What is jQuery?

jQuery is a lightweight, **"write less, do more",** JavaScript library.

The purpose of jQuery is to make it much easier to use JavaScript on your website.

jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.

jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

The jQuery library contains the following features:

* HTML/DOM manipulation
* CSS manipulation
* HTML event methods
* Effects and animations
* AJAX
* Utilities

**Tip:** In addition, jQuery has plugins for almost any task out there.

Why jQuery?

There are lots of other JavaScript frameworks out there, but jQuery seems to be the most popular, and also the most extendable.

Many of the biggest companies on the Web use jQuery, such as:

* Google
* Microsoft
* IBM
* Netflix

**Will jQuery work in all browsers?**  
The jQuery team knows all about cross-browser issues, and they have written this knowledge into the jQuery library. jQuery will run exactly the same in all major browsers, including Internet Explorer 6!

jQuery Syntax

The jQuery syntax is tailor-made for **selecting** HTML elements and performing some **action** on the element(s).

Basic syntax is: **$(*selector*).*action*()**

* A $ sign to define/access jQuery
* A (*selector*) to "query (or find)" HTML elements
* A jQuery *action*() to be performed on the element(s)

Examples:

$(this).hide() - hides the current element.

$("p").hide() - hides all <p> elements.

$(".test").hide() - hides all elements with class="test".

$("#test").hide() - hides the element with id="test".

**Are you familiar with CSS selectors?**  
  
jQuery uses CSS syntax to select elements. You will learn more about the selector syntax in the next chapter of this tutorial.

The Document Ready Event

You might have noticed that all jQuery methods in our examples, are inside a document ready event:

$(document).ready(function(){  
  
   *// jQuery methods go here...*  
  
});

This is to prevent any jQuery code from running before the document is finished loading (is ready).

It is good practice to wait for the document to be fully loaded and ready before working with it. This also allows you to have your JavaScript code before the body of your document, in the head section.

Here are some examples of actions that can fail if methods are run before the document is fully loaded:

* Trying to hide an element that is not created yet
* Trying to get the size of an image that is not loaded yet

**Tip:** The jQuery team has also created an even shorter method for the document ready event:

$(function(){  
  
   *// jQuery methods go here...*  
  
});

Use the syntax you prefer. We think that the document ready event is easier to understand when reading the code.

## Functions In a Separate File

If your website contains a lot of pages, and you want your jQuery functions to be easy to maintain, you can put your jQuery functions in a separate .js file.

When we demonstrate jQuery in this tutorial, the functions are added directly into the <head> section. However, sometimes it is preferable to place them in a separate file, like this (use the src attribute to refer to the .js file):

### **Example**

<head>  
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js">  
</script>  
<script src="my\_jquery\_functions.js"></script>  
</head>