

# jQuery Introduction (Source:w3schools.com)

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## 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 requires many lines of JavaScript code to accomplish, and wraps it 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.

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## Why jQuery?

There are a 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, like:

- 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 Install

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## Adding jQuery to Your Web Pages

To use jQuery, you need to download the jQuery library (explained below), and include it on the pages you wish to use it.

The jQuery library is a single JavaScript file, and you reference to it using the HTML `<script>` tag:

```
<head>
<script src="jquery.js"></script>
</head>
```

Notice that the `<script>` tag should be inside the page's `<head>` section.

### Do you wonder why we do not have `type="text/javascript"` inside the `<script>` tag?



This is not required in HTML5. JavaScript is the default scripting language in HTML5 and in all modern browsers!

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## Downloading jQuery

There are two versions of jQuery available for downloading:

- Production version - this is for your live website because it has been minified and compressed
- Development version - this is for testing and development (uncompressed and readable code)

Both versions can be downloaded from [jQuery.com](http://jQuery.com).

**Tip:** Place the downloaded file in the same directory as the pages where you wish to use it.

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## Alternatives to Downloading

If you don't want to download and host jQuery yourself, you can include it from a CDN (Content Delivery Network).

Both Google and Microsoft host jQuery.

To use jQuery from Google, use one of the following:

### Google CDN:

```
<head>  
<script src="http://ajax.googleapis.com/ajax/libs/jquery/1.8.0/jquery.min.js">  
</script>  
</head>
```

[Try it yourself »](#)

#### Get the latest available version with Google CDN:



If you look at the Google URL above - the version of jQuery is specified in the URL (1.8.0). If you would like to use the latest version of jQuery, you can either remove a number from the end of the version string (for example 1.8), then Google will return the latest version available in the 1.8 series (1.8.0, 1.8.1, etc.), or you can take it up to the whole number (1), and Google will return the latest version available in the 1 series (from 1.1.0 to 1.9.9).

#### One big advantage of using the hosted jQuery from Google or Microsoft:



Many users already have downloaded jQuery from Google or Microsoft when visiting another site. As a result, it will be loaded from cache when they visit your site, which leads to faster loading time. Also, most CDN's will make sure that once a user requests a file from it, it will be served from the server closest to them, which also leads to faster loading time.

# jQuery Syntax

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With jQuery you select (query) HTML elements and perform "actions" on them.

## 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 \$ 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.

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## 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.

## jQuery Selectors

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jQuery selectors are one of the most important parts of the jQuery library.

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### jQuery Selectors

jQuery selectors allow you to select and manipulate HTML element(s).

With jQuery selectors you can find elements based on their id, classes, types, attributes, values of attributes and much more. It's based on the existing [CSS Selectors](#), and in addition, it has some own custom selectors.

All type of selectors in jQuery, start with the dollar sign and parentheses: `$()`.

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