Node

* The DOM can be thought of as a tree consisting of interconnected nodes. Each tag in an HTML document is represented by a node; any tags that are nested inside that tag are nodes that are connected to it as children, or branches in the tree. Each of these nodes is called an element node. There are several other types of nodes; the most useful are the document node, text node, and attribute node.

Node Object Types

* Most common types of nodes are
* DOCUMENT\_NODE (e.g., window.document)
* ELEMENT\_NODE (e.g., <body>, <a>, <p>, <script>, <style>, <html>, <h1>)
* ATTRIBUTE\_NODE (e.g., class="funEdges")
* TEXT\_NODE (e.g., text characters in an HTML document including carriage returns and whitespace)
* DOCUMENT\_FRAGMENT\_NODE (e.g., document.createDocumentFragment())
* DOCUMENT\_TYPE\_NODE (e.g., <!DOCTYPE html>)

Table 1-1. Node interfaces/constructors and corresponding numeric classification and name given to instances.

|  |  |
| --- | --- |
| Interface/constructor | nodeType (returned from .nodeType) |
| HTML\*Element[e.g., HTMLBodyElement] | 1 (i.e., ELEMENT\_NODE) |
| Text | 3 (i.e., TEXT\_NODE) |
| Attr | 2 (i.e., ATTRIBUTE\_NODE) |
| HTMLDocument | 9 (i.e., DOCUMENT\_NODE) |
| DocumentFragment | 11 (i.e., DOCUMENT\_FRAGMENT\_NODE) |
| DocumentType | 10 (i.e., DOCUMENT\_TYPE\_NODE) |

The following are the most common Node properties and methods inherited by all node objects, including the relevant inherited properties for working with nodes from subnode interfaces.

Node properties

* childNodes
* firstChild
* lastChild
* nextSibling
* nodeName
* nodeType
* nodeValue
* parentNode
* previousSibling

Node methods

* appendChild()
* cloneNode()
* compareDocumentPosition()
* contains()
* hasChildNodes()
* insertBefore()
* isEqualNode()
* removeChild()
* replaceChild()

Document methods

* document.createElement()
* document.createTextNode()

HTML\*Element properties

* innerHTML
* outerHTML
* textContent
* innerText
* outerText
* firstElementChild
* lastElementChild
* nextElementChild
* previousElementChild
* children

HTML element method

* insertAdjacentHTML()

Notes

* Every node has a nodeType and nodeName property that is inherited from Node. For example, Text nodes have a nodeType code of 3 and a nodeName value of #text.