jQuery

A free and open source[JavaScript](http://www.webopedia.com/TERM/J/JavaScript.html) [library](http://www.webopedia.com/TERM/L/library.html) that is used by Web developers to navigate [HTML](http://www.webopedia.com/TERM/H/HTML.html) documents, handle events, perform animations and add [Ajax](http://www.webopedia.com/TERM/A/Ajax.html) interactions to [Web pages](http://www.webopedia.com/TERM/W/web_page.html).

**jQuery Version:**

* **August 22nd, 2005** - [John first hints of a JavaScript library to use CSS selectors with a more succinct syntax than existing libraries: Selectors in JavaScript](http://ejohn.org/blog/selectors-in-javascript/)
* **August 26th, 2006** - [First stable version of jQuery: jQuery 1.0](http://blog.jquery.com/2006/08/26/jquery-10/)
* **March 1st, 2013** - [jQuery 2.0 Beta 2 Released](http://blog.jquery.com/2013/03/01/jquery-2-0-beta-2-released/" \o "jQuery 2.0 Beta 2 Released)

**DOM = Document Object Model**  
  
The DOM defines a standard for accessing HTML and XML documents:  
  
*"The Document Object Model (DOM) is a platform and language-neutral interface that allows programs and scripts to dynamically access and update the content, structure, and style of a document.”*

## Advantages

1. **Ease of use**

This is pretty much the main advantage of using JQuery, it is a lot more easy to use compared to standard javascript and other javascript libraries.

1. **Less Code**

much less lines of code to achieve the same feature in comparison.

1. **Large library**

JQuery enables you to perform hordes of functions in comparison to other Javascript libraries.

1. **Strong opensource community. (Several jQuery plugins available)**

JQuery, while relatively new, has a following that religiously devote their time to develop and enhance the functionality of JQuery.

1. **Great documentation and tutorials**

The JQuery website has a comprehensive documentation and tutorials to get even an absolute beginner in programming to get the ball rolling with this library.

1. **Ajax support**

**Disadvantages**

1. **Functionality maybe limited**:

While JQuery has an impressive library in terms of quantity, depending on how much customization you require on your website, functionality maybe limited thus using raw javascript maybe inevitable in some cases.

1. **JQuery javascript file required**

The JQuery javascript file is required to run JQuery commands, while the size of this file is relatively small (25-100KB depending on server), it is still a strain on the client computer and maybe your web server as well if you intend to host the JQuery script on your own web server.

**Areas in which jQuery used**

#### Web Designer Wall

#### Hv-Designs Fade In RSS Icon

#### CSS-Tricks Fade-In Navigation

**Get Content - text(), html(), and val()**

Three simple, but useful, jQuery methods for DOM manipulation are:

* text() - Sets or returns the text content of selected elements
* html() - Sets or returns the content of selected elements (including HTML markup)
* val() - Sets or returns the value of form fields

## Get Attributes - attr()

The jQuery attr() method is used to get attribute values.

## Set Content - text(), html(), and val()

We will use the same three methods from the previous page to **set content**:

* text() - Sets or returns the text content of selected elements
* html() - Sets or returns the content of selected elements (including HTML markup)
* val() - Sets or returns the value of form fields

## Set Attributes - attr()

The jQuery attr() method is also used to set/change attribute values.

**$(document).ready()**

The $(document).ready() method allows us to execute a function when the document is fully loaded.

## 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 a family tree. With jQuery traversing, you can easily move up (ancestors), down (descendants) and sideways (siblings) in the family tree, starting from the selected (current) element. This movement is called traversing - or moving through - the DOM.

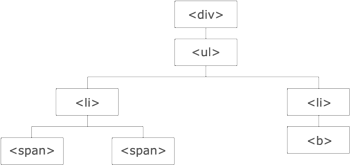


Illustration explained:

* 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>

## What is AJAX?

AJAX = Asynchronous JavaScript and XML.

In short; AJAX is about loading data in the background and display it on the webpage, without reloading the whole page.

## What About jQuery and AJAX?

jQuery provides several methods for AJAX functionality.

With the jQuery AJAX methods, you can request text, HTML, XML, or JSON from a remote server using both HTTP Get and HTTP Post - And you can load the external data directly into the selected HTML elements of your web page

## jQuery $.get() Method

The $.get() method requests data from the server with an HTTP GET request.

**Syntax:**

$.get(*URL,callback*);

**Example:**

<script>

$(document).ready(function(){

$("button").click(function(){

$.get("demo\_test.asp",function(data,status){

alert("Data: " + data + "\nStatus: " + status);

});

});

});

</script>

## jQuery $.post() Method

The $.post() method requests data from the server using an HTTP POST request.

**Syntax:**

$.post(*URL,data,callback*);

**Example:**

$("button").click(function(){  
  $.post("demo\_test\_post.asp",  
  {  
    name:"Donald Duck",  
    city:"Duckburg"  
  },  
  function(data,status){  
    alert("Data: " + data + "\nStatus: " + status);  
  });  
});