in HTML 4.01.

`readOnly` of type `boolean`

This control is read-only. See the `readOnly` attribute definition in HTML 4.01.

`rows` of type `long`

Number of text rows. See the `rows` attribute definition in HTML 4.01.

`tabIndex` of type `long`

Index that represents the element's position in the tabbing order. See the `tabindex` attribute definition in HTML 4.01.

`type` of type `DOMString`, `readonly`

The type of this form control. This the string "textarea".

`value` of type `DOMString`

Represents the current contents of the corresponding form control, in an interactive user agent. Changing this attribute changes the contents of the form control, but does not change the contents of the element. If the entirety of the data can not fit into a single `DOMString`, the implementation may truncate the data.

### Methods

`blur`

Removes keyboard focus from this element.

**No Parameters**

**No Return Value**

**No Exceptions**

`focus`

Gives keyboard focus to this element.

**No Parameters**

**No Return Value**

**No Exceptions**

`select`

Select the contents of the `TEXTAREA`.

**No Parameters**

**No Return Value**

**No Exceptions**

### Interface *HTMLButtonElement*

Push button. See the `BUTTON` element definition in HTML 4.01.

### IDL Definition

```
interface HTMLButtonElement : HTMLElement {
  readonly attribute HTMLFormElement form;
  attribute DOMString      accessKey;
  attribute boolean        disabled;
  attribute DOMString      name;
  attribute long           tabIndex;
  readonly attribute DOMString type;
  attribute DOMString      value;
};
```

### Attributes

`accessKey` of type `DOMString`

A single character access key to give access to the form control. See the `accesskey` attribute definition in HTML 4.01.

`disabled` of type `boolean`

The control is unavailable in this context. See the `disabled` attribute definition in HTML 4.01.

`form` of type `HTMLFormElement` [p.25], `readonly`

Returns the `FORM` element containing this control. Returns `null` if this control is not within the context of a form.

`name` of type `DOMString`

Form control or object name when submitted with a form. See the `name` attribute definition in HTML 4.01.

`tabIndex` of type `long`

Index that represents the element's position in the tabbing order. See the `tabindex` attribute definition in HTML 4.01.

`type` of type `DOMString`, `readonly`

The type of button (all lower case). See the `type` attribute definition in HTML 4.01.

`value` of type `DOMString`

The current form control value. See the `value` attribute definition in HTML 4.01.

### **Interface *HTMLLabelElement***

Form field label text. See the `LABEL` element definition in HTML 4.01.

#### **IDL Definition**

```
interface HTMLLabelElement : HTMLElement {
    readonly attribute HTMLFormElement form;
    attribute DOMString      accessKey;
    attribute DOMString      htmlFor;
};
```

#### **Attributes**

`accessKey` of type `DOMString`

A single character access key to give access to the form control. See the `accesskey` attribute definition in HTML 4.01.

`form` of type `HTMLFormElement` [p.25], `readonly`

Returns the `FORM` element containing this control. Returns `null` if this control is not within the context of a form.

`htmlFor` of type `DOMString`

This attribute links this label with another form control by `id` attribute. See the `for` attribute definition in HTML 4.01.

### **Interface *HTMLFieldSetElement***

Organizes form controls into logical groups. See the `FIELDSET` element definition in HTML 4.01.

#### **IDL Definition**

```
interface HTMLFieldSetElement : HTMLElement {
  readonly attribute HTMLFormElement form;
};
```

**Attributes**

form of type HTMLFormElement [p.25] , readonly

Returns the FORM element containing this control. Returns null if this control is not within the context of a form.

**Interface *HTMLLegendElement***

Provides a caption for a FIELDSET grouping. See the LEGEND element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLLegendElement : HTMLElement {
  readonly attribute HTMLFormElement form;
  attribute DOMString      accessKey;
  attribute DOMString      align;
};
```

**Attributes**

accessKey of type DOMString

A single character access key to give access to the form control. See the accesskey attribute definition in HTML 4.01.

align of type DOMString

Text alignment relative to FIELDSET. See the align attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

form of type HTMLFormElement [p.25] , readonly

Returns the FORM element containing this control. Returns null if this control is not within the context of a form.

**Interface *HTMLULListElement***

Unordered list. See the UL element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLULListElement : HTMLElement {
  attribute boolean      compact;
  attribute DOMString    type;
};
```

**Attributes**

compact of type boolean

Reduce spacing between list items. See the compact attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

type of type DOMString

Bullet style. See the type attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLLOListElement***

Ordered list. See the OL element definition in HTML 4.01.

### IDL Definition

```
interface HTMLListElement : HTMLElement {
    attribute boolean        compact;
    attribute long          start;
    attribute DOMString     type;
};
```

### Attributes

compact of type boolean

Reduce spacing between list items. See the compact attribute definition in HTML 4.01.

This attribute is deprecated in HTML 4.01.

start of type long

Starting sequence number. See the start attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

type of type DOMString

Numbering style. See the type attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

### Interface *HTMLDLListElement*

Definition list. See the DL element definition in HTML 4.01.

### IDL Definition

```
interface HTMLDLListElement : HTMLElement {
    attribute boolean        compact;
};
```

### Attributes

compact of type boolean

Reduce spacing between list items. See the compact attribute definition in HTML 4.01.

This attribute is deprecated in HTML 4.01.

### Interface *HTMLDirectoryElement*

Directory list. See the DIR element definition in HTML 4.01. This element is deprecated in HTML 4.01.

### IDL Definition

```
interface HTMLDirectoryElement : HTMLElement {
    attribute boolean        compact;
};
```

### Attributes

compact of type boolean

Reduce spacing between list items. See the compact attribute definition in HTML 4.01.

This attribute is deprecated in HTML 4.01.

**Interface *HTMLMenuElement***

Menu list. See the MENU element definition in HTML 4.01. This element is deprecated in HTML 4.01.

**IDL Definition**

```
interface HTMLMenuElement : HTMLElement {
    attribute boolean        compact;
};
```

**Attributes**

compact of type boolean

Reduce spacing between list items. See the compact attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLLIElement***

List item. See the LI element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLLIElement : HTMLElement {
    attribute DOMString    type;
    attribute long         value;
};
```

**Attributes**

type of type DOMString

List item bullet style. See the type attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

value of type long

Reset sequence number when used in OL. See the value attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLDivElement***

Generic block container. See the DIV element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLDivElement : HTMLElement {
    attribute DOMString    align;
};
```

**Attributes**

align of type DOMString

Horizontal text alignment. See the align attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLParagraphElement***

Paragraphs. See the P element definition in HTML 4.01.

### IDL Definition

```
interface HTMLParagraphElement : HTMLElement {
    attribute DOMString    align;
};
```

### Attributes

align of type DOMString  
Horizontal text alignment. See the align attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

### Interface *HTMLHeadingElement*

For the H1 to H6 elements. See the H1 element definition in HTML 4.01.

### IDL Definition

```
interface HTMLHeadingElement : HTMLElement {
    attribute DOMString    align;
};
```

### Attributes

align of type DOMString  
Horizontal text alignment. See the align attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

### Interface *HTMLQuoteElement*

For the Q and BLOCKQUOTE elements. See the Q element definition in HTML 4.01.

### IDL Definition

```
interface HTMLQuoteElement : HTMLElement {
    attribute DOMString    cite;
};
```

### Attributes

cite of type DOMString  
A URI [IETF RFC 2396] designating a source document or message. See the cite attribute definition in HTML 4.01.

### Interface *HTMLPreElement*

Preformatted text. See the PRE element definition in HTML 4.01.

### IDL Definition

```
interface HTMLPreElement : HTMLElement {
    attribute long        width;
};
```

**Attributes**

width of type long

Fixed width for content. See the width attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLBRElement***

Force a line break. See the BR element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLBRElement : HTMLElement {
    attribute DOMString    clear;
};
```

**Attributes**

clear of type DOMString

Control flow of text around floats. See the clear attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLBaseFontElement***

Base font. See the BASEFONT element definition in HTML 4.01. This element is deprecated in HTML 4.01.

**IDL Definition**

```
interface HTMLBaseFontElement : HTMLElement {
    attribute DOMString    color;
    attribute DOMString    face;
    // Modified in DOM Level 2:
    attribute long         size;
};
```

**Attributes**

color of type DOMString

Font color. See the color attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

face of type DOMString

Font face identifier. See the face attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

size of type long, modified in **DOM Level 2**

Computed font size. See the size attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLFontElement***

Local change to font. See the FONT element definition in HTML 4.01. This element is deprecated in HTML 4.01.

**IDL Definition**



```
interface HTMLFontElement : HTMLElement {
    attribute DOMString    color;
    attribute DOMString    face;
    attribute DOMString    size;
};
```

**Attributes**

- color** of type `DOMString`  
Font color. See the `color` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- face** of type `DOMString`  
Font face identifier. See the `face` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- size** of type `DOMString`  
Font size. See the `size` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLHRElement***

Create a horizontal rule. See the `HR` element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLHRElement : HTMLElement {
    attribute DOMString    align;
    attribute boolean      noShade;
    attribute DOMString    size;
    attribute DOMString    width;
};
```

**Attributes**

- align** of type `DOMString`  
Align the rule on the page. See the `align` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- noShade** of type `boolean`  
Indicates to the user agent that there should be no shading in the rendering of this element. See the `noshade` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- size** of type `DOMString`  
The height of the rule. See the `size` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- width** of type `DOMString`  
The width of the rule. See the `width` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLModElement***

Notice of modification to part of a document. See the `INS` and `DEL` element definitions in HTML 4.01.

**IDL Definition**

```
interface HTMLModElement : HTMLElement {
    attribute DOMString    cite;
    attribute DOMString    dateTime;
};
```

**Attributes**

`cite` of type `DOMString`

A URI [IETF RFC 2396] designating a document that describes the reason for the change. See the `cite` attribute definition in HTML 4.01.

`dateTime` of type `DOMString`

The date and time of the change. See the `datetime` attribute definition in HTML 4.01.

**Interface *HTMLAnchorElement***

The anchor element. See the `A` element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLAnchorElement : HTMLElement {
    attribute DOMString    accessKey;
    attribute DOMString    charset;
    attribute DOMString    coords;
    attribute DOMString    href;
    attribute DOMString    hreflang;
    attribute DOMString    name;
    attribute DOMString    rel;
    attribute DOMString    rev;
    attribute DOMString    shape;
    attribute long         tabIndex;
    attribute DOMString    target;
    attribute DOMString    type;

    void                    blur();
    void                    focus();
};
```

**Attributes**

`accessKey` of type `DOMString`

A single character access key to give access to the form control. See the `accesskey` attribute definition in HTML 4.01.

`charset` of type `DOMString`

The character encoding of the linked resource. See the `charset` attribute definition in HTML 4.01.

`coords` of type `DOMString`

Comma-separated list of lengths, defining an active region geometry. See also `shape` for the shape of the region. See the `coords` attribute definition in HTML 4.01.

`href` of type `DOMString`

The absolute URI [IETF RFC 2396] of the linked resource. See the `href` attribute definition in HTML 4.01.

hreflang of type DOMString

Language code of the linked resource. See the hreflang attribute definition in HTML 4.01.

name of type DOMString

Anchor name. See the name attribute definition in HTML 4.01.

rel of type DOMString

Forward link type. See the rel attribute definition in HTML 4.01.

rev of type DOMString

Reverse link type. See the rev attribute definition in HTML 4.01.

shape of type DOMString

The shape of the active area. The coordinates are given by coords. See the shape attribute definition in HTML 4.01.

tabIndex of type long

Index that represents the element's position in the tabbing order. See the tabIndex attribute definition in HTML 4.01.

target of type DOMString

Frame to render the resource in. See the target attribute definition in HTML 4.01.

type of type DOMString

Advisory content type. See the type attribute definition in HTML 4.01.

### Methods

blur

Removes keyboard focus from this element.

**No Parameters**

**No Return Value**

**No Exceptions**

focus

Gives keyboard focus to this element.

**No Parameters**

**No Return Value**

**No Exceptions**

### Interface *HTMLImageElement*

Embedded image. See the IMG element definition in HTML 4.01.

### IDL Definition

```
interface HTMLImageElement : HTMLElement {
    attribute DOMString    name;
    attribute DOMString    align;
    attribute DOMString    alt;
    attribute DOMString    border;
    // Modified in DOM Level 2:
    attribute long         height;
    // Modified in DOM Level 2:
    attribute long         hspace;
    attribute boolean      isMap;
    attribute DOMString    longDesc;
    attribute DOMString    src;
    attribute DOMString    useMap;
    // Modified in DOM Level 2:
```

```

        attribute long          vspace;
// Modified in DOM Level 2:
        attribute long          width;
};

```

### Attributes

- align of type DOMString  
Aligns this object (vertically or horizontally) with respect to its surrounding text. See the align attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- alt of type DOMString  
Alternate text for user agents not rendering the normal content of this element. See the alt attribute definition in HTML 4.01.
- border of type DOMString  
Width of border around image. See the border attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01. Note that the type of this attribute was DOMString in DOM Level 1 HTML [DOM Level 1].
- height of type long, modified in **DOM Level 2**  
Height of the image in pixels. See the height attribute definition in HTML 4.01. Note that the type of this attribute was DOMString in DOM Level 1 HTML [DOM Level 1].
- hspace of type long, modified in **DOM Level 2**  
Horizontal space to the left and right of this image in pixels. See the hspace attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01. Note that the type of this attribute was DOMString in DOM Level 1 HTML [DOM Level 1].
- isMap of type boolean  
Use server-side image map. See the ismap attribute definition in HTML 4.01.
- longDesc of type DOMString  
URI [IETF RFC 2396] designating a long description of this image or frame. See the longdesc attribute definition in HTML 4.01.
- name of type DOMString  
The name of the element (for backwards compatibility).
- src of type DOMString  
URI [IETF RFC 2396] designating the source of this image. See the src attribute definition in HTML 4.01.
- useMap of type DOMString  
Use client-side image map. See the usemap attribute definition in HTML 4.01.
- vspace of type long, modified in **DOM Level 2**  
Vertical space above and below this image in pixels. See the vspace attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01. Note that the type of this attribute was "DOMString" in DOM Level 1 HTML [DOM Level 1].
- width of type long, modified in **DOM Level 2**  
The width of the image in pixels. See the width attribute definition in HTML 4.01. Note that the type of this attribute was DOMString in DOM Level 1 HTML [DOM Level 1].

### Interface *HTMLObjectElement*

Generic embedded object.

**Note:** In principle, all properties on the object element are read-write but in some environments some properties may be read-only once the underlying object is instantiated. See the OBJECT element definition in [HTML 4.01].

### IDL Definition

```
interface HTMLObjectElement : HTMLElement {
  readonly attribute HTMLFormElement form;
  attribute DOMString code;
  attribute DOMString align;
  attribute DOMString archive;
  attribute DOMString border;
  attribute DOMString codeBase;
  attribute DOMString codeType;
  attribute DOMString data;
  attribute boolean declare;
  attribute DOMString height;
  attribute long hspace;
  attribute DOMString name;
  attribute DOMString standby;
  attribute long tabIndex;
  attribute DOMString type;
  attribute DOMString useMap;
  attribute long vspace;
  attribute DOMString width;
  // Introduced in DOM Level 2:
  readonly attribute Document contentDocument;
};
```

### Attributes

- align of type DOMString  
Aligns this object (vertically or horizontally) with respect to its surrounding text. See the align attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- archive of type DOMString  
Space-separated list of archives. See the archive attribute definition in HTML 4.01.
- border of type DOMString  
Width of border around the object. See the border attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- code of type DOMString  
Applet class file. See the code attribute for HTMLAppletElement.
- codeBase of type DOMString  
Base URI [IETF RFC 2396] for classid, data, and archive attributes. See the codebase attribute definition in HTML 4.01.
- codeType of type DOMString  
Content type for data downloaded via classid attribute. See the codetype attribute definition in HTML 4.01.
- contentDocument of type Document, readonly, introduced in **DOM Level 2**  
The document this object contains, if there is any and it is available, or null otherwise.
- data of type DOMString  
A URI [IETF RFC 2396] specifying the location of the object's data. See the data attribute definition in HTML 4.01.

- `declare` of type `boolean`  
 Declare (for future reference), but do not instantiate, this object. See the `declare` attribute definition in HTML 4.01.
- `form` of type `HTMLFormElement` [p.25] , `readonly`  
 Returns the FORM element containing this control. Returns `null` if this control is not within the context of a form.
- `height` of type `DOMString`  
 Override height. See the `height` attribute definition in HTML 4.01.
- `hspace` of type `long`  
 Horizontal space, in pixels, to the left and right of this image, applet, or object. See the `hspace` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- `name` of type `DOMString`  
 Form control or object name when submitted with a form. See the `name` attribute definition in HTML 4.01.
- `standby` of type `DOMString`  
 Message to render while loading the object. See the `standby` attribute definition in HTML 4.01.
- `tabIndex` of type `long`  
 Index that represents the element's position in the tabbing order. See the `tabindex` attribute definition in HTML 4.01.
- `type` of type `DOMString`  
 Content type for data downloaded via `data` attribute. See the `type` attribute definition in HTML 4.01.
- `useMap` of type `DOMString`  
 Use client-side image map. See the `usemap` attribute definition in HTML 4.01.
- `vspace` of type `long`  
 Vertical space, in pixels, above and below this image, applet, or object. See the `vspace` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- `width` of type `DOMString`  
 Override width. See the `width` attribute definition in HTML 4.01.

### **Interface *HTMLParamElement***

Parameters fed to the OBJECT element. See the PARAM element definition in HTML 4.01.

#### **IDL Definition**

```
interface HTMLParamElement : HTMLElement {
    attribute DOMString    name;
    attribute DOMString    type;
    attribute DOMString    value;
    attribute DOMString    valueType;
};
```

#### **Attributes**

- `name` of type `DOMString`  
 The name of a run-time parameter. See the `name` attribute definition in HTML 4.01.

type of type DOMString

Content type for the value attribute when valueType has the value "ref". See the type attribute definition in HTML 4.01.

value of type DOMString

The value of a run-time parameter. See the value attribute definition in HTML 4.01.

valueType of type DOMString

Information about the meaning of the value attribute value. See the valueType attribute definition in HTML 4.01.

### Interface *HTMLAppletElement*

An embedded Java applet. See the APPLET element definition in HTML 4.01. This element is deprecated in HTML 4.01.

#### IDL Definition

```
interface HTMLAppletElement : HTMLElement {
    attribute DOMString    align;
    attribute DOMString    alt;
    attribute DOMString    archive;
    attribute DOMString    code;
    attribute DOMString    codeBase;
    attribute DOMString    height;
    // Modified in DOM Level 2:
    attribute long         hspace;
    attribute DOMString    name;
    // Modified in DOM Level 2:
    attribute DOMString    object;
    // Modified in DOM Level 2:
    attribute long         vspace;
    attribute DOMString    width;
};
```

#### Attributes

align of type DOMString

Aligns this object (vertically or horizontally) with respect to its surrounding text. See the align attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

alt of type DOMString

Alternate text for user agents not rendering the normal content of this element. See the alt attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

archive of type DOMString

Comma-separated archive list. See the archive attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

code of type DOMString

Applet class file. See the code attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

codeBase of type DOMString

Optional base URI [IETF RFC 2396] for applet. See the codebase attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

height of type DOMString

Override height. See the height attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

hspace of type long, modified in **DOM Level 2**

Horizontal space, in pixels, to the left and right of this image, applet, or object. See the hspace attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

name of type DOMString

The name of the applet. See the name attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

object of type DOMString, modified in **DOM Level 2**

The value of the "object" attribute. See the object attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

vspace of type long, modified in **DOM Level 2**

Vertical space, in pixels, above and below this image, applet, or object. See the vspace attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

width of type DOMString

Override width. See the width attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

### Interface *HTMLMapElement*

Client-side image map. See the MAP element definition in HTML 4.01.

#### IDL Definition

```
interface HTMLMapElement : HTMLElement {
    readonly attribute HTMLCollection  areas;
    attribute DOMString               name;
};
```

#### Attributes

areas of type HTMLCollection [p.13], readonly

The list of areas defined for the image map.

name of type DOMString

Names the map (for use with usemap). See the name attribute definition in HTML 4.01.

### Interface *HTMLAreaElement*

Client-side image map area definition. See the AREA element definition in HTML 4.01.

#### IDL Definition

```
interface HTMLAreaElement : HTMLElement {
    attribute DOMString    accessKey;
    attribute DOMString    alt;
    attribute DOMString    coords;
    attribute DOMString    href;
    attribute boolean      noHref;
    attribute DOMString    shape;
    attribute long         tabIndex;
    attribute DOMString    target;
};
```



**Attributes**

`accessKey` of type `DOMString`

A single character access key to give access to the form control. See the `accesskey` attribute definition in HTML 4.01.

`alt` of type `DOMString`

Alternate text for user agents not rendering the normal content of this element. See the `alt` attribute definition in HTML 4.01.

`coords` of type `DOMString`

Comma-separated list of lengths, defining an active region geometry. See also `shape` for the shape of the region. See the `coords` attribute definition in HTML 4.01.

`href` of type `DOMString`

The URI [IETF RFC 2396] of the linked resource. See the `href` attribute definition in HTML 4.01.

`noHref` of type `boolean`

Specifies that this area is inactive, i.e., has no associated action. See the `nohref` attribute definition in HTML 4.01.

`shape` of type `DOMString`

The shape of the active area. The coordinates are given by `coords`. See the `shape` attribute definition in HTML 4.01.

`tabIndex` of type `long`

Index that represents the element's position in the tabbing order. See the `tabindex` attribute definition in HTML 4.01.

`target` of type `DOMString`

Frame to render the resource in. See the `target` attribute definition in HTML 4.01.

**Interface *HTMLScriptElement***

Script statements. See the `SCRIPT` element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLScriptElement : HTMLElement {
    attribute DOMString    text;
    attribute DOMString    htmlFor;
    attribute DOMString    event;
    attribute DOMString    charset;
    attribute boolean      defer;
    attribute DOMString    src;
    attribute DOMString    type;
};
```

**Attributes**

`charset` of type `DOMString`

The character encoding of the linked resource. See the `charset` attribute definition in HTML 4.01.

`defer` of type `boolean`

Indicates that the user agent can defer processing of the script. See the `defer` attribute definition in HTML 4.01.

event of type DOMString  
*Reserved for future use.*

htmlFor of type DOMString  
*Reserved for future use.*

src of type DOMString  
 URI [IETF RFC 2396] designating an external script. See the src attribute definition in HTML 4.01.

text of type DOMString  
 The script content of the element.

type of type DOMString  
 The content type of the script language. See the type attribute definition in HTML 4.01.

### Interface *HTMLTableElement*

The create\* and delete\* methods on the table allow authors to construct and modify tables. [HTML 4.01] specifies that only one of each of the CAPTION, THEAD, and TFOOT elements may exist in a table. Therefore, if one exists, and the createTHead() or createTFoot() method is called, the method returns the existing THead or TFoot element. See the TABLE element definition in HTML 4.01.

### IDL Definition

```
interface HTMLTableElement : HTMLElement {
  // Modified in DOM Level 2:
  attribute HTMLTableCaptionElement caption;
                                     // raises(DOMException) on setting

  // Modified in DOM Level 2:
  attribute HTMLTableSectionElement tHead;
                                     // raises(DOMException) on setting

  // Modified in DOM Level 2:
  attribute HTMLTableSectionElement tFoot;
                                     // raises(DOMException) on setting

  readonly attribute HTMLCollection rows;
  readonly attribute HTMLCollection tBodies;
  attribute DOMString align;
  attribute DOMString bgColor;
  attribute DOMString border;
  attribute DOMString cellPadding;
  attribute DOMString cellSpacing;
  attribute DOMString frame;
  attribute DOMString rules;
  attribute DOMString summary;
  attribute DOMString width;

  HTMLElement createTHead();
  void deleteTHead();
  HTMLElement createTFoot();
  void deleteTFoot();
  HTMLElement createCaption();
  void deleteCaption();
  // Modified in DOM Level 2:
  HTMLElement insertRow(in long index)
                                     raises(DOMException);
}
```

```

// Modified in DOM Level 2:
void      deleteRow(in long index)
                raises(DOMException);
};

```

### Attributes

- `align` of type `DOMString`  
 Specifies the table's position with respect to the rest of the document. See the `align` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- `bgColor` of type `DOMString`  
 Cell background color. See the `bgcolor` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.
- `border` of type `DOMString`  
 The width of the border around the table. See the `border` attribute definition in HTML 4.01.
- `caption` of type `HTMLTableCaptionElement` [p.53] , modified in **DOM Level 2**  
 Returns the table's `CAPTION`, or `void` if none exists.
- Exceptions on setting**
- `DOMException` `HIERARCHY_REQUEST_ERR`: if the element is not a `CAPTION`.
- `cellPadding` of type `DOMString`  
 Specifies the horizontal and vertical space between cell content and cell borders. See the `cellpadding` attribute definition in HTML 4.01.
- `cellSpacing` of type `DOMString`  
 Specifies the horizontal and vertical separation between cells. See the `cellspacing` attribute definition in HTML 4.01.
- `frame` of type `DOMString`  
 Specifies which external table borders to render. See the `frame` attribute definition in HTML 4.01.
- `rows` of type `HTMLCollection` [p.13] , `readonly`  
 Returns a collection of all the rows in the table, including all in `THEAD`, `TFOOT`, all `TBODY` elements.
- `rules` of type `DOMString`  
 Specifies which internal table borders to render. See the `rules` attribute definition in HTML 4.01.
- `summary` of type `DOMString`  
 Description about the purpose or structure of a table. See the `summary` attribute definition in HTML 4.01.
- `tBodies` of type `HTMLCollection` [p.13] , `readonly`  
 Returns a collection of the table bodies (including implicit ones).
- `tFoot` of type `HTMLTableSectionElement` [p.54] , modified in **DOM Level 2**  
 Returns the table's `TFOOT`, or `null` if none exists.
- Exceptions on setting**

`DOMException` `HIERARCHY_REQUEST_ERR`: if the element is not a `TFOOT`.

`tHead` of type `HTMLTableSectionElement` [p.54] , modified in **DOM Level 2**

Returns the table's `THEAD`, or `null` if none exists.

**Exceptions on setting**

`DOMException` `HIERARCHY_REQUEST_ERR`: if the element is not a `THEAD`.

`width` of type `DOMString`

Specifies the desired table width. See the `width` attribute definition in HTML 4.01.

**Methods**

`createCaption`

Create a new table caption object or return an existing one.

**Return Value**

`HTMLElement` [p.20] A `CAPTION` element.

**No Parameters**

**No Exceptions**

`createTFoot`

Create a table footer row or return an existing one.

**Return Value**

`HTMLElement` [p.20] A footer element (`TFOOT`).

**No Parameters**

**No Exceptions**

`createTHead`

Create a table header row or return an existing one.

**Return Value**

`HTMLElement` [p.20] A new table header element (`THEAD`).

**No Parameters**

**No Exceptions**

`deleteCaption`

Delete the table caption, if one exists.

**No Parameters**

**No Return Value**

**No Exceptions**

`deleteRow` modified in **DOM Level 2**

Delete a table row.

**Parameters**

`index` of type `long`

The index of the row to be deleted. This index starts from 0 and is relative to the logical order (not document order) of all the rows contained inside the table. If the

index is -1 the last row in the table is deleted.

### Exceptions

`DOMException` `INDEX_SIZE_ERR`: Raised if the specified index is greater than or equal to the number of rows or if the index is a negative number other than -1.

### No Return Value

`deleteTFoot`

Delete the footer from the table, if one exists.

### No Parameters

### No Return Value

### No Exceptions

`deleteTHead`

Delete the header from the table, if one exists.

### No Parameters

### No Return Value

### No Exceptions

`insertRow` modified in **DOM Level 2**

Insert a new empty row in the table. The new row is inserted immediately before and in the same section as the current `index`th row in the table. If `index` is -1 or equal to the number of rows, the new row is appended. In addition, when the table is empty the row is inserted into a `TBODY` which is created and inserted into the table.

**Note:** A table row cannot be empty according to [HTML 4.01].

### Parameters

`index` of type `long`

The row number where to insert a new row. This index starts from 0 and is relative to the logical order (not document order) of all the rows contained inside the table.

### Return Value

`HTMLElement` [p.20] The newly created row.

### Exceptions

`DOMException` `INDEX_SIZE_ERR`: Raised if the specified index is greater than the number of rows or if the index is a negative number other than -1.

## Interface *HTMLTableCaptionElement*

Table caption See the `CAPTION` element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLTableCaptionElement : HTMLElement {
    attribute DOMString    align;
};
```

**Attributes**

`align` of type `DOMString`  
Caption alignment with respect to the table. See the `align` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**Interface *HTMLTableColElement***

Regroups the `COL` and `COLGROUP` elements. See the `COL` element definition in HTML 4.01.

**IDL Definition**

```
interface HTMLTableColElement : HTMLElement {
    attribute DOMString    align;
    attribute DOMString    ch;
    attribute DOMString    chOff;
    attribute long         span;
    attribute DOMString    vAlign;
    attribute DOMString    width;
};
```

**Attributes**

`align` of type `DOMString`  
Horizontal alignment of cell data in column. See the `align` attribute definition in HTML 4.01.

`ch` of type `DOMString`  
Alignment character for cells in a column. See the `char` attribute definition in HTML 4.01.

`chOff` of type `DOMString`  
Offset of alignment character. See the `charoff` attribute definition in HTML 4.01.

`span` of type `long`  
Indicates the number of columns in a group or affected by a grouping. See the `span` attribute definition in HTML 4.01.

`vAlign` of type `DOMString`  
Vertical alignment of cell data in column. See the `valign` attribute definition in HTML 4.01.

`width` of type `DOMString`  
Default column width. See the `width` attribute definition in HTML 4.01.

**Interface *HTMLTableSectionElement***

The `THEAD`, `TFOOT`, and `TBODY` elements.

**IDL Definition**

```
interface HTMLTableSectionElement : HTMLElement {
    attribute DOMString    align;
    attribute DOMString    ch;
    attribute DOMString    chOff;
    attribute DOMString    vAlign;
```

```

readonly attribute HTMLCollection rows;
// Modified in DOM Level 2:
HTMLCollection insertRow(in long index)
                                   raises(DOMException);
// Modified in DOM Level 2:
void deleteRow(in long index)
                                   raises(DOMException);
};

```

**Attributes**

**align** of type DOMString  
Horizontal alignment of data in cells. See the `align` attribute for `HTMLTheadElement` for details.

**ch** of type DOMString  
Alignment character for cells in a column. See the `char` attribute definition in HTML 4.01.

**chOff** of type DOMString  
Offset of alignment character. See the `charoff` attribute definition in HTML 4.01.

**rows** of type HTMLCollection [p.13] , readonly  
The collection of rows in this table section.

**vAlign** of type DOMString  
Vertical alignment of data in cells. See the `vAlign` attribute for `HTMLTheadElement` for details.

**Methods**

**deleteRow** modified in **DOM Level 2**

Delete a row from this section.

**Parameters**

**index** of type long

The index of the row to be deleted, or -1 to delete the last row. This index starts from 0 and is relative only to the rows contained inside this section, not all the rows in the table.

**Exceptions**

`DOMException` **INDEX\_SIZE\_ERR**: Raised if the specified index is greater than or equal to the number of rows or if the index is a negative number other than -1.

**No Return Value**

**insertRow** modified in **DOM Level 2**

Insert a row into this section. The new row is inserted immediately before the current `index`th row in this section. If `index` is -1 or equal to the number of rows in this section, the new row is appended.

**Parameters**

**index** of type long

The row number where to insert a new row. This index starts from 0 and is relative only to the rows contained inside this section, not all the rows in the table.

**Return Value**

HTML`Element` [p.20] The newly created row.

### Exceptions

DOM`Exception` `INDEX_SIZE_ERR`: Raised if the specified index is greater than the number of rows of if the index is a negative number other than -1.

### Interface *HTMLTableRowElement*

A row in a table. See the TR element definition in HTML 4.01.

#### IDL Definition

```
interface HTMLTableRowElement : HTMLElement {
  // Modified in DOM Level 2:
  readonly attribute long          rowIndex;
  // Modified in DOM Level 2:
  readonly attribute long          sectionRowIndex;
  // Modified in DOM Level 2:
  readonly attribute HTMLCollection cells;
  attribute DOMString            align;
  attribute DOMString            bgColor;
  attribute DOMString            ch;
  attribute DOMString            chOff;
  attribute DOMString            vAlign;
  // Modified in DOM Level 2:
  HTMLElement                    insertCell(in long index)
                                  raises(DOMException);
  // Modified in DOM Level 2:
  void                            deleteCell(in long index)
                                  raises(DOMException);
};
```

#### Attributes

`align` of type DOM`String`  
Horizontal alignment of data within cells of this row. See the align attribute definition in HTML 4.01.

`bgColor` of type DOM`String`  
Background color for rows. See the bgcolor attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

`cells` of type HTML`Collection` [p.13], readonly, modified in **DOM Level 2**  
The collection of cells in this row.

`ch` of type DOM`String`  
Alignment character for cells in a column. See the char attribute definition in HTML 4.01.

`chOff` of type DOM`String`  
Offset of alignment character. See the charoff attribute definition in HTML 4.01.

`rowIndex` of type long, readonly, modified in **DOM Level 2**  
This is in logical order and not in document order. The `rowIndex` does take into account sections (THEAD, TFOOT, or TBODY) within the table, placing THEAD rows first in the



index, followed by TBODY rows, followed by TFOOT rows.

`sectionRowIndex` of type `long`, readonly, modified in **DOM Level 2**

The index of this row, relative to the current section (THEAD, TFOOT, or TBODY), starting from 0.

`vAlign` of type `DOMString`

Vertical alignment of data within cells of this row. See the `vAlign` attribute definition in HTML 4.01.

### Methods

`deleteCell` modified in **DOM Level 2**

Delete a cell from the current row.

#### Parameters

`index` of type `long`

The index of the cell to delete, starting from 0. If the index is -1 the last cell in the row is deleted.

#### Exceptions

`DOMException` `INDEX_SIZE_ERR`: Raised if the specified `index` is greater than or equal to the number of cells or if the index is a negative number other than -1.

#### No Return Value

`insertCell` modified in **DOM Level 2**

Insert an empty TD cell into this row. If `index` is -1 or equal to the number of cells, the new cell is appended.

#### Parameters

`index` of type `long`

The place to insert the cell, starting from 0.

#### Return Value

`HTMLElement` [p.20] The newly created cell.

#### Exceptions

`DOMException` `INDEX_SIZE_ERR`: Raised if the specified `index` is greater than the number of cells or if the index is a negative number other than -1.

### Interface *HTMLTableCellElement*

The object used to represent the TH and TD elements. See the TD element definition in HTML 4.01.

#### IDL Definition

```

interface HTMLTableCellElement : HTMLElement {
    readonly attribute long        cellIndex;
    attribute DOMString            abbr;
    attribute DOMString            align;
    attribute DOMString            axis;
    attribute DOMString            bgColor;
    attribute DOMString            ch;
    attribute DOMString            chOff;
    attribute long                 colSpan;
    attribute DOMString            headers;
    attribute DOMString            height;
    attribute boolean              noWrap;
    attribute long                 rowSpan;
    attribute DOMString            scope;
    attribute DOMString            vAlign;
    attribute DOMString            width;
};

```

### Attributes

**abbr** of type DOMString

Abbreviation for header cells. See the abbr attribute definition in HTML 4.01.

**align** of type DOMString

Horizontal alignment of data in cell. See the align attribute definition in HTML 4.01.

**axis** of type DOMString

Names group of related headers. See the axis attribute definition in HTML 4.01.

**bgColor** of type DOMString

Cell background color. See the bgcolor attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**cellIndex** of type long, readonly

The index of this cell in the row, starting from 0. This index is in document tree order and not display order.

**ch** of type DOMString

Alignment character for cells in a column. See the char attribute definition in HTML 4.01.

**chOff** of type DOMString

Offset of alignment character. See the charoff attribute definition in HTML 4.01.

**colSpan** of type long

Number of columns spanned by cell. See the colspan attribute definition in HTML 4.01.

**headers** of type DOMString

List of id attribute values for header cells. See the headers attribute definition in HTML 4.01.

**height** of type DOMString

Cell height. See the height attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**noWrap** of type boolean

Suppress word wrapping. See the nowrap attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

**rowSpan** of type long

Number of rows spanned by cell. See the rowspan attribute definition in HTML 4.01.

scope of type DOMString

Scope covered by header cells. See the scope attribute definition in HTML 4.01.

vAlign of type DOMString

Vertical alignment of data in cell. See the valign attribute definition in HTML 4.01.

width of type DOMString

Cell width. See the width attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

### Interface *HTMLFrameSetElement*

Create a grid of frames. See the FRAMESET element definition in HTML 4.01.

#### IDL Definition

```
interface HTMLFrameSetElement : HTMLElement {
    attribute DOMString    cols;
    attribute DOMString    rows;
};
```

#### Attributes

cols of type DOMString

The number of columns of frames in the frameset. See the cols attribute definition in HTML 4.01.

rows of type DOMString

The number of rows of frames in the frameset. See the rows attribute definition in HTML 4.01.

### Interface *HTMLFrameElement*

Create a frame. See the FRAME element definition in HTML 4.01.

#### IDL Definition

```
interface HTMLFrameElement : HTMLElement {
    attribute DOMString    frameBorder;
    attribute DOMString    longDesc;
    attribute DOMString    marginHeight;
    attribute DOMString    marginWidth;
    attribute DOMString    name;
    attribute boolean      noResize;
    attribute DOMString    scrolling;
    attribute DOMString    src;
    // Introduced in DOM Level 2:
    readonly attribute Document    contentDocument;
};
```

#### Attributes

contentDocument of type Document, readonly, introduced in **DOM Level 2**

The document this frame contains, if there is any and it is available, or null otherwise.

frameBorder of type DOMString

Request frame borders. See the frameborder attribute definition in HTML 4.01.

`longDesc` of type `DOMString`

URI [IETF RFC 2396] designating a long description of this image or frame. See the `longdesc` attribute definition in HTML 4.01.

`marginHeight` of type `DOMString`

Frame margin height, in pixels. See the `marginheight` attribute definition in HTML 4.01.

`marginWidth` of type `DOMString`

Frame margin width, in pixels. See the `marginwidth` attribute definition in HTML 4.01.

`name` of type `DOMString`

The frame name (object of the `target` attribute). See the `name` attribute definition in HTML 4.01.

`noResize` of type `boolean`

When true, forbid user from resizing frame. See the `noresize` attribute definition in HTML 4.01.

`scrolling` of type `DOMString`

Specify whether or not the frame should have scrollbars. See the `scrolling` attribute definition in HTML 4.01.

`src` of type `DOMString`

A URI [IETF RFC 2396] designating the initial frame contents. See the `src` attribute definition in HTML 4.01.

### Interface *HTMLIFrameElement*

Inline subwindows. See the `IFRAME` element definition in HTML 4.01.

#### IDL Definition

```
interface HTMLIFrameElement : HTMLElement {
    attribute DOMString    align;
    attribute DOMString    frameBorder;
    attribute DOMString    height;
    attribute DOMString    longDesc;
    attribute DOMString    marginHeight;
    attribute DOMString    marginWidth;
    attribute DOMString    name;
    attribute DOMString    scrolling;
    attribute DOMString    src;
    attribute DOMString    width;
    // Introduced in DOM Level 2:
    readonly attribute Document    contentDocument;
};
```

#### Attributes

`align` of type `DOMString`

Aligns this object (vertically or horizontally) with respect to its surrounding text. See the `align` attribute definition in HTML 4.01. This attribute is deprecated in HTML 4.01.

`contentDocument` of type `Document`, `readonly`, introduced in **DOM Level 2**

The document this frame contains, if there is any and it is available, or `null` otherwise.

`frameBorder` of type `DOMString`

Request frame borders. See the `frameborder` attribute definition in HTML 4.01.

height of type DOMString

Frame height. See the height attribute definition in HTML 4.01.

longDesc of type DOMString

URI [IETF RFC 2396] designating a long description of this image or frame. See the longdesc attribute definition in HTML 4.01.

marginHeight of type DOMString

Frame margin height, in pixels. See the marginheight attribute definition in HTML 4.01.

marginWidth of type DOMString

Frame margin width, in pixels. See the marginwidth attribute definition in HTML 4.01.

name of type DOMString

The frame name (object of the target attribute). See the name attribute definition in HTML 4.01.

scrolling of type DOMString

Specify whether or not the frame should have scrollbars. See the scrolling attribute definition in HTML 4.01.

src of type DOMString

A URI [IETF RFC 2396] designating the initial frame contents. See the src attribute definition in HTML 4.01.

width of type DOMString

Frame width. See the width attribute definition in HTML 4.01.

### 1.6.5. Object definitions

## Appendix A: Changes

*Editor:*

Philippe Le Hégaré, W3C

### A.1: Changes between DOM Level 1 and DOM Level 2

**Note:** The DOM Level 2 HTML module is not backward compatible with the DOM Level 1 HTML module.

#### OMG IDL

The DOM Level 2 specifications use CORBA 2.3.1 instead of CORBA 2.2.

#### XHTML 1.0 support

The DOM Level 2 HTML module supports HTML 4 as well as XHTML 1.0 documents. Therefore, case sensitivity in methods depends on Document support for the feature "XML" as well as "HTML".

#### A.1.1: Changes to DOM Level 1 interfaces and exceptions

##### Interface `HTMLDocument` [p.15]

the method `getElementById` is now inherited from the `Document` interface [DOM Level 2 Core] where it was moved.

##### Interface `HTMLSelectElement` [p.26]

The type of the attribute `options` was changed from `HTMLCollection` [p.13] to `HTMLOptionsCollection` [p.14].

The attribute `length` is no longer readonly and is now unsigned.

##### Interface `HTMLOptionElement` [p.29]

Changing the `defaultSelected` attribute does not reset the state of the form control. `index` is readonly.

##### Interface `HTMLInputElement` [p.30]

the attribute `type` is no longer read only.

The type of the attribute `size` was changed from `DOMString` to unsigned `long`.

##### Interface `HTMLTextAreaElement` [p.33]

Changing the `defaultValue` attribute does not reset the contents of the form control.

##### Interface `HTMLBlockquoteElement`

this interface has been removed. `BLOCKQUOTE` elements are now supported by the `HTMLQuoteElement` [p.39] interface.

##### Interface `HTMLBaseFontElement` [p.40]

The attribute `size` is of type `long`.

##### Interface `HTMLImageElement` [p.43]

The `lowSrc` attribute was removed.

The types of the attributes `height`, `hspace`, `width` and `vspace` were changed from `DOMString` to `long`.

##### Interface `HTMLObjectElement` [p.44]

The attribute `contentDocument` was added.

**Interface HTMLAppletElement [p.47]**

The types of the attributes `hspace` and `vspace` were changed from `DOMString` to `long`.  
The attribute `object` returns the value of the HTML object attribute.

**Interface HTMLTableElement [p.50]**

`caption`, `tHead`, `tFoot`, `insertRow`, and `deleteRow` may raise exceptions.  
`index` uses a logical order, and not a document order.

**Interface HTMLTableSectionElement [p.54]**

The methods `insertRow` and `deleteRow` may raise exceptions.

**Interface HTMLTableRowElement [p.56]**

The attributes `rowIndex`, `sectionRowIndex`, and `cells` are readonly.  
The methods `insertCell` and `deleteCell` may raise exceptions.  
`rowIndex` uses a logical order, and not a document order.

**Interface HTMLFrameElement [p.59]**

the attribute `contentDocument` was added.

**Interface HTMLIFrameElement [p.60]**

the attribute `contentDocument` was added.

**Module and package name**

The module name used in the OMG IDL is now `html2`.

The package name used in the Java bindings is now `org.w3c.dom.html2`.

## A.1.2: New Interfaces

**Interface HTMLOptionsCollection [p.14]**

The `HTMLOptionsCollection [p.14]` interface was added to the HTML module.



## Appendix B: IDL Definitions

This appendix contains the complete OMG IDL [OMG IDL] for the Level 2 Document Object Model HTML definitions.

Unfortunately the OMG IDL in this appendix is not conformant due to problems in the validator that was used to validate Level 1. The `readOnly` attribute on the `HTMLInputElement` [p.30] and `HTMLTextAreaElement` [p.33] interfaces, as well as the `object` attribute on the `HTMLAppletElement` [p.47] interface, are not conformant with OMG IDL 2.2. The `valueType` attribute on the `HTMLParamElement` [p.46] interface is not conformant with OMG IDL 2.3.1, which hadn't been released when DOM Level 1 [DOM Level 1] was published.

The IDL files are also available as:

<http://www.w3.org/TR/2003/REC-DOM-Level-2-HTML-20030109/idl.zip>

### html2.idl:

```
// File: html2.idl

#ifndef _HTML2_IDL_
#define _HTML2_IDL_

#include "dom.idl"

#pragma prefix "dom.w3c.org"
module html2
{

    typedef dom::DOMString DOMString;
    typedef dom::Node Node;
    typedef dom::Document Document;
    typedef dom::NodeList NodeList;
    typedef dom::Element Element;

    interface HTMLCollection;
    interface HTMLFormElement;
    interface HTMLTableCaptionElement;
    interface HTMLTableSectionElement;

    interface HTMLCollection {
        readonly attribute unsigned long length;
        Node item(in unsigned long index);
        Node namedItem(in DOMString name);
    };

    // Introduced in DOM Level 2:
    interface HTMLOptionsCollection {
        attribute unsigned long length;
        // raises(dom::DOMException) on setting

        Node item(in unsigned long index);
        Node namedItem(in DOMString name);
    };
};
```

```

interface HTMLDocument : Document {
    attribute DOMString      title;
    readonly attribute DOMString  referrer;
    readonly attribute DOMString  domain;
    readonly attribute DOMString  URL;
    attribute HTMLCollection  body;
    readonly attribute HTMLCollection  images;
    readonly attribute HTMLCollection  applets;
    readonly attribute HTMLCollection  links;
    readonly attribute HTMLCollection  forms;
    readonly attribute HTMLCollection  anchors;
    attribute DOMString      cookie;
                                // raises(dom::DOMException) on setting

    void      open();
    void      close();
    void      write(in DOMString text);
    void      writeln(in DOMString text);
    NodeList  getElementsByName(in DOMString elementName);
};

interface HTMLElement : Element {
    attribute DOMString      id;
    attribute DOMString      title;
    attribute DOMString      lang;
    attribute DOMString      dir;
    attribute DOMString      className;
};

interface HTMLHtmlElement : HTMLElement {
    attribute DOMString      version;
};

interface HTMLHeadElement : HTMLElement {
    attribute DOMString      profile;
};

interface HTMLLinkElement : HTMLElement {
    attribute boolean      disabled;
    attribute DOMString    charset;
    attribute DOMString    href;
    attribute DOMString    hreflang;
    attribute DOMString    media;
    attribute DOMString    rel;
    attribute DOMString    rev;
    attribute DOMString    target;
    attribute DOMString    type;
};

interface HTMLTitleElement : HTMLElement {
    attribute DOMString      text;
};

interface HTMLMetaElement : HTMLElement {
    attribute DOMString      content;
    attribute DOMString      httpEquiv;
};

```

html2.idl:

```
        attribute DOMString      name;
        attribute DOMString      scheme;
};

interface HTMLBaseElement : HTMLElement {
    attribute DOMString          href;
    attribute DOMString          target;
};

interface HTMLIsIndexElement : HTMLElement {
    readonly attribute HTMLFormElement form;
    attribute DOMString          prompt;
};

interface HTMLStyleElement : HTMLElement {
    attribute boolean            disabled;
    attribute DOMString          media;
    attribute DOMString          type;
};

interface HTMLBodyElement : HTMLElement {
    attribute DOMString          aLink;
    attribute DOMString          background;
    attribute DOMString          bgColor;
    attribute DOMString          link;
    attribute DOMString          text;
    attribute DOMString          vLink;
};

interface HTMLFormElement : HTMLElement {
    readonly attribute HTMLCollection elements;
    readonly attribute long      length;
    attribute DOMString          name;
    attribute DOMString          acceptCharset;
    attribute DOMString          action;
    attribute DOMString          enctype;
    attribute DOMString          method;
    attribute DOMString          target;

    void      submit();
    void      reset();
};

interface HTMLSelectElement : HTMLElement {
    readonly attribute DOMString  type;
    attribute long               selectedIndex;
    attribute DOMString          value;
    // Modified in DOM Level 2:
    attribute unsigned long      length;
                                   // raises(dom::DOMException) on setting

    readonly attribute HTMLFormElement form;
    // Modified in DOM Level 2:
    readonly attribute HTMLOptionsCollection options;
    attribute boolean            disabled;
    attribute boolean            multiple;
    attribute DOMString          name;
    attribute long               size;
};
```

html2.idl:

```
        attribute long          tabIndex;
void      add(in HTMLInputElement element,
             in HTMLInputElement before)
             raises(dom::DOMException);
void      remove(in long index);
void      blur();
void      focus();
};

interface HTMLOptGroupElement : HTMLInputElement {
    attribute boolean          disabled;
    attribute DOMString       label;
};

interface HTMLOptionElement : HTMLInputElement {
    readonly attribute HTMLFormElement form;
    // Modified in DOM Level 2:
    attribute boolean          defaultSelected;
    readonly attribute DOMString text;
    // Modified in DOM Level 2:
    readonly attribute long    index;
    attribute boolean          disabled;
    attribute DOMString       label;
    attribute boolean          selected;
    attribute DOMString       value;
};

interface HTMLInputElement : HTMLInputElement {
    attribute DOMString       defaultValue;
    attribute boolean         defaultChecked;
    readonly attribute HTMLFormElement form;
    attribute DOMString       accept;
    attribute DOMString       accessKey;
    attribute DOMString       align;
    attribute DOMString       alt;
    attribute boolean         checked;
    attribute boolean         disabled;
    attribute long            maxLength;
    attribute DOMString       name;
    attribute boolean         readOnly;
    // Modified in DOM Level 2:
    attribute unsigned long   size;
    attribute DOMString       src;
    attribute long            tabIndex;
    // Modified in DOM Level 2:
    attribute DOMString       type;
    attribute DOMString       useMap;
    attribute DOMString       value;
    void      blur();
    void      focus();
    void      select();
    void      click();
};

interface HTMLTextAreaElement : HTMLInputElement {
    // Modified in DOM Level 2:
    attribute DOMString       defaultValue;
};
```

```

    readonly attribute HTMLFormElement form;
        attribute DOMString      accessKey;
        attribute long           cols;
        attribute boolean        disabled;
        attribute DOMString      name;
        attribute boolean        readOnly;
        attribute long           rows;
        attribute long           tabIndex;
    readonly attribute DOMString type;
    attribute DOMString value;
void      blur();
void      focus();
void      select();
};

interface HTMLButtonElement : HTMLInputElement {
    readonly attribute HTMLFormElement form;
        attribute DOMString      accessKey;
        attribute boolean        disabled;
        attribute DOMString      name;
        attribute long           tabIndex;
    readonly attribute DOMString type;
    attribute DOMString value;
};

interface HTMLLabelElement : HTMLInputElement {
    readonly attribute HTMLFormElement form;
        attribute DOMString      accessKey;
        attribute DOMString      htmlFor;
};

interface HTMLFieldSetElement : HTMLInputElement {
    readonly attribute HTMLFormElement form;
};

interface HTMLLegendElement : HTMLInputElement {
    readonly attribute HTMLFormElement form;
        attribute DOMString      accessKey;
        attribute DOMString      align;
};

interface HTMLUListElement : HTMLInputElement {
        attribute boolean        compact;
        attribute DOMString      type;
};

interface HTMLLOListElement : HTMLInputElement {
        attribute boolean        compact;
        attribute long           start;
        attribute DOMString      type;
};

interface HTMLDListElement : HTMLInputElement {
        attribute boolean        compact;
};

interface HTMLDirectoryElement : HTMLInputElement {

```

```

        attribute boolean        compact;
};

interface HTMLMenuElement : HTMLInputElement {
    attribute boolean        compact;
};

interface HTMLLIElement : HTMLInputElement {
    attribute DOMString      type;
    attribute long           value;
};

interface HTMLDivElement : HTMLInputElement {
    attribute DOMString      align;
};

interface HTMLParagraphElement : HTMLInputElement {
    attribute DOMString      align;
};

interface HTMLHeadingElement : HTMLInputElement {
    attribute DOMString      align;
};

interface HTMLQuoteElement : HTMLInputElement {
    attribute DOMString      cite;
};

interface HTMLPreElement : HTMLInputElement {
    attribute long           width;
};

interface HTMLBRElement : HTMLInputElement {
    attribute DOMString      clear;
};

interface HTMLBaseFontElement : HTMLInputElement {
    attribute DOMString      color;
    attribute DOMString      face;
    // Modified in DOM Level 2:
    attribute long           size;
};

interface HTMLFontElement : HTMLInputElement {
    attribute DOMString      color;
    attribute DOMString      face;
    attribute DOMString      size;
};

interface HTMLHRElement : HTMLInputElement {
    attribute DOMString      align;
    attribute boolean        noShade;
    attribute DOMString      size;
    attribute DOMString      width;
};

interface HTMLModElement : HTMLInputElement {

```

html2.idl:

```
        attribute DOMString      cite;
        attribute DOMString      dateTime;
};

interface HTMLAnchorElement : HTMLInputElement {
    attribute DOMString          accessKey;
    attribute DOMString          charset;
    attribute DOMString          coords;
    attribute DOMString          href;
    attribute DOMString          hreflang;
    attribute DOMString          name;
    attribute DOMString          rel;
    attribute DOMString          rev;
    attribute DOMString          shape;
    attribute long               tabIndex;
    attribute DOMString          target;
    attribute DOMString          type;

    void blur();
    void focus();
};

interface HTMLImageElement : HTMLInputElement {
    attribute DOMString          name;
    attribute DOMString          align;
    attribute DOMString          alt;
    attribute DOMString          border;
    // Modified in DOM Level 2:
    attribute long               height;
    // Modified in DOM Level 2:
    attribute long               hspace;
    attribute boolean           isMap;
    attribute DOMString          longDesc;
    attribute DOMString          src;
    attribute DOMString          useMap;
    // Modified in DOM Level 2:
    attribute long               vspace;
    // Modified in DOM Level 2:
    attribute long               width;
};

interface HTMLObjectElement : HTMLInputElement {
    readonly attribute HTMLFormElement form;
    attribute DOMString          code;
    attribute DOMString          align;
    attribute DOMString          archive;
    attribute DOMString          border;
    attribute DOMString          codeBase;
    attribute DOMString          codeType;
    attribute DOMString          data;
    attribute boolean           declare;
    attribute DOMString          height;
    attribute long               hspace;
    attribute DOMString          name;
    attribute DOMString          standby;
    attribute long               tabIndex;
    attribute DOMString          type;
    attribute DOMString          useMap;
};
```

html2.idl:

```
        attribute long          vspace;
        attribute DOMString     width;
    // Introduced in DOM Level 2:
    readonly attribute Document  contentDocument;
};

interface HTMLParamElement : HTMLElement {
    attribute DOMString         name;
    attribute DOMString         type;
    attribute DOMString         value;
    attribute DOMString         valueType;
};

interface HTMLAppletElement : HTMLElement {
    attribute DOMString         align;
    attribute DOMString         alt;
    attribute DOMString         archive;
    attribute DOMString         code;
    attribute DOMString         codeBase;
    attribute DOMString         height;
    // Modified in DOM Level 2:
    attribute long             hspace;
    attribute DOMString         name;
    // Modified in DOM Level 2:
    attribute DOMString         object;
    // Modified in DOM Level 2:
    attribute long             vspace;
    attribute DOMString         width;
};

interface HTMLMapElement : HTMLElement {
    readonly attribute HTMLCollection areas;
    attribute DOMString         name;
};

interface HTMLAreaElement : HTMLElement {
    attribute DOMString         accessKey;
    attribute DOMString         alt;
    attribute DOMString         coords;
    attribute DOMString         href;
    attribute boolean          noHref;
    attribute DOMString         shape;
    attribute long             tabIndex;
    attribute DOMString         target;
};

interface HTMLScriptElement : HTMLElement {
    attribute DOMString         text;
    attribute DOMString         htmlFor;
    attribute DOMString         event;
    attribute DOMString         charset;
    attribute boolean          defer;
    attribute DOMString         src;
    attribute DOMString         type;
};

interface HTMLTableElement : HTMLElement {
```



```

// Modified in DOM Level 2:
    attribute HTMLTableCaptionElement caption;
                                        // raises(dom::DOMException) on setting

// Modified in DOM Level 2:
    attribute HTMLTableSectionElement tHead;
                                        // raises(dom::DOMException) on setting

// Modified in DOM Level 2:
    attribute HTMLTableSectionElement tFoot;
                                        // raises(dom::DOMException) on setting

readonly attribute HTMLCollection rows;
readonly attribute HTMLCollection tBodies;
    attribute DOMString align;
    attribute DOMString bgColor;
    attribute DOMString border;
    attribute DOMString cellPadding;
    attribute DOMString cellSpacing;
    attribute DOMString frame;
    attribute DOMString rules;
    attribute DOMString summary;
    attribute DOMString width;
HTMLElement createTHead();
void deleteTHead();
HTMLElement createTFoot();
void deleteTFoot();
HTMLElement createCaption();
void deleteCaption();
// Modified in DOM Level 2:
HTMLElement insertRow(in long index)
                    raises(dom::DOMException);
// Modified in DOM Level 2:
void deleteRow(in long index)
                    raises(dom::DOMException);
};

interface HTMLTableCaptionElement : HTMLElement {
    attribute DOMString align;
};

interface HTMLTableColElement : HTMLElement {
    attribute DOMString align;
    attribute DOMString ch;
    attribute DOMString chOff;
    attribute long span;
    attribute DOMString vAlign;
    attribute DOMString width;
};

interface HTMLTableSectionElement : HTMLElement {
    attribute DOMString align;
    attribute DOMString ch;
    attribute DOMString chOff;
    attribute DOMString vAlign;
    readonly attribute HTMLCollection rows;
// Modified in DOM Level 2:

```

```

HTMLInputElement      insertRow(in long index)
                        raises(dom::DOMException);
// Modified in DOM Level 2:
void                  deleteRow(in long index)
                        raises(dom::DOMException);
};

interface HTMLTableRowElement : HTMLInputElement {
// Modified in DOM Level 2:
readonly attribute long      rowIndex;
// Modified in DOM Level 2:
readonly attribute long      sectionRowIndex;
// Modified in DOM Level 2:
readonly attribute HTMLCollection cells;
        attribute DOMString  align;
        attribute DOMString  bgColor;
        attribute DOMString  ch;
        attribute DOMString  chOff;
        attribute DOMString  vAlign;
// Modified in DOM Level 2:
HTMLInputElement          insertCell(in long index)
                            raises(dom::DOMException);
// Modified in DOM Level 2:
void                      deleteCell(in long index)
                            raises(dom::DOMException);
};

interface HTMLTableCellElement : HTMLInputElement {
        readonly attribute long      cellIndex;
        attribute DOMString  abbr;
        attribute DOMString  align;
        attribute DOMString  axis;
        attribute DOMString  bgColor;
        attribute DOMString  ch;
        attribute DOMString  chOff;
        attribute long      colSpan;
        attribute DOMString  headers;
        attribute DOMString  height;
        attribute boolean   noWrap;
        attribute long      rowSpan;
        attribute DOMString  scope;
        attribute DOMString  vAlign;
        attribute DOMString  width;
};

interface HTMLFrameSetElement : HTMLInputElement {
        attribute DOMString  cols;
        attribute DOMString  rows;
};

interface HTMLFrameElement : HTMLInputElement {
        attribute DOMString  frameBorder;
        attribute DOMString  longDesc;
        attribute DOMString  marginHeight;
        attribute DOMString  marginWidth;
        attribute DOMString  name;
        attribute boolean   noResize;
};

```

html2.idl:

```
        attribute DOMString      scrolling;
        attribute DOMString      src;
// Introduced in DOM Level 2:
readonly attribute Document      contentDocument;
};

interface HTMLIFrameElement : HTMLInputElement {
    attribute DOMString          align;
    attribute DOMString          frameBorder;
    attribute DOMString          height;
    attribute DOMString          longDesc;
    attribute DOMString          marginHeight;
    attribute DOMString          marginWidth;
    attribute DOMString          name;
    attribute DOMString          scrolling;
    attribute DOMString          src;
    attribute DOMString          width;
// Introduced in DOM Level 2:
readonly attribute Document      contentDocument;
};
};

#endif // _HTML2_IDL_
```

html2.idl:

## Appendix C: Java language Binding

This appendix contains the complete Java language [Java] binding for the Level 2 Document Object Model HTML.

The Java files are also available as

<http://www.w3.org/TR/2003/REC-DOM-Level-2-HTML-20030109/java-binding.zip>

### **org/w3c/dom/html2/HTMLCollection.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.Node;

public interface HTMLCollection {
    public int getLength();

    public Node item(int index);

    public Node namedItem(String name);
}
```

### **org/w3c/dom/html2/HTMLOptionsCollection.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.Node;
import org.w3c.dom.DOMException;

public interface HTMLOptionsCollection {
    public int getLength();
    public void setLength(int length)
        throws DOMException;

    public Node item(int index);

    public Node namedItem(String name);
}
```

### **org/w3c/dom/html2/HTMLDocument.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.Document;
import org.w3c.dom.NodeList;
import org.w3c.dom.DOMException;

public interface HTMLDocument extends Document {
    public String getTitle();
    public void setTitle(String title);
}
```

```
public String getReferrer();

public String getDomain();

public String getURL();

public HTMLElement getBody();
public void setBody(HTMLElement body);

public HTMLCollection getImages();

public HTMLCollection getApplets();

public HTMLCollection getLinks();

public HTMLCollection getForms();

public HTMLCollection getAnchors();

public String getCookie();
public void setCookie(String cookie)
    throws DOMException;

public void open();

public void close();

public void write(String text);

public void writeln(String text);

public NodeList getElementsByTagName(String elementName);
}
```

## **org/w3c/dom/html2/HTMLElement.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.Element;

public interface HTMLElement extends Element {
    public String getId();
    public void setId(String id);

    public String getTitle();
    public void setTitle(String title);

    public String getLang();
    public void setLang(String lang);

    public String getDir();
    public void setDir(String dir);
}
```

```
    public String getClassName();
    public void setClassName(String className);
}
```

### **org/w3c/dom/html2/HTMLHtmlElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLHtmlElement extends HTMLElement {
    public String getVersion();
    public void setVersion(String version);
}
```

### **org/w3c/dom/html2/HTMLHeadElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLHeadElement extends HTMLElement {
    public String getProfile();
    public void setProfile(String profile);
}
```

### **org/w3c/dom/html2/HTMLLinkElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLLinkElement extends HTMLElement {
    public boolean getDisabled();
    public void setDisabled(boolean disabled);

    public String getCharset();
    public void setCharset(String charset);

    public String getHref();
    public void setHref(String href);

    public String getHreflang();
    public void setHreflang(String hreflang);

    public String getMedia();
    public void setMedia(String media);

    public String getRel();
    public void setRel(String rel);

    public String getRev();
    public void setRev(String rev);

    public String getTarget();
    public void setTarget(String target);
}
```

```
    public String getType();
    public void setType(String type);
}
```

### **org/w3c/dom/html2/HTMLTitleElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLTitleElement extends HTMLElement {
    public String getText();
    public void setText(String text);
}
```

### **org/w3c/dom/html2/HTMLMetaElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLMetaElement extends HTMLElement {
    public String getContent();
    public void setContent(String content);

    public String getHttpEquiv();
    public void setHttpEquiv(String httpEquiv);

    public String getName();
    public void setName(String name);

    public String getScheme();
    public void setScheme(String scheme);
}
```

### **org/w3c/dom/html2/HTMLBaseElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLBaseElement extends HTMLElement {
    public String getHref();
    public void setHref(String href);

    public String getTarget();
    public void setTarget(String target);
}
```

### **org/w3c/dom/html2/HTMLIsIndexElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLIsIndexElement extends HTMLElement {
    public HTMLFormElement getForm();
}
```



```
    public String getPrompt();
    public void setPrompt(String prompt);
}
```

### **org/w3c/dom/html2/HTMLStyleElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLStyleElement extends HTMLElement {
    public boolean getDisabled();
    public void setDisabled(boolean disabled);

    public String getMedia();
    public void setMedia(String media);

    public String getType();
    public void setType(String type);
}
```

### **org/w3c/dom/html2/HTMLBodyElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLBodyElement extends HTMLElement {
    public String getALink();
    public void setALink(String aLink);

    public String getBackground();
    public void setBackground(String background);

    public String getBgColor();
    public void setBgColor(String bgColor);

    public String getLink();
    public void setLink(String link);

    public String getText();
    public void setText(String text);

    public String getVLink();
    public void setVLink(String vLink);
}
```

### **org/w3c/dom/html2/HTMLFormElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLFormElement extends HTMLElement {
    public HTMLCollection getElements();

    public int getLength();
}
```

```
public String getName();
public void setName(String name);

public String getAcceptCharset();
public void setAcceptCharset(String acceptCharset);

public String getAction();
public void setAction(String action);

public String getEnctype();
public void setEnctype(String enctype);

public String getMethod();
public void setMethod(String method);

public String getTarget();
public void setTarget(String target);

public void submit();

public void reset();
}
```

## **org/w3c/dom/html2/HTMLSelectElement.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.DOMException;

public interface HTMLSelectElement extends HTMLElement {
    public String getType();

    public int getSelectedIndex();
    public void setSelectedIndex(int selectedIndex);

    public String getValue();
    public void setValue(String value);

    public int getLength();
    public void setLength(int length)
        throws DOMException;

    public HTMLFormElement getForm();

    public HTMLOptionsCollection getOptions();

    public boolean getDisabled();
    public void setDisabled(boolean disabled);

    public boolean getMultiple();
    public void setMultiple(boolean multiple);

    public String getName();
    public void setName(String name);
}
```

```
public int getSize();
public void setSize(int size);

public int getTabIndex();
public void setTabIndex(int tabIndex);

public void add(HTMLElement element,
               HTMLElement before)
               throws DOMException;

public void remove(int index);

public void blur();

public void focus();
}
```

### **org/w3c/dom/html2/HTMLOptGroupElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLOptGroupElement extends HTMLElement {
    public boolean getDisabled();
    public void setDisabled(boolean disabled);

    public String getLabel();
    public void setLabel(String label);
}
```

### **org/w3c/dom/html2/HTMLOptionElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLOptionElement extends HTMLElement {
    public HTMLFormElement getForm();

    public boolean getDefaultSelected();
    public void setDefaultSelected(boolean defaultSelected);

    public String getText();

    public int getIndex();

    public boolean getDisabled();
    public void setDisabled(boolean disabled);

    public String getLabel();
    public void setLabel(String label);

    public boolean getSelected();
    public void setSelected(boolean selected);
}
```

```
public String getValue();
public void setValue(String value);
}
```

## **org/w3c/dom/html2/HTMLInputElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLInputElement extends HTMLElement {
    public String getDefaultValue();
    public void setDefaultValue(String defaultValue);

    public boolean getDefaultChecked();
    public void setDefaultChecked(boolean defaultChecked);

    public HTMLFormElement getForm();

    public String getAccept();
    public void setAccept(String accept);

    public String getAccessKey();
    public void setAccessKey(String accessKey);

    public String getAlign();
    public void setAlign(String align);

    public String getAlt();
    public void setAlt(String alt);

    public boolean getChecked();
    public void setChecked(boolean checked);

    public boolean getDisabled();
    public void setDisabled(boolean disabled);

    public int getMaxLength();
    public void setMaxLength(int maxLength);

    public String getName();
    public void setName(String name);

    public boolean getReadOnly();
    public void setReadOnly(boolean readOnly);

    public int getSize();
    public void setSize(int size);

    public String getSrc();
    public void setSrc(String src);

    public int getTabIndex();
    public void setTabIndex(int tabIndex);

    public String getType();
    public void setType(String type);
}
```

```
public String getUseMap();
public void setUseMap(String useMap);

public String getValue();
public void setValue(String value);

public void blur();

public void focus();

public void select();

public void click();
}
```

## **org/w3c/dom/html2/HTMLTextAreaElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLTextAreaElement extends HTMLElement {
    public String getDefaultValue();
    public void setDefaultValue(String defaultValue);

    public HTMLFormElement getForm();

    public String getAccessKey();
    public void setAccessKey(String accessKey);

    public int getCols();
    public void setCols(int cols);

    public boolean getDisabled();
    public void setDisabled(boolean disabled);

    public String getName();
    public void setName(String name);

    public boolean getReadOnly();
    public void setReadOnly(boolean readOnly);

    public int getRows();
    public void setRows(int rows);

    public int getTabIndex();
    public void setTabIndex(int tabIndex);

    public String getType();

    public String getValue();
    public void setValue(String value);

    public void blur();

    public void focus();
}
```

```
    public void select();  
}
```

## **org/w3c/dom/html2/HTMLButtonElement.java:**

```
package org.w3c.dom.html2;  
  
public interface HTMLButtonElement extends HTMLElement {  
    public HTMLFormElement getForm();  
  
    public String getAccessKey();  
    public void setAccessKey(String accessKey);  
  
    public boolean getDisabled();  
    public void setDisabled(boolean disabled);  
  
    public String getName();  
    public void setName(String name);  
  
    public int getTabIndex();  
    public void setTabIndex(int tabIndex);  
  
    public String getType();  
  
    public String getValue();  
    public void setValue(String value);  
}
```

## **org/w3c/dom/html2/HTMLLabelElement.java:**

```
package org.w3c.dom.html2;  
  
public interface HTMLLabelElement extends HTMLElement {  
    public HTMLFormElement getForm();  
  
    public String getAccessKey();  
    public void setAccessKey(String accessKey);  
  
    public String getHtmlFor();  
    public void setHtmlFor(String htmlFor);  
}
```

## **org/w3c/dom/html2/HTMLFieldSetElement.java:**

```
package org.w3c.dom.html2;  
  
public interface HTMLFieldSetElement extends HTMLElement {  
    public HTMLFormElement getForm();  
}
```

### **org/w3c/dom/html2/HTMLLegendElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLLegendElement extends HTMLElement {
    public HTMLFormElement getForm();

    public String getAccessKey();
    public void setAccessKey(String accessKey);

    public String getAlign();
    public void setAlign(String align);
}
```

### **org/w3c/dom/html2/HTMLULListElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLULListElement extends HTMLElement {
    public boolean getCompact();
    public void setCompact(boolean compact);

    public String getType();
    public void setType(String type);
}
```

### **org/w3c/dom/html2/HTMLLOListElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLLOListElement extends HTMLElement {
    public boolean getCompact();
    public void setCompact(boolean compact);

    public int getStart();
    public void setStart(int start);

    public String getType();
    public void setType(String type);
}
```

### **org/w3c/dom/html2/HTMLDListElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLDListElement extends HTMLElement {
    public boolean getCompact();
    public void setCompact(boolean compact);
}
```

### **org/w3c/dom/html2/HTMLDirectoryElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLDirectoryElement extends HTMLElement {
    public boolean getCompact();
    public void setCompact(boolean compact);
}
```

### **org/w3c/dom/html2/HTMLMenuElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLMenuElement extends HTMLElement {
    public boolean getCompact();
    public void setCompact(boolean compact);
}
```

### **org/w3c/dom/html2/HTMLLIElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLLIElement extends HTMLElement {
    public String getType();
    public void setType(String type);

    public int getValue();
    public void setValue(int value);
}
```

### **org/w3c/dom/html2/HTMLDivElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLDivElement extends HTMLElement {
    public String getAlign();
    public void setAlign(String align);
}
```

### **org/w3c/dom/html2/HTMLParagraphElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLParagraphElement extends HTMLElement {
    public String getAlign();
    public void setAlign(String align);
}
```



### **org/w3c/dom/html2/HTMLHeadingElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLHeadingElement extends HTMLElement {
    public String getAlign();
    public void setAlign(String align);
}
```

### **org/w3c/dom/html2/HTMLQuoteElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLQuoteElement extends HTMLElement {
    public String getCite();
    public void setCite(String cite);
}
```

### **org/w3c/dom/html2/HTMLPreElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLPreElement extends HTMLElement {
    public int getWidth();
    public void setWidth(int width);
}
```

### **org/w3c/dom/html2/HTMLBRElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLBRElement extends HTMLElement {
    public String getClear();
    public void setClear(String clear);
}
```

### **org/w3c/dom/html2/HTMLBaseFontElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLBaseFontElement extends HTMLElement {
    public String getColor();
    public void setColor(String color);

    public String getFace();
    public void setFace(String face);
}
```

```
    public int getSize();
    public void setSize(int size);
}
```

### **org/w3c/dom/html2/HTMLFontElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLFontElement extends HTMLElement {
    public String getColor();
    public void setColor(String color);

    public String getFace();
    public void setFace(String face);

    public String getSize();
    public void setSize(String size);
}
```

### **org/w3c/dom/html2/HTMLHRElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLHRElement extends HTMLElement {
    public String getAlign();
    public void setAlign(String align);

    public boolean getNoShade();
    public void setNoShade(boolean noShade);

    public String getSize();
    public void setSize(String size);

    public String getWidth();
    public void setWidth(String width);
}
```

### **org/w3c/dom/html2/HTMLModElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLModElement extends HTMLElement {
    public String getCite();
    public void setCite(String cite);

    public String getDateTime();
    public void setDateTime(String dateTime);
}
```

## **org/w3c/dom/html2/HTMLAnchorElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLAnchorElement extends HTMLElement {
    public String getAccessKey();
    public void setAccessKey(String accessKey);

    public String getCharset();
    public void setCharset(String charset);

    public String getCoords();
    public void setCoords(String coords);

    public String getHref();
    public void setHref(String href);

    public String getHreflang();
    public void setHreflang(String hreflang);

    public String getName();
    public void setName(String name);

    public String getRel();
    public void setRel(String rel);

    public String getRev();
    public void setRev(String rev);

    public String getShape();
    public void setShape(String shape);

    public int getTabIndex();
    public void setTabIndex(int tabIndex);

    public String getTarget();
    public void setTarget(String target);

    public String getType();
    public void setType(String type);

    public void blur();

    public void focus();
}
```

## **org/w3c/dom/html2/HTMLImageElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLImageElement extends HTMLElement {
    public String getName();
    public void setName(String name);

    public String getAlign();
```

```
public void setAlign(String align);

public String getAlt();
public void setAlt(String alt);

public String getBorder();
public void setBorder(String border);

public int getHeight();
public void setHeight(int height);

public int getHspace();
public void setHspace(int hspace);

public boolean getIsMap();
public void setIsMap(boolean isMap);

public String getLongDesc();
public void setLongDesc(String longDesc);

public String getSrc();
public void setSrc(String src);

public String getUseMap();
public void setUseMap(String useMap);

public int getVspace();
public void setVspace(int vspace);

public int getWidth();
public void setWidth(int width);
}
```

## **org/w3c/dom/html2/HTMLObjectElement.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.Document;

public interface HTMLObjectElement extends HTMLElement {
    public HTMLFormElement getForm();

    public String getCode();
    public void setCode(String code);

    public String getAlign();
    public void setAlign(String align);

    public String getArchive();
    public void setArchive(String archive);

    public String getBorder();
    public void setBorder(String border);

    public String getCodeBase();
```

```
public void setCodeBase(String codeBase);

public String getCodeType();
public void setCodeType(String codeType);

public String getData();
public void setData(String data);

public boolean getDeclare();
public void setDeclare(boolean declare);

public String getHeight();
public void setHeight(String height);

public int getHspace();
public void setHspace(int hspace);

public String getName();
public void setName(String name);

public String getStandby();
public void setStandby(String standby);

public int getTabIndex();
public void setTabIndex(int tabIndex);

public String getType();
public void setType(String type);

public String getUseMap();
public void setUseMap(String useMap);

public int getVspace();
public void setVspace(int vspace);

public String getWidth();
public void setWidth(String width);

public Document getContentDocument();
}
```

## **org/w3c/dom/html2/HTMLParamElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLParamElement extends HTMLElement {
    public String getName();
    public void setName(String name);

    public String getType();
    public void setType(String type);

    public String getValue();
    public void setValue(String value);
}
```

```
    public String getValueType();
    public void setValueType(String valueType);
}
```

## **org/w3c/dom/html2/HTMLAppletElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLAppletElement extends HTMLElement {
    public String getAlign();
    public void setAlign(String align);

    public String getAlt();
    public void setAlt(String alt);

    public String getArchive();
    public void setArchive(String archive);

    public String getCode();
    public void setCode(String code);

    public String getCodeBase();
    public void setCodeBase(String codeBase);

    public String getHeight();
    public void setHeight(String height);

    public int getHspace();
    public void setHspace(int hspace);

    public String getName();
    public void setName(String name);

    public String getObject();
    public void setObject(String object);

    public int getVspace();
    public void setVspace(int vspace);

    public String getWidth();
    public void setWidth(String width);
}
```

## **org/w3c/dom/html2/HTMLMapElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLMapElement extends HTMLElement {
    public HTMLCollection getAreas();

    public String getName();
    public void setName(String name);
}
```

## **org/w3c/dom/html2/HTMLAreaElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLAreaElement extends HTMLElement {
    public String getAccessKey();
    public void setAccessKey(String accessKey);

    public String getAlt();
    public void setAlt(String alt);

    public String getCoords();
    public void setCoords(String coords);

    public String getHref();
    public void setHref(String href);

    public boolean getNoHref();
    public void setNoHref(boolean noHref);

    public String getShape();
    public void setShape(String shape);

    public int getTabIndex();
    public void setTabIndex(int tabIndex);

    public String getTarget();
    public void setTarget(String target);
}
```

## **org/w3c/dom/html2/HTMLScriptElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLScriptElement extends HTMLElement {
    public String getText();
    public void setText(String text);

    public String getHtmlFor();
    public void setHtmlFor(String htmlFor);

    public String getEvent();
    public void setEvent(String event);

    public String getCharset();
    public void setCharset(String charset);

    public boolean getDefer();
    public void setDefer(boolean defer);

    public String getSrc();
    public void setSrc(String src);
}
```

```
public String getType();  
public void setType(String type);  
}
```

## **org/w3c/dom/html2/HTMLTableElement.java:**

```
package org.w3c.dom.html2;  
  
import org.w3c.dom.DOMException;  
  
public interface HTMLTableElement extends HTMLElement {  
    public HTMLTableCaptionElement getCaption();  
    public void setCaption(HTMLTableCaptionElement caption)  
        throws DOMException;  
  
    public HTMLTableSectionElement getTHead();  
    public void setTHead(HTMLTableSectionElement tHead)  
        throws DOMException;  
  
    public HTMLTableSectionElement getTFoot();  
    public void setTFoot(HTMLTableSectionElement tFoot)  
        throws DOMException;  
  
    public HTMLCollection getRows();  
  
    public HTMLCollection getTBodies();  
  
    public String getAlign();  
    public void setAlign(String align);  
  
    public String getBgColor();  
    public void setBgColor(String bgColor);  
  
    public String getBorder();  
    public void setBorder(String border);  
  
    public String getCellPadding();  
    public void setCellPadding(String cellPadding);  
  
    public String getCellSpacing();  
    public void setCellSpacing(String cellSpacing);  
  
    public String getFrame();  
    public void setFrame(String frame);  
  
    public String getRules();  
    public void setRules(String rules);  
  
    public String getSummary();  
    public void setSummary(String summary);  
  
    public String getWidth();  
    public void setWidth(String width);  
  
    public HTMLElement createTHead();
```



org/w3c/dom/html2/HTMLTableCaptionElement.java:

```
public void deleteTHead();

public HTMLInputElement createTFoot();

public void deleteTFoot();

public HTMLInputElement createCaption();

public void deleteCaption();

public HTMLInputElement insertRow(int index)
    throws DOMException;

public void deleteRow(int index)
    throws DOMException;

}
```

### **org/w3c/dom/html2/HTMLTableCaptionElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLTableCaptionElement extends HTMLInputElement {
    public String getAlign();
    public void setAlign(String align);
}

}
```

### **org/w3c/dom/html2/HTMLTableColElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLTableColElement extends HTMLInputElement {
    public String getAlign();
    public void setAlign(String align);

    public String getCh();
    public void setCh(String ch);

    public String getChOff();
    public void setChOff(String chOff);

    public int getSpan();
    public void setSpan(int span);

    public String getVAlign();
    public void setVAlign(String vAlign);

    public String getWidth();
    public void setWidth(String width);
}

}
```

## **org/w3c/dom/html2/HTMLTableSectionElement.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.DOMException;

public interface HTMLTableSectionElement extends HTMLElement {
    public String getAlign();
    public void setAlign(String align);

    public String getCh();
    public void setCh(String ch);

    public String getChOff();
    public void setChOff(String chOff);

    public String getVAlign();
    public void setVAlign(String vAlign);

    public HTMLCollection getRows();

    public HTMLElement insertRow(int index)
        throws DOMException;

    public void deleteRow(int index)
        throws DOMException;
}
```

## **org/w3c/dom/html2/HTMLTableRowElement.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.DOMException;

public interface HTMLTableRowElement extends HTMLElement {
    public int getRowIndex();

    public int getSectionRowIndex();

    public HTMLCollection getCells();

    public String getAlign();
    public void setAlign(String align);

    public String getBgColor();
    public void setBgColor(String bgColor);

    public String getCh();
    public void setCh(String ch);

    public String getChOff();
    public void setChOff(String chOff);

    public String getVAlign();
    public void setVAlign(String vAlign);
}
```

```
public HTMLElement insertCell(int index)
    throws DOMException;

public void deleteCell(int index)
    throws DOMException;

}
```

## **org/w3c/dom/html2/HTMLTableCellElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLTableCellElement extends HTMLElement {
    public int getCellIndex();

    public String getAbbr();
    public void setAbbr(String abbr);

    public String getAlign();
    public void setAlign(String align);

    public String getAxis();
    public void setAxis(String axis);

    public String getBgColor();
    public void setBgColor(String bgColor);

    public String getCh();
    public void setCh(String ch);

    public String getChOff();
    public void setChOff(String chOff);

    public int getColSpan();
    public void setColSpan(int colSpan);

    public String getHeaders();
    public void setHeaders(String headers);

    public String getHeight();
    public void setHeight(String height);

    public boolean getNoWrap();
    public void setNoWrap(boolean noWrap);

    public int getRowSpan();
    public void setRowSpan(int rowSpan);

    public String getScope();
    public void setScope(String scope);

    public String getVAlign();
    public void setVAlign(String vAlign);
}
```

```
    public String getWidth();
    public void setWidth(String width);
}
```

### **org/w3c/dom/html2/HTMLFrameSetElement.java:**

```
package org.w3c.dom.html2;

public interface HTMLFrameSetElement extends HTMLElement {
    public String getCols();
    public void setCols(String cols);

    public String getRows();
    public void setRows(String rows);
}
```

### **org/w3c/dom/html2/HTMLFrameElement.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.Document;

public interface HTMLFrameElement extends HTMLElement {
    public String getFrameBorder();
    public void setFrameBorder(String frameBorder);

    public String getLongDesc();
    public void setLongDesc(String longDesc);

    public String getMarginHeight();
    public void setMarginHeight(String marginHeight);

    public String getMarginWidth();
    public void setMarginWidth(String marginWidth);

    public String getName();
    public void setName(String name);

    public boolean getNoResize();
    public void setNoResize(boolean noResize);

    public String getScrolling();
    public void setScrolling(String scrolling);

    public String getSrc();
    public void setSrc(String src);

    public Document getContentDocument();
}
```

## **org/w3c/dom/html2/HTMLIFrameElement.java:**

```
package org.w3c.dom.html2;

import org.w3c.dom.Document;

public interface HTMLIFrameElement extends HTMLElement {
    public String getAlign();
    public void setAlign(String align);

    public String getFrameBorder();
    public void setFrameBorder(String frameBorder);

    public String getHeight();
    public void setHeight(String height);

    public String getLongDesc();
    public void setLongDesc(String longDesc);

    public String getMarginHeight();
    public void setMarginHeight(String marginHeight);

    public String getMarginWidth();
    public void setMarginWidth(String marginWidth);

    public String getName();
    public void setName(String name);

    public String getScrolling();
    public void setScrolling(String scrolling);

    public String getSrc();
    public void setSrc(String src);

    public String getWidth();
    public void setWidth(String width);

    public Document getContentDocument();
}
```

org/w3c/dom/html2/HTMLIFrameElement.java:

## Appendix D: ECMAScript Language Binding

This appendix contains the complete ECMAScript [ECMAScript] binding for the Level 2 Document Object Model HTML definitions.

**Note:** Exceptions handling is only supported by ECMAScript implementation conformant with the Standard ECMA-262 3rd. Edition ([ECMAScript]).

Objects that implement the **HTMLCollection** interface:

Properties of objects that implement the **HTMLCollection** interface:

**length**

This read-only property is a **Number**.

Functions of objects that implement the **HTMLCollection** interface:

**item(index)**

This function returns an object that implements the **Node** interface.

The **index** parameter is a **Number**.

**Note:** This object can also be dereferenced using square bracket notation (e.g. obj[1]).

Dereferencing with an integer **index** is equivalent to invoking the **item** function with that index.

**namedItem(name)**

This function returns an object that implements the **Node** interface.

The **name** parameter is a **String**.

**Note:** This object can also be dereferenced using square bracket notation (e.g. obj["foo"]).

Dereferencing using a string index is equivalent to invoking the **namedItem** function with that index.

Objects that implement the **HTMLOptionsCollection** interface:

Properties of objects that implement the **HTMLOptionsCollection** interface:

**length**

This property is a **Number** and can raise an object that implements **DOMException** interface on setting.

Functions of objects that implement the **HTMLOptionsCollection** interface:

**item(index)**

This function returns an object that implements the **Node** interface.

The **index** parameter is a **Number**.

**Note:** This object can also be dereferenced using square bracket notation (e.g. obj[1]).

Dereferencing with an integer **index** is equivalent to invoking the **item** function with that index.

**namedItem(name)**

This function returns an object that implements the **Node** interface.

The **name** parameter is a **String**.

**Note:** This object can also be dereferenced using square bracket notation (e.g. obj["foo"]).

Dereferencing using a string index is equivalent to invoking the **namedItem** function with that index.

Objects that implement the **HTMLDocument** interface:

Objects that implement the **HTMLDocument** interface have all properties and functions of the **Document** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLDocument** interface:

**title**

This property is a **String**.

**referrer**

This read-only property is a **String**.

**domain**

This read-only property is a **String**.

**URL**

This read-only property is a **String**.

**body**

This property is an object that implements the **HTMLElement** interface.

**images**

This read-only property is an object that implements the **HTMLCollection** interface.

**applets**

This read-only property is an object that implements the **HTMLCollection** interface.

**links**

This read-only property is an object that implements the **HTMLCollection** interface.

**forms**

This read-only property is an object that implements the **HTMLCollection** interface.

**anchors**

This read-only property is an object that implements the **HTMLCollection** interface.

**cookie**

This property is a **String** and can raise an object that implements **DOMException** interface on setting.

Functions of objects that implement the **HTMLDocument** interface:

**open()**

This function has no return value.

**close()**

This function has no return value.

**write(text)**

This function has no return value.

The **text** parameter is a **String**.

**writeln(text)**

This function has no return value.

The **text** parameter is a **String**.

**getElementsByName(elementName)**

This function returns an object that implements the **NodeList** interface.

The **elementName** parameter is a **String**.

Objects that implement the **HTMLElement** interface:

Objects that implement the **HTMLElement** interface have all properties and functions of the **Element** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLElement** interface:

**id**

This property is a **String**.



**title**

This property is a **String**.

**lang**

This property is a **String**.

**dir**

This property is a **String**.

**className**

This property is a **String**.

Objects that implement the **HTMLHtmlElement** interface:

Objects that implement the **HTMLHtmlElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLHtmlElement** interface:

**version**

This property is a **String**.

Objects that implement the **HTMLHeadElement** interface:

Objects that implement the **HTMLHeadElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLHeadElement** interface:

**profile**

This property is a **String**.

Objects that implement the **HTMLLinkElement** interface:

Objects that implement the **HTMLLinkElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLLinkElement** interface:

**disabled**

This property is a **Boolean**.

**charset**

This property is a **String**.

**href**

This property is a **String**.

**hreflang**

This property is a **String**.

**media**

This property is a **String**.

**rel**

This property is a **String**.

**rev**

This property is a **String**.

**target**

This property is a **String**.

**type**

This property is a **String**.

Objects that implement the **HTMLTitleElement** interface:

Objects that implement the **HTMLTitleElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLTitleElement** interface:

**text**

This property is a **String**.

Objects that implement the **HTMLMetaElement** interface:

Objects that implement the **HTMLMetaElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLMetaElement** interface:

**content**

This property is a **String**.

**httpEquiv**

This property is a **String**.

**name**

This property is a **String**.

**scheme**

This property is a **String**.

Objects that implement the **HTMLBaseElement** interface:

Objects that implement the **HTMLBaseElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLBaseElement** interface:

**href**

This property is a **String**.

**target**

This property is a **String**.

Objects that implement the **HTMLIsIndexElement** interface:

Objects that implement the **HTMLIsIndexElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLIsIndexElement** interface:

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

**prompt**

This property is a **String**.

Objects that implement the **HTMLStyleElement** interface:

Objects that implement the **HTMLStyleElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLStyleElement** interface:

**disabled**

This property is a **Boolean**.

**media**

This property is a **String**.

**type**

This property is a **String**.

Objects that implement the **HTMLBodyElement** interface:

Objects that implement the **HTMLBodyElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLBodyElement** interface:

**aLink**

This property is a **String**.

**background**

This property is a **String**.

**bgColor**

This property is a **String**.

**link**

This property is a **String**.

**text**

This property is a **String**.

**vLink**

This property is a **String**.

Objects that implement the **HTMLFormElement** interface:

Objects that implement the **HTMLFormElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLFormElement** interface:

**elements**

This read-only property is an object that implements the **HTMLCollection** interface.

**length**

This read-only property is a **Number**.

**name**

This property is a **String**.

**acceptCharset**

This property is a **String**.

**action**

This property is a **String**.

**enctype**

This property is a **String**.

**method**

This property is a **String**.

**target**

This property is a **String**.

Functions of objects that implement the **HTMLFormElement** interface:

**submit()**

This function has no return value.

**reset()**

This function has no return value.

Objects that implement the **HTMLSelectElement** interface:

Objects that implement the **HTMLSelectElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLSelectElement** interface:

**type**

This read-only property is a **String**.

**selectedIndex**

This property is a **Number**.

**value**

This property is a **String**.

**length**

This property is a **Number** and can raise an object that implements **DOMException** interface on setting.

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

**options**

This read-only property is an object that implements the **HTMLOptionsCollection** interface.

**disabled**

This property is a **Boolean**.

**multiple**

This property is a **Boolean**.

**name**

This property is a **String**.

**size**

This property is a **Number**.

**tabIndex**

This property is a **Number**.

Functions of objects that implement the **HTMLSelectElement** interface:

**add(element, before)**

This function has no return value.

The **element** parameter is an object that implements the **HTMLElement** interface.

The **before** parameter is an object that implements the **HTMLElement** interface.

This function can raise an object that implements the **DOMException** interface.

**remove(index)**

This function has no return value.

The **index** parameter is a **Number**.

**blur()**

This function has no return value.

**focus()**

This function has no return value.

Objects that implement the **HTMLOptGroupElement** interface:

Objects that implement the **HTMLOptGroupElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLOptGroupElement** interface:

**disabled**

This property is a **Boolean**.

**label**

This property is a **String**.

Objects that implement the **HTMLOptionElement** interface:

Objects that implement the **HTMLOptionElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLOptionElement** interface:

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

**defaultSelected**

This property is a **Boolean**.

**text**

This read-only property is a **String**.

**index**

This read-only property is a **Number**.

**disabled**

This property is a **Boolean**.

**label**

This property is a **String**.

**selected**

This property is a **Boolean**.

**value**

This property is a **String**.

Objects that implement the **HTMLInputElement** interface:

Objects that implement the **HTMLInputElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLInputElement** interface:

**defaultValue**

This property is a **String**.

**defaultChecked**

This property is a **Boolean**.

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

**accept**

This property is a **String**.

**accessKey**

This property is a **String**.

**align**

This property is a **String**.

**alt**

This property is a **String**.

**checked**

This property is a **Boolean**.

**disabled**

This property is a **Boolean**.

**maxLength**

This property is a **Number**.

**name**

This property is a **String**.

**readOnly**

This property is a **Boolean**.

**size**

This property is a **Number**.

**src**  
This property is a **String**.

**tabIndex**  
This property is a **Number**.

**type**  
This property is a **String**.

**useMap**  
This property is a **String**.

**value**  
This property is a **String**.

Functions of objects that implement the **HTMLInputElement** interface:

**blur()**  
This function has no return value.

**focus()**  
This function has no return value.

**select()**  
This function has no return value.

**click()**  
This function has no return value.

Objects that implement the **HTMLTextAreaElement** interface:

Objects that implement the **HTMLTextAreaElement** interface have all properties and functions of the **HTMLFormElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLTextAreaElement** interface:

**defaultValue**  
This property is a **String**.

**form**  
This read-only property is an object that implements the **HTMLFormElement** interface.

**accessKey**  
This property is a **String**.

**cols**  
This property is a **Number**.

**disabled**  
This property is a **Boolean**.

**name**  
This property is a **String**.

**readOnly**  
This property is a **Boolean**.

**rows**  
This property is a **Number**.

**tabIndex**  
This property is a **Number**.

**type**  
This read-only property is a **String**.

**value**  
This property is a **String**.

Functions of objects that implement the **HTMLTextAreaElement** interface:

**blur()**

This function has no return value.

**focus()**

This function has no return value.

**select()**

This function has no return value.

Objects that implement the **HTMLButtonElement** interface:

Objects that implement the **HTMLButtonElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLButtonElement** interface:

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

**accessKey**

This property is a **String**.

**disabled**

This property is a **Boolean**.

**name**

This property is a **String**.

**tabIndex**

This property is a **Number**.

**type**

This read-only property is a **String**.

**value**

This property is a **String**.

Objects that implement the **HTMLLabelElement** interface:

Objects that implement the **HTMLLabelElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLLabelElement** interface:

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

**accessKey**

This property is a **String**.

**htmlFor**

This property is a **String**.

Objects that implement the **HTMLFieldSetElement** interface:

Objects that implement the **HTMLFieldSetElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLFieldSetElement** interface:

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

Objects that implement the **HTMLLegendElement** interface:

Objects that implement the **HTMLLegendElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLLegendElement** interface:

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

**accessKey**

This property is a **String**.

**align**

This property is a **String**.

Objects that implement the **HTMLUListElement** interface:

Objects that implement the **HTMLUListElement** interface have all properties and functions of the **HTMLFormElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLUListElement** interface:

**compact**

This property is a **Boolean**.

**type**

This property is a **String**.

Objects that implement the **HTMLLOListElement** interface:

Objects that implement the **HTMLLOListElement** interface have all properties and functions of the **HTMLFormElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLLOListElement** interface:

**compact**

This property is a **Boolean**.

**start**

This property is a **Number**.

**type**

This property is a **String**.

Objects that implement the **HTMLDListElement** interface:

Objects that implement the **HTMLDListElement** interface have all properties and functions of the **HTMLFormElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLDListElement** interface:

**compact**

This property is a **Boolean**.

Objects that implement the **HTMLDirectoryElement** interface:

Objects that implement the **HTMLDirectoryElement** interface have all properties and functions of the **HTMLFormElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLDirectoryElement** interface:

**compact**

This property is a **Boolean**.

Objects that implement the **HTMLMenuElement** interface:

Objects that implement the **HTMLMenuElement** interface have all properties and functions of the **HTMLFormElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLMenuElement** interface:

**compact**

This property is a **Boolean**.

Objects that implement the **HTMLLIElement** interface:

Objects that implement the **HTMLLIElement** interface have all properties and functions of the **HTMLFormElement** interface as well as the properties and functions defined below.



Properties of objects that implement the **HTMLLIElement** interface:

**type**

This property is a **String**.

**value**

This property is a **Number**.

Objects that implement the **HTMLDivElement** interface:

Objects that implement the **HTMLDivElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLDivElement** interface:

**align**

This property is a **String**.

Objects that implement the **HTMLParagraphElement** interface:

Objects that implement the **HTMLParagraphElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLParagraphElement** interface:

**align**

This property is a **String**.

Objects that implement the **HTMLHeadingElement** interface:

Objects that implement the **HTMLHeadingElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLHeadingElement** interface:

**align**

This property is a **String**.

Objects that implement the **HTMLQuoteElement** interface:

Objects that implement the **HTMLQuoteElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLQuoteElement** interface:

**cite**

This property is a **String**.

Objects that implement the **HTMLPreElement** interface:

Objects that implement the **HTMLPreElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLPreElement** interface:

**width**

This property is a **Number**.

Objects that implement the **HTMLBRElement** interface:

Objects that implement the **HTMLBRElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLBRElement** interface:

**clear**

This property is a **String**.

Objects that implement the **HTMLBaseFontElement** interface:

Objects that implement the **HTMLBaseFontElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLBaseFontElement** interface:

**color**

This property is a **String**.

**face**

This property is a **String**.

**size**

This property is a **Number**.

Objects that implement the **HTMLFontElement** interface:

Objects that implement the **HTMLFontElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLFontElement** interface:

**color**

This property is a **String**.

**face**

This property is a **String**.

**size**

This property is a **String**.

Objects that implement the **HTMLHRElement** interface:

Objects that implement the **HTMLHRElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLHRElement** interface:

**align**

This property is a **String**.

**noShade**

This property is a **Boolean**.

**size**

This property is a **String**.

**width**

This property is a **String**.

Objects that implement the **HTMLModElement** interface:

Objects that implement the **HTMLModElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLModElement** interface:

**cite**

This property is a **String**.

**dateTime**

This property is a **String**.

Objects that implement the **HTMLAnchorElement** interface:

Objects that implement the **HTMLAnchorElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLAnchorElement** interface:

**accessKey**

This property is a **String**.

**charset**

This property is a **String**.

**coords**

This property is a **String**.

**href**  
This property is a **String**.

**hreflang**  
This property is a **String**.

**name**  
This property is a **String**.

**rel**  
This property is a **String**.

**rev**  
This property is a **String**.

**shape**  
This property is a **String**.

**tabIndex**  
This property is a **Number**.

**target**  
This property is a **String**.

**type**  
This property is a **String**.

Functions of objects that implement the **HTMLAnchorElement** interface:

**blur()**  
This function has no return value.

**focus()**  
This function has no return value.

Objects that implement the **HTMLImageElement** interface:

Objects that implement the **HTMLImageElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLImageElement** interface:

**name**  
This property is a **String**.

**align**  
This property is a **String**.

**alt**  
This property is a **String**.

**border**  
This property is a **String**.

**height**  
This property is a **Number**.

**hspace**  
This property is a **Number**.

**isMap**  
This property is a **Boolean**.

**longDesc**  
This property is a **String**.

**src**  
This property is a **String**.

**useMap**

This property is a **String**.

**vspace**

This property is a **Number**.

**width**

This property is a **Number**.

Objects that implement the **HTMLObjectElement** interface:

Objects that implement the **HTMLObjectElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLObjectElement** interface:

**form**

This read-only property is an object that implements the **HTMLFormElement** interface.

**code**

This property is a **String**.

**align**

This property is a **String**.

**archive**

This property is a **String**.

**border**

This property is a **String**.

**codeBase**

This property is a **String**.

**codeType**

This property is a **String**.

**data**

This property is a **String**.

**declare**

This property is a **Boolean**.

**height**

This property is a **String**.

**hspace**

This property is a **Number**.

**name**

This property is a **String**.

**standby**

This property is a **String**.

**tabIndex**

This property is a **Number**.

**type**

This property is a **String**.

**useMap**

This property is a **String**.

**vspace**

This property is a **Number**.

**width**

This property is a **String**.

**contentDocument**

This read-only property is an object that implements the **Document** interface.

Objects that implement the **HTMLParamElement** interface:

Objects that implement the **HTMLParamElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLParamElement** interface:

**name**

This property is a **String**.

**type**

This property is a **String**.

**value**

This property is a **String**.

**valueType**

This property is a **String**.

Objects that implement the **HTMLAppletElement** interface:

Objects that implement the **HTMLAppletElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLAppletElement** interface:

**align**

This property is a **String**.

**alt**

This property is a **String**.

**archive**

This property is a **String**.

**code**

This property is a **String**.

**codeBase**

This property is a **String**.

**height**

This property is a **String**.

**hspace**

This property is a **Number**.

**name**

This property is a **String**.

**object**

This property is a **String**.

**vspace**

This property is a **Number**.

**width**

This property is a **String**.

Objects that implement the **HTMLMapElement** interface:

Objects that implement the **HTMLMapElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLMapElement** interface:

**areas**

This read-only property is an object that implements the **HTMLCollection** interface.

**name**

This property is a **String**.

Objects that implement the **HTMLAreaElement** interface:

Objects that implement the **HTMLAreaElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLAreaElement** interface:

**accessKey**

This property is a **String**.

**alt**

This property is a **String**.

**coords**

This property is a **String**.

**href**

This property is a **String**.

**noHref**

This property is a **Boolean**.

**shape**

This property is a **String**.

**tabIndex**

This property is a **Number**.

**target**

This property is a **String**.

Objects that implement the **HTMLScriptElement** interface:

Objects that implement the **HTMLScriptElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLScriptElement** interface:

**text**

This property is a **String**.

**htmlFor**

This property is a **String**.

**event**

This property is a **String**.

**charset**

This property is a **String**.

**defer**

This property is a **Boolean**.

**src**

This property is a **String**.

**type**

This property is a **String**.

Objects that implement the **HTMLTableElement** interface:

Objects that implement the **HTMLTableElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLTableElement** interface:

**caption**

This property is an object that implements the **HTMLTableCaptionElement** interface and

can raise an object that implements **DOMException** interface on setting.

**tHead**

This property is an object that implements the **HTMLTableSectionElement** interface and can raise an object that implements **DOMException** interface on setting.

**tFoot**

This property is an object that implements the **HTMLTableSectionElement** interface and can raise an object that implements **DOMException** interface on setting.

**rows**

This read-only property is an object that implements the **HTMLCollection** interface.

**tBodies**

This read-only property is an object that implements the **HTMLCollection** interface.

**align**

This property is a **String**.

**bgColor**

This property is a **String**.

**border**

This property is a **String**.

**cellPadding**

This property is a **String**.

**cellSpacing**

This property is a **String**.

**frame**

This property is a **String**.

**rules**

This property is a **String**.

**summary**

This property is a **String**.

**width**

This property is a **String**.

Functions of objects that implement the **HTMLTableElement** interface:

**createTHead()**

This function returns an object that implements the **HTMLTableSectionElement** interface.

**deleteTHead()**

This function has no return value.

**createTFoot()**

This function returns an object that implements the **HTMLTableSectionElement** interface.

**deleteTFoot()**

This function has no return value.

**createCaption()**

This function returns an object that implements the **HTMLTableCaptionElement** interface.

**deleteCaption()**

This function has no return value.

**insertRow(index)**

This function returns an object that implements the **HTMLTableSectionElement** interface.

The **index** parameter is a **Number**.

This function can raise an object that implements the **DOMException** interface.

**deleteRow(index)**

This function has no return value.

The **index** parameter is a **Number**.

This function can raise an object that implements the **DOMException** interface.

Objects that implement the **HTMLTableCaptionElement** interface:

Objects that implement the **HTMLTableCaptionElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLTableCaptionElement** interface:

**align**

This property is a **String**.

Objects that implement the **HTMLTableColElement** interface:

Objects that implement the **HTMLTableColElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLTableColElement** interface:

**align**

This property is a **String**.

**ch**

This property is a **String**.

**chOff**

This property is a **String**.

**span**

This property is a **Number**.

**vAlign**

This property is a **String**.

**width**

This property is a **String**.

Objects that implement the **HTMLTableSectionElement** interface:

Objects that implement the **HTMLTableSectionElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLTableSectionElement** interface:

**align**

This property is a **String**.

**ch**

This property is a **String**.

**chOff**

This property is a **String**.

**vAlign**

This property is a **String**.

**rows**

This read-only property is an object that implements the **HTMLCollection** interface.

Functions of objects that implement the **HTMLTableSectionElement** interface:

**insertRow(index)**

This function returns an object that implements the **HTMLElement** interface.

The **index** parameter is a **Number**.

This function can raise an object that implements the **DOMException** interface.



**deleteRow(index)**

This function has no return value.

The **index** parameter is a **Number**.

This function can raise an object that implements the **DOMException** interface.

Objects that implement the **HTMLTableRowElement** interface:

Objects that implement the **HTMLTableRowElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLTableRowElement** interface:

**rowIndex**

This read-only property is a **Number**.

**sectionRowIndex**

This read-only property is a **Number**.

**cells**

This read-only property is an object that implements the **HTMLCollection** interface.

**align**

This property is a **String**.

**bgColor**

This property is a **String**.

**ch**

This property is a **String**.

**chOff**

This property is a **String**.

**vAlign**

This property is a **String**.

Functions of objects that implement the **HTMLTableRowElement** interface:

**insertCell(index)**

This function returns an object that implements the **HTMLElement** interface.

The **index** parameter is a **Number**.

This function can raise an object that implements the **DOMException** interface.

**deleteCell(index)**

This function has no return value.

The **index** parameter is a **Number**.

This function can raise an object that implements the **DOMException** interface.

Objects that implement the **HTMLTableCellElement** interface:

Objects that implement the **HTMLTableCellElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLTableCellElement** interface:

**cellIndex**

This read-only property is a **Number**.

**abbr**

This property is a **String**.

**align**

This property is a **String**.

**axis**

This property is a **String**.

**bgColor**

This property is a **String**.

**ch**

This property is a **String**.

**chOff**

This property is a **String**.

**colSpan**

This property is a **Number**.

**headers**

This property is a **String**.

**height**

This property is a **String**.

**noWrap**

This property is a **Boolean**.

**rowSpan**

This property is a **Number**.

**scope**

This property is a **String**.

**vAlign**

This property is a **String**.

**width**

This property is a **String**.

Objects that implement the **HTMLFrameSetElement** interface:

Objects that implement the **HTMLFrameSetElement** interface have all properties and functions of the **HTMLFrameElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLFrameSetElement** interface:

**cols**

This property is a **String**.

**rows**

This property is a **String**.

Objects that implement the **HTMLFrameElement** interface:

Objects that implement the **HTMLFrameElement** interface have all properties and functions of the **HTMLFrameElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLFrameElement** interface:

**frameBorder**

This property is a **String**.

**longDesc**

This property is a **String**.

**marginHeight**

This property is a **String**.

**marginWidth**

This property is a **String**.

**name**

This property is a **String**.

**noResize**

This property is a **Boolean**.

**scrolling**

This property is a **String**.

**src**

This property is a **String**.

**contentDocument**

This read-only property is an object that implements the **Document** interface.

Objects that implement the **HTMLIFrameElement** interface:

Objects that implement the **HTMLIFrameElement** interface have all properties and functions of the **HTMLElement** interface as well as the properties and functions defined below.

Properties of objects that implement the **HTMLIFrameElement** interface:

**align**

This property is a **String**.

**frameBorder**

This property is a **String**.

**height**

This property is a **String**.

**longDesc**

This property is a **String**.

**marginHeight**

This property is a **String**.

**marginWidth**

This property is a **String**.

**name**

This property is a **String**.

**scrolling**

This property is a **String**.

**src**

This property is a **String**.

**width**

This property is a **String**.

**contentDocument**

This read-only property is an object that implements the **Document** interface.

HTMLAnchorElement objects in String expressions are evaluated as `HTMLAnchorElement.href` [p.42]. For example:

```
alert(" The absolute URI is " + myAnchorElement);
```

is equivalent to

```
alert(" The absolute URI is " + myAnchorElement.href);
```



## Appendix E: Acknowledgements

Many people contributed to this specification, including members of the DOM Working Group and the DOM Interest Group. We especially thank the following:

Andy Heninger (IBM), Arnaud Le Hors (W3C and IBM), Bill Smith (Sun), Bill Shea (Merrill Lynch), Chris Lovett (Microsoft), Chris Wilson (Microsoft), David Brownell (Sun), Glenn Adams (ATSC), James Davidson (Sun), Joe Kesselman (IBM), Joe Lapp (webMethods), Joe Marini (Macromedia), Johnny Stenback (Netscape), Jonathan Marsh (Microsoft), Jonathan Robie (Texcel Research and Software AG), Kim Adamson-Sharpe (SoftQuad Software Inc.), Lauren Wood (SoftQuad Software Inc., *former Chair*), Laurence Cable (Sun), Mark Davis (IBM), Mark Scardina (Oracle), Martin Dürst (W3C), Mick Goulish (Software AG), Mike Champion (Arbortext and Software AG), Miles Sabin (Cromwell Media), Patti Lutsky (Arbortext), Paul Grosso (Arbortext), Peter Sharpe (SoftQuad Software Inc.), Phil Karlton (Netscape), Philippe Le Hégarret (W3C, *W3C team contact and former Chair*), Ramesh Lekshmyarayanan (Merrill Lynch), Ray Whitmer (iMall, Excite@Home, Netscape and *Chair*), Rich Rollman (Microsoft), Rick Gessner (Netscape), Tom Pixley (Netscape), Vidur Apparao (Netscape), Vinod Anupam (Lucent).

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The W3C tried to produce the most useful and accurate specification as possible but we wouldn't have been able to do so without the help of the DOM Test Suite effort. Special thanks to Curt Arnold, Rick Rivello (NIST), Robert Clary (Netscape) and Dimitris Dimitriadis for the DOM Level 2 HTML Test Suite. The DOM Test Suite is based on the test suite developed by Mary Brady (NIST).

### E.1: Production Systems

This specification was written in XML. The HTML, OMG IDL, Java and ECMAScript bindings were all produced automatically.

This document was generated using DOM Level 2. We used Xerces as the basis DOM implementation and wish to thank the authors. Philippe Le Hégarret and Arnaud Le Hors wrote the Java programs which are the DOM application.

### E.2: DOM Level 1

The authors of the DOM Level 1 specification, members of the DOM Working Group, deserve much credit for their hard work:

Lauren Wood (SoftQuad, Inc., *chair*), Arnaud Le Hors (W3C, *W3C staff contact*), Andrew Watson (Object Management Group), Bill Smith (Sun), Chris Lovett (Microsoft), Chris Wilson (Microsoft), David Brownell (Sun), David Singer (IBM), Don Park (invited), Eric Vasilik (Microsoft), Gavin Nicol (INSO), Ian Jacobs (W3C), James Clark (invited), Jared Sorensen (Novell), Jonathan Robie (Texcel Research and Software AG), Mike Champion (ArborText and Software AG), Paul Grosso (ArborText), Peter Sharpe (SoftQuad, Inc.), Phil Karlton (Netscape), Ray Whitmer (iMall), Rich Rollman (Microsoft), Rick Gessner (Netscape), Robert Sutor (IBM), Scott Isaacs (Microsoft), Sharon Adler (INSO), Steve Byrne (JavaSoft),

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The editors of the first version of the DOM HTML module were Mike Champion (ArborText), Vidur Apparao (Netscape), Scott Isaacs (Microsoft, January 1998), Chris Wilson (Microsoft, after January 1998), and Ian Jacobs (W3C).

# Glossary

## Editors:

Arnaud Le Hors, IBM  
 Lauren Wood, SoftQuad Software Inc.  
 Robert S. Sutor, IBM (for DOM Level 1)

Several of the following term definitions have been borrowed or modified from similar definitions in other W3C or standards documents. See the links within the definitions for more information.

### **convenience**

A *convenience method* is an operation on an object that could be accomplished by a program consisting of more basic operations on the object. Convenience *methods* are usually provided to make the API easier and simpler to use or to allow specific programs to create more optimized implementations for common operations. A similar definition holds for a *convenience property*.

### **data model**

A *data model* is a collection of descriptions of data structures and their contained fields, together with the operations or functions that manipulate them.

### **DOM Level 0**

The term "*DOM Level 0*" refers to a mix (not formally specified) of HTML document functionalities offered by Netscape Navigator version 3.0 and Microsoft Internet Explorer version 3.0. In some cases, attributes or *methods* have been included for reasons of backward compatibility with "DOM Level 0".

### **HTML**

The HyperText Markup Language (*HTML*) is a simple markup language used to create hypertext documents that are portable from one platform to another. HTML documents are SGML documents with generic semantics that are appropriate for representing information from a wide range of applications. [HTML 4.01]

### **language binding**

A programming *language binding* for an IDL specification is an implementation of the interfaces in the specification for the given language. For example, a Java language binding for the Document Object Model IDL specification would implement the concrete Java classes that provide the functionality exposed by the interfaces.

### **live**

An object is *live* if any change to the underlying document structure is reflected in the object.

### **tokenized**

The description given to various information items (for example, attribute values of various types, but not including the StringType CDATA) after having been processed by the XML processor. The process includes stripping leading and trailing white space, and replacing multiple space characters by one. See the definition of tokenized type.





## References

For the latest version of any W3C specification please consult the list of W3C Technical Reports available at <http://www.w3.org/TR>.

### G.1: Normative references

#### [DOM Level 2 Core]

*Document Object Model Level 2 Core Specification*, A. Le Hors, et al., Editors. World Wide Web Consortium, 13 November 2000. This version of the DOM Level 2 Core Recommendation is <http://www.w3.org/TR/2000/REC-DOM-Level-2-Core-20001113>. The latest version of DOM Level 2 Core is available at <http://www.w3.org/TR/DOM-Level-2-Core>.

#### [DOM Level 2 Style Sheets and CSS]

*Document Object Model Level 2 Style Sheets and CSS Specification*, C. Wilson, P. Le Hégarret, V. Apparao, Editors. World Wide Web Consortium, 13 November 2000. This version of the Document Object Model Level 2 Style Sheets and CSS Recommendation is <http://www.w3.org/TR/2000/REC-DOM-Level-2-Style-20001113>. The latest version of Document Object Model Level 2 Style Sheets and CSS is available at <http://www.w3.org/TR/DOM-Level-2-Style>.

#### [ECMAScript]

*ECMAScript Language Specification*, Third Edition. European Computer Manufacturers Association, December 1999. This version of the ECMAScript Language is available at <http://www.ecma.ch/ecma1/STAND/ECMA-262.HTM>.

#### [HTML 4.01]

*HTML 4.01 Specification*, D. Raggett, A. Le Hors, and I. Jacobs, Editors. World Wide Web Consortium, 17 December 1997, revised 24 April 1998, revised 24 December 1999. This version of the HTML 4.01 Recommendation is <http://www.w3.org/TR/1999/REC-html401-19991224>. The latest version of HTML 4 is available at <http://www.w3.org/TR/html4>.

#### [IETF RFC 2396]

*Uniform Resource Identifiers (URI): Generic Syntax*, T. Berners-Lee, R. Fielding, L. Masinter, Authors. Internet Engineering Task Force, August 1998. Available at <http://www.ietf.org/rfc/rfc2396.txt>.

#### [IETF RFC 2965]

*HTTP State Management Mechanism*, D. Kristol and L. Montulli, Editors. Internet Engineering Task Force, October 2000. Available at <http://www.ietf.org/rfc/rfc2965.txt>.

#### [Java]

*The Java Language Specification*, J. Gosling, B. Joy, and G. Steele, Authors. Addison-Wesley, September 1996. Available at <http://java.sun.com/docs/books/jls>

#### [OMG IDL]

*"OMG IDL Syntax and Semantics"* defined in *The Common Object Request Broker: Architecture and Specification, version 2*, Object Management Group. The latest version of CORBA version 2.0 is available at [http://www.omg.org/technology/documents/formal/corba\\_2.htm](http://www.omg.org/technology/documents/formal/corba_2.htm).

#### [XHTML 1.0]

*XHTML 1.0: The Extensible HyperText Markup Language*, S. Pemberton, et al., Authors. World Wide Web Consortium, 26 January 2000, revised 1 August 2002. This version of the XHTML 1.0 Recommendation is <http://www.w3.org/TR/2002/REC-xhtml1-20020801>. The latest version of

XHTML 1.0 is available at <http://www.w3.org/TR/xhtml1>.

## G.2: Informative references

### [DOM Level 1]

*DOM Level 1 Specification*, V. Apparao, et al., Editors. World Wide Web Consortium, 1 October 1998. This version of the DOM Level 1 Recommendation is <http://www.w3.org/TR/1998/REC-DOM-Level-1-19981001>. The latest version of DOM Level 1 is available at <http://www.w3.org/TR/REC-DOM-Level-1>.

### [DOM Level 3 Load and Save]

*Document Object Model Level 3 Load and Save Specification*, J. Stenback, A. Heninger, Editors. World Wide Web Consortium, July 2002. This version of the DOM Level 3 Load and Save Specification is <http://www.w3.org/TR/2002/WD-DOM-Level-3-LS-20020725>. The latest version of DOM Level 3 Load and Save is available at <http://www.w3.org/TR/DOM-Level-3-LS>.

### [DOM Level 2 Style Sheets and CSS]

*Document Object Model Level 2 Style Sheets and CSS Specification*, C. Wilson, P. Le Hégarret, V. Apparao, Editors. World Wide Web Consortium, 13 November 2000. This version of the Document Object Model Level 2 Style Sheets and CSS Recommendation is <http://www.w3.org/TR/2000/REC-DOM-Level-2-Style-20001113>. The latest version of Document Object Model Level 2 Style Sheets and CSS is available at <http://www.w3.org/TR/DOM-Level-2-Style>.

### [DOM Level 2 Traversal]

*"Document Object Model Traversal"* in *Document Object Model Level 2 Traversal and Range Specification*, J. Kesselman, J. Robie, M. Champion, P. Sharpe, V. Apparao, L. Wood, Editors. World Wide Web Consortium, 13 November 2000. This version of the Document Object Model Level 2 Traversal and Range Recommendation is <http://www.w3.org/TR/2000/REC-DOM-Level-2-Traversal-Range-20001113>. The latest version of Document Object Model Level 2 Traversal and Range is available at <http://www.w3.org/TR/DOM-Level-2-Traversal-Range>.

### [IETF RFC 2616]

*Hypertext Transfer Protocol -- HTTP/1.1*, R. Fielding, J. Gettys, J. Mogul, H. Frystyk, L. Masinter, P. Leach, T. Berners-Lee, Authors. Internet Engineering Task Force, June 1999. Available at <http://www.ietf.org/rfc/rfc2616.txt>.

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