Introduction to jQuery  
  
jQuery is a JavaScript library intended to make JavaScript programming easier and more fun.   
  
A JavaScript library is a complex JavaScript program that both simplifies difficult tasks and solves cross-browser problems. In other words, jQuery solves the two biggest headaches with JavaScript—complexity and the finicky nature of different web browsers.  
  
jQuery is a web designer’s secret weapon in the battle of JavaScript programming. With jQuery, you can accomplish tasks in a single line of code that would otherwise take hundreds of lines of programming and many hours of browser testing to achieve with your own JavaScript code.   
  
  
I believe that the best tutorial for an introduction to jQuery is found at W3Schools.  
  
Tutorial: <http://www.w3schools.com/jquery/default.asp>  
  
  
For your convenience, here is a partial summary from this tutorial.  
 **jQuery is a JavaScript Library.  
jQuery greatly simplifies JavaScript programming.  
jQuery is a lightweight "write less, do more" JavaScript library.  
The jQuery library contains the following features:**  
  
HTML element selections  
HTML element manipulation  
CSS manipulation  
HTML event functions  
JavaScript Effects and animations  
HTML DOM traversal and modification  
AJAX  
Utilities  
  
 **Download jquery:**  
  
<http://fog.ccsf.cc.ca.us/~srubin/jquery.js>  
  
  
**jQuery Syntax**  
  
The jQuery syntax is tailor made for selecting HTML elements and perform some action on the element(s).  
  
Basic syntax is: $(selector).action()  
  
A dollar sign to define jQuery  
A (selector) to "query (or find)" HTML elements  
A jQuery action() to be performed on the element(s)  
<http://www.w3schools.com/jquery/jquery_ref_selectors.asp>  
  
 **The Document Ready Function**  
  
All jQuery methods are inside a document.ready() function:  
$(document).ready(function(){  
  
// jQuery functions go here...  
  
});  
  
This is to prevent any jQuery code from running before the document is finished loading (is ready).  
  
  
**Coding example: Display a p tag and clicking it will make it disappear**  
  
<html>  
<head>  
<script type="text/javascript" src="jquery.js"></script>  
<script type="text/javascript">  
$(document).ready(function(){  
$("p").click(function(){  
$(this).hide();  
});  
});  
</script>  
</head>  
<body>  
<p>If you click on me, I will disappear.</p>  
  
</body>  
</html>  
  
[Displayed](http://fog.ccsf.edu/~srubin/e1.html)  
  
  
**jQuery Event Functions**  
  
The jQuery event handling methods are core functions in jQuery.  
  
Event handlers are method that are called when "something happens" in HTML. The term "triggered (or "fired") by an event" is often used.   
  
It is common to put jQuery code into event handler methods in the <head> section:  
  
**Coding example: Display p tags and clicking button will make them disappear**<html>  
<head>  
<script type="text/javascript" src="jquery.js"></script>  
<script type="text/javascript">  
$(document).ready(function(){  
$("button").click(function(){  
$("p").hide();  
});  
});  
</script>  
</head>  
  
<body>  
<h2>This is a heading</h2>  
<p>This is a paragraph.</p>  
<p>This is another paragraph.</p>  
<button>Click me</button>  
</body>  
  
</html>   
  
  
[Displayed](http://fog.ccsf.edu/~srubin/e2.html)  
  
  
**jQuery Hide and Show**  
  
With jQuery, you can hide and show HTML elements with the hide() and show() methods:  
  
Example  
$("#hide").click(function(){  
$("p").hide();  
});  
$("#show").click(function(){  
$("p").show();  
});  
  
**Coding example: Display p tags and clicking button will make them disappear slowly**  
  
<html>  
<head>  
<script type="text/javascript" src="jquery.js"></script>  
<script type="text/javascript">  
$(document).ready(function(){  
$("button").click(function(){  
$("p").hide(1000);  
});  
});  
</script>  
</head>  
<body>  
<button>Hide</button>  
<p>This is a paragraph with little content.</p>  
<p>This is another small paragraph.</p>  
</body>  
</html>  
  
[Displayed](http://fog.ccsf.edu/~srubin/e3.html)  
  
 **Query Slide - slideDown, slideUp, slideToggle**  
  
The jQuery slide methods gradually change the height for selected elements.  
  
  
**Coding example: Display a panel of text and clicking it will then display another panel of text**<html>  
<head>  
  
<script type="text/javascript" src="jquery.js"></script>  
<script type="text/javascript">   
$(document).ready(function(){  
$(".flip").click(function(){  
$(".panel").slideDown("slow");  
});  
});  
</script>  
  
<style type="text/css">   
div.panel,p.flip  
{  
margin:0px;  
padding:5px;  
text-align:center;  
background:#e5eecc;  
border:solid 1px #c3c3c3;  
}  
div.panel  
{  
height:120px;  
display:none;  
}  
</style>  
</head>  
  
<body>  
  
<div class="panel">  
<p>Because time is valuable, we deliver quick and easy learning.</p>  
<p>At W3Schools, you can study everything you need to learn, in an accessible and handy format.</p>  
</div>  
  
<p class="flip">Show Panel</p>  
  
</body>  
</html>  
  
  
[Displayed](http://fog.ccsf.edu/~srubin/e4.html)  
  
  
**Coding example: Clicking a button will fade a colored box and the button**  
  
<html>  
<head>  
<script type="text/javascript" src="jquery.js"></script>  
<script type="text/javascript">  
$(document).ready(function(){  
$("button").click(function(){  
$("div").fadeTo("slow",0.25);  
});  
});  
</script>  
</head>  
  
<body>  
<div style="background:yellow;width:300px;height:300px">  
<button>Click to Fade</button>  
</div>  
</body>  
</html>  
  
[Displayed](http://fog.ccsf.edu/~srubin/e5.html)  
  
**See another Tutorial about jquery:**  
  
<http://docs.jquery.com/Tutorials:How_jQuery_Works#jQuery:_The_Basics>  
  
  
[jQuery UI](http://jqueryui.com/demos/) provides a comprehensive set of core interaction plugins, UI widgets and visual effects that use a jQuery-style, event-driven architecture and a focus on web standards, accessiblity, flexible styling, and user-friendly design. All plugins are tested for compatibility in IE 6.0+, Firefox 3+, Safari 3.1+, Opera 9.6+, and Google Chrome.