

A Brief Navigation Reference

In this lesson we get acquainted with navigation reference.

WE'LL COVER THE FOLLOWING



- Document operations to query nodes
- Document properties to access nodes
- HTML element navigation methods and properties

Now, it is time to summarize the operations you can use for navigation.

Generally, you start with querying the document object for a single node, or a collection of nodes.

For this activity, you can use the operations summarized in the table below:

Document operations to query nodes

Operation	Description
<code>getElementById()</code>	This method returns the element that has the <code>id</code> attribute with the specified value. It is one of the most commonly used methods in the HTML DOM, and is invoked almost every time you want to manipulate, or get info from, an element on your document.
	Returns null if no elements with the specified <code>id</code> exists.
<code>getElementsByName()</code>	This method retrieves a collection of all elements that have their <code>name</code> attribute with the specified value. Returns an empty collection if no elements with the specified name exists.
<code>getElementsByTagName()</code>	This method returns a collection of all elements in the document with the specified tag name. Passing the value <code>"*"</code> to this method returns all elements in the document.

In Listing 6-3, you already used the `body` property of document as a shortcut to access the tag. The document object provides a number of properties to access frequently used nodes and node collections, as summarized in the table below:

Document properties to access nodes

Property	Description
<code>anchors</code>	This property returns an array of all the anchors (<code><a></code> tags) in the current document.
<code>body</code>	Returns the body element of the document.
<code>doctype</code>	Returns the <code><!DOCTYPE></code> of the HTML document.
<code>documentElement</code>	This property returns the document, as an Element object. Using this property you can access HTML element operations on the document node.
<code>forms</code>	This property returns an array of all the forms (<code><form></code> tags) in the current document.
<code>images</code>	This property returns an array of all the images (<code></code> tags) in the current document.
<code>links</code>	This property returns an array of all the links in the current document. As you learned, not only the <code><a></code> tag, but also the <code><area></code> tag can define links to other documents. This property retrieves all of them.

When you grab a node representing an HTML element, you can use the navigation methods and properties summarized in the table below. If you have a collection of HTML elements, you can iterate through them, and apply the operations in the table below on each collection item, or on selected ones.

HTML element navigation methods and properties

Method/Property	Description
<code>attributes</code>	Returns a collection of the element's attributes.
<code>childNodes</code>	Returns a collection of child nodes for an element.
<code>firstChild</code>	Returns the first child node of the specified node. Do not forget, in HTML, the document itself is the parent node of the <code><html></code> element, <code><head></code> and <code><body></code> are child nodes of <code><html></code> .
<code>getAttribute()</code>	Returns the specified attribute value of the element node
<code>getAttributeNode()</code>	Returns the specified attribute node
<code>getElementsByTagName()</code>	Returns a collection of all child elements with the specified tag name
<code>hasAttribute</code>	Returns true, if an element has the specified attribute; otherwise, false.
<code>hasAttributes()</code>	Returns true, if an element has any attributes; otherwise, false.
<code>hasChildNodes()</code>	Returns true, if an element has any child nodes; otherwise, false.
<code>innerHTML</code>	This property sets or returns the inner HTML of the element. Yes, it not only retrieves, but allows changing the content of the element.
<code>lastChild</code>	Returns the last child node of the specified node.
<code>nextSibling</code>	Returns the node immediately following this node, in the same tree level.
<code>ownerDocument</code>	Returns the root element (document object) for this element.
<code>parentNode</code>	Returns the parent node of the element.
<code>previousSibling</code>	Returns the previous node of this node, in the same tree level.
<code>textContent</code>	This property sets or returns the textual content of the specified node, and all its direct and indirect descendants. This property not only retrieves the textual content, it allows changing it.

In the next lesson, let's delve into element specific properties of the DOM.