**jQuery Traversing**

What is Traversing?

jQuery traversing, which means "move through", are used to "find" (or select) HTML elements based on their relation to other elements. Start with one selection and move through that selection until you reach the elements you desire.

The image below illustrates an HTML page as a tree (DOM tree). With jQuery traversing, you can easily move up (ancestors), down (descendants) and sideways (siblings) in the tree, starting from the selected (current) element. This movement is called traversing - or moving through - the DOM tree.

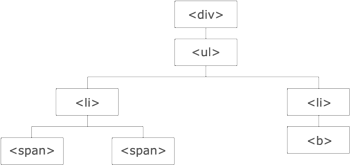


Illustration explained:

* The <div> element is the**parent** of <ul>, and an **ancestor** of everything inside of it
* The <ul> element is the **parent** of both <li> elements, and a **child** of <div>
* The left <li> element is the **parent** of <span>, **child** of <ul> and a **descendant** of <div>
* The <span> element is a **child** of the left <li> and a **descendant** of <ul> and <div>
* The two <li> elements are **siblings** (they share the same parent)
* The right <li> element is the **parent** of <b>, **child** of <ul> and a **descendant** of <div>
* The <b> element is a **child** of the right <li> and a **descendant** of <ul> and <div>

An ancestor is a parent, grandparent, great-grandparent, and so on.

A descendant is a child, grandchild, great-grandchild, and so on.

Siblings share the same parent.

## Ancestors(Traversing Up the DOM Tree)

Three useful jQuery methods for traversing up the DOM tree are:

* parent()
* parents()
* parentsUntil()

The parent() method returns the direct parent element of the selected element.

Example: Returns the direct parent element of each <span> elements:

$(document).ready(function(){  
  $("span").parent();  
});

The parents() method returns all ancestor elements of the selected element, all the way up to the document's root element (<html>).

Example: Returns all ancestors of all <span> elements:

## $(document).ready(function(){    $("span").parents(); });

We can also use an optional parameter to filter the search for ancestors.

Example: Returns all ancestors of all <span> elements that are <ul> elements:

## $(document).ready(function(){   $("span").parents("ul"); });

The parentsUntil() method returns all ancestor elements between two given arguments.

Example: Returns all ancestor elements between a <span> and a <div> element:

$(document).ready(function(){  
  $("span").parentsUntil("div");  
});

## Descendants (Traversing Down the DOM Tree)

Two useful jQuery methods for traversing down the DOM tree are:

* children()
* find()

The children() method returns all direct children of the selected element.

This method only traverses a single level down the DOM tree.

Example: Returns all elements that are direct children of each <div> elements:

$(document).ready(function(){  
  $("div").children();  
});

The find() method returns descendant elements of the selected element, all the way down to the last descendant.

Example: Returns all <span> elements that are descendants of <div>:

$(document).ready(function(){  
  $("div").find("span");  
});

Example: Returns all descendants of <div>:

$(document).ready(function(){  
  $("div").find("\*");  
});

Siblings

There are many useful jQuery methods for traversing sideways in the DOM tree:

* siblings()
* next()
* nextAll()
* nextUntil()
* prev()
* prevAll()
* prevUntil()

The siblings() method returns all sibling elements of the selected element.

Example: Returns all sibling elements of <h2>:

We can also use an optional parameter to filter the search for siblings.

Example: Returns all sibling elements of <h2> that are <p> elements:

$(document).ready(function(){  
  $("h2").siblings("p");  
});

The next() method returns the next sibling element of the selected element.

Example: Returns the next sibling of <h2>:

$(document).ready(function(){  
  $("h2").next();  
});

The nextAll() method returns all next sibling elements of the selected element.

Example: Returns all next sibling elements of <h2>:

$(document).ready(function(){  
  $("h2").nextAll();  
});

The nextUntil() method returns all next sibling elements between two given arguments.

Example: Returns all sibling elements between a <h2> and a <h6> element:

The prev(), prevAll() and prevUntil() methods work just like the methods above but with reverse functionality: they return previous sibling elements (traverse backwards along sibling elements in the DOM tree, instead of forward).

The prev() methods return the previous sibling element of each <li> element with class name "start

$(document).ready(function(){  
  $("li.start").prev().css({"color": "red", "border": "2px solid red"});  
});

The prevAll() methods return all previous sibling elements of each <li> element with class name "start":

$(document).ready(function(){  
  $("li.start").prevAll().css({"color": "red", "border": "2px solid red"});  
});

The prevUntil() methods return all sibling elements between two <li> elements with class name "start" and "stop":

$(document).ready(function(){  
  $("li.start").prevUntil("li.stop").css({"color": "red", "border": "2px solid red"});  
});