### jQuery

The JavaScript library jQuery first appeared in 2006 and is intended to make HTML client side scripting less complex. Navigation of the HTML document to manipulate the DOM through event triggers and AJAX calls to provide dynamic interactive behaviour is significantly simplified through its use.

It also considerably improves productivity allowing lengthy code blocks previously written in traditional Javascript to be written in a more powerful and concise fashion and high performance execution. Complex functionality can be delivered with just a few short lines of code. It has cross browser support, and promotes the use of plug in libraries to complement its functionality. It can be downloaded from <http://jquery.com>

The jQuery() or $() function is the main function of the library. This returns an object, which can then have various methods applied to it. There are four distinct ways to call it. It can be used to pass a CSS selector, which will return a set of elements in the form of an object that can then be manipulated.

$() can also wrap and return the window, document, or element objects to be manipulated by jQuery methods, precluding the use of the methods associated with the DOM. $(document) or $(this) are examples of jQuery calls and they can affect multiple elements and cater for arrays of elements . $() can also process HTML text-strings returning an object to be manipulated and a document object can the elements belong.

$() also processes functions. The function passed is called once the document loads. This is the jQuery way of dealing with the traditional JavaScript onLoad() function.

Reference - *Flanagan D. (2011), JavaScript: The Definitive Guide, Sixth Edition*