

# jQuery®

## Notes for Professionals

### Chapter 2: Selectors

A jQuery selector selects or finds a DOM (document object model) element in an HTML document. It selects HTML elements based on id, name, types, attributes, class and etc. It is based on existing elements.

#### Section 2.1: Overview

Elements can be selected by jQuery using [jQuery Selectors](#). The function returns either an array of elements.

##### Basic selectors

```
// All elements
$('*')
// All <div> elements
$('div')
// All elements with class=blue OR class=red
$('.blue', '.red')
// The (first) element with id=example
$('#example')
// All elements with href=example.com
$('a[href="example.com"]')
```

##### Relational operators

```
// All <span> that are descendants of a <div>
$('div span')
// All <span> that are a direct child of a <div>
$('div > span')
// All <span> that are siblings following an <div>
$('div ~ span')
```

#### Section 2.2: Types of Selectors

In jQuery you can select elements in a page using many various properties of the

- Type
- Class
- ID
- Possession of Attribute
- Attribute Value
- Indexed Selector
- Pseudo-Selector

If you know CSS selectors you will notice selectors in jQuery are the same. Take the following HTML, for example:

```
<a href="#index.html" id="1">1</a>
<a href="#second-link" id="2">2</a>
<a href="#third-link" id="3">3</a>
<a href="#fourth-link" id="4">4</a>
<a href="#fifth-link" id="5">5</a>
```

##### Selecting by Type:

The following jQuery selector will select all <a> elements, including 1, 2, 3 and 4.

```
$(a)
```

### Chapter 7: DOM Manipulation

#### Section 7.1: Creating DOM elements

The jQuery function (usually aliased as \$) can be used both to select elements and to create new elements.

```
var myLink = $('a href="http://stackoverflow.com"/>');
```

You can optionally pass a second argument with element attributes:

```
var myLink = $('a', { href: 'http://stackoverflow.com' });
```

The first argument specifies the type of DOM element you want to create. In this example it's an <a> but could be anything on this list. See the [specification](#) for a reference of the element.

The second argument is a [jQuery Object](#) containing attribute name/value pairs.

The 'name'/'value' pairs will appear between the < > of the first argument, for example <a name="value" which for our example would be <a href="http://stackoverflow.com"> </a>

#### Section 7.2: Manipulating element classes

Assuming the page includes an HTML element like:

```
<p class="small-paragraph">
  This is a small <a href="https://en.wikipedia.org/wiki/Paragraph">paragraph</a>
  with a <a class="trusted-link" href="http://stackoverflow.com">link</a> inside.
</p>
```

jQuery provides useful functions to manipulate DOM classes, most notably [hasClass\(\)](#), [addClass\(\)](#), [removeClass\(\)](#) and [toggleClass\(\)](#). These functions directly modify the class attribute of the matched elements.

```
$(p).hasClass('small-paragraph'); // true
$(p).hasClass('large-paragraph'); // false

// Add a class to all links within paragraphs
$(p a).addClass('trusted-link-in-paragraph');
```

```
// Remove the class from a trusted
$(a.trusted, untrusted-link-in-paragraph)
.removeClass('trusted-link-in-paragraph');
```

##### Toggling a class

Given the example markup, we can add a class with our first [toggleClass\(\)](#):

```
$(a.small-paragraph).toggleClass('pretty');
```

Now this would return true: `$(a.small-paragraph).hasClass('pretty')`

[toggleClass\(\)](#) provides the same effect with less code as:

```
if($(a.small-paragraph).hasClass('pretty'))
```

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### Chapter 10: Element Visibility

Parameter When passed, the effects of [hide\(\)](#), [show\(\)](#) and [toggle\(\)](#) are animated; the elements will gradually fade in or out. Details

#### Section 10.1: Overview

```
$(element).hide() // sets display: none
$(element).show() // sets display: original value
$(element).toggle() // toggles between the two
$(element).is(':visible') // returns true or false
$(element).fadeIn() // animates all elements that are hidden
$(element).fadeOut() // animates all elements that are visible
$(element).fadeIn(1000) // display the element
$(element).fadeOut(1000) // hide the element
// display the element using timer and a callback function
$(element).fadeIn(1000, function() {
  // code to execute
});
// hide the element using timer and a callback function
$(element).fadeOut(1000, function() {
  // code to execute
});
```

#### Section 10.2: Toggle possibilities

##### Simple toggle case

```
function toggleBasic() {
  $(target).toggle();
}
```

##### With specific duration

```
function toggleDuration() {
  $(target).toggle('slow'); // A millisecond duration value is also acceptable
}
```

##### ...and callback

```
function toggleCallback() {
  $(target).toggle('slow', function() {alert('now do something');});
}
```

##### ...or with easing and callback

```
function toggleEasingAndCallback() {
  // the 3rd arg jQuery only supports linear and easing names
  $(target).toggle('slow', 'linear', function() {alert('now do something');});
}
```

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# Contents

<b>About</b>	1
<b>Chapter 1: Getting started with jQuery</b>	2
<a href="#">Section 1.1: Getting Started</a>	2
<a href="#">Section 1.2: Avoiding namespace collisions</a>	3
<a href="#">Section 1.3: jQuery Namespace ("jQuery" and "\$")</a>	4
<a href="#">Section 1.4: Loading jQuery via console on a page that does not have it</a>	5
<a href="#">Section 1.5: Include script tag in head of HTML page</a>	5
<a href="#">Section 1.6: The jQuery Object</a>	7
<b>Chapter 2: Selectors</b>	8
<a href="#">Section 2.1: Overview</a>	8
<a href="#">Section 2.2: Types of Selectors</a>	8
<a href="#">Section 2.3: Caching Selectors</a>	10
<a href="#">Section 2.4: Combining selectors</a>	11
<a href="#">Section 2.5: DOM Elements as selectors</a>	13
<a href="#">Section 2.6: HTML strings as selectors</a>	13
<b>Chapter 3: Each function</b>	15
<a href="#">Section 3.1: jQuery each function</a>	15
<b>Chapter 4: Attributes</b>	16
<a href="#">Section 4.1: Difference between attr() and prop()</a>	16
<a href="#">Section 4.2: Get the attribute value of a HTML element</a>	16
<a href="#">Section 4.3: Setting value of HTML attribute</a>	17
<a href="#">Section 4.4: Removing attribute</a>	17
<b>Chapter 5: document-ready event</b>	18
<a href="#">Section 5.1: What is document-ready and how should I use it?</a>	18
<a href="#">Section 5.2: jQuery 2.2.3 and earlier</a>	18
<a href="#">Section 5.3: jQuery 3.0</a>	19
<a href="#">Section 5.4: Attaching events and manipulating the DOM inside ready()</a>	19
<a href="#">Section 5.5: Difference between \$(document).ready() and \$(window).load()</a>	20
<a href="#">Section 5.6: Difference between jQuery(fn) and executing your code before &lt;/body&gt;</a>	21
<b>Chapter 6: Events</b>	22
<a href="#">Section 6.1: Delegated Events</a>	22
<a href="#">Section 6.2: Attach and Detach Event Handlers</a>	23
<a href="#">Section 6.3: Switching specific events on and off via jQuery. (Named Listeners)</a>	24
<a href="#">Section 6.4: originalEvent</a>	25
<a href="#">Section 6.5: Events for repeating elements without using ID's</a>	25
<a href="#">Section 6.6: Document Loading Event .load()</a>	26
<b>Chapter 7: DOM Manipulation</b>	27
<a href="#">Section 7.1: Creating DOM elements</a>	27
<a href="#">Section 7.2: Manipulating element classes</a>	27
<a href="#">Section 7.3: Other API Methods</a>	29
<b>Chapter 8: DOM Traversing</b>	31
<a href="#">Section 8.1: Select children of element</a>	31
<a href="#">Section 8.2: Get next element</a>	31
<a href="#">Section 8.3: Get previous element</a>	31
<a href="#">Section 8.4: Filter a selection</a>	32
<a href="#">Section 8.5: find() method</a>	33

<a href="#">Section 8.6: Iterating over list of jQuery elements</a>	34
<a href="#">Section 8.7: Selecting siblings</a>	34
<a href="#">Section 8.8: closest() method</a>	34
<b><a href="#">Chapter 9: CSS Manipulation</a></b>	36
<a href="#">Section 9.1: CSS – Getters and Setters</a>	36
<a href="#">Section 9.2: Increment/Decrement Numeric Properties</a>	36
<a href="#">Section 9.3: Set CSS property</a>	37
<a href="#">Section 9.4: Get CSS property</a>	37
<b><a href="#">Chapter 10: Element Visibility</a></b>	38
<a href="#">Section 10.1: Overview</a>	38
<a href="#">Section 10.2: Toggle possibilities</a>	38
<b><a href="#">Chapter 11: Append</a></b>	40
<a href="#">Section 11.1: Efficient consecutive .append() usage</a>	40
<a href="#">Section 11.2: jQuery append</a>	43
<a href="#">Section 11.3: Appending an element to a container</a>	43
<b><a href="#">Chapter 12: Prepend</a></b>	45
<a href="#">Section 12.1: Prepending an element to a container</a>	45
<a href="#">Section 12.2: Prepend method</a>	45
<b><a href="#">Chapter 13: Getting and setting width and height of an element</a></b>	47
<a href="#">Section 13.1: Getting and setting width and height (ignoring border)</a>	47
<a href="#">Section 13.2: Getting and setting innerWidth and innerHeight (ignoring padding and border)</a>	47
<a href="#">Section 13.3: Getting and setting outerWidth and outerHeight (including padding and border)</a>	47
<b><a href="#">Chapter 14: jQuery .animate() Method</a></b>	48
<a href="#">Section 14.1: Animation with callback</a>	48
<b><a href="#">Chapter 15: jQuery Deferred objects and Promises</a></b>	50
<a href="#">Section 15.1: jQuery ajax() success, error VS .done(), .fail()</a>	50
<a href="#">Section 15.2: Basic promise creation</a>	50
<b><a href="#">Chapter 16: Ajax</a></b>	52
<a href="#">Section 16.1: Handling HTTP Response Codes with \$.ajax()</a>	52
<a href="#">Section 16.2: Using Ajax to Submit a Form</a>	53
<a href="#">Section 16.3: All in one examples</a>	53
<a href="#">Section 16.4: Ajax File Uploads</a>	55
<b><a href="#">Chapter 17: Checkbox Select all with automatic check/uncheck on other checkbox change</a></b>	58
<a href="#">Section 17.1: 2 select all checkboxes with corresponding group checkboxes</a>	58
<b><a href="#">Chapter 18: Plugins</a></b>	59
<a href="#">Section 18.1: Plugins - Getting Started</a>	59
<b><a href="#">Credits</a></b>	61
<b><a href="#">You may also like</a></b>	64

# About

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# Chapter 1: Getting started with jQuery

Version	Notes	Release Date
<a href="#">1.0</a>	First stable release	2006-08-26
<a href="#">1.1</a>		2007-01-14
<a href="#">1.2</a>		2007-09-10
<a href="#">1.3</a>	<a href="#">Sizzle</a> introduced into core	2009-01-14
<a href="#">1.4</a>		2010-01-14
<a href="#">1.5</a>	Deferred callback management, ajax module rewrite	2011-01-31
<a href="#">1.6</a>	Significant performance gains in the <code>attr()</code> and <code>val()</code> methods	2011-05-03
<a href="#">1.7</a>	New Event APIs: <code>on()</code> and <code>off()</code> .	2011-11-03
<a href="#">1.8</a>	<a href="#">Sizzle</a> rewritten, improved animations and <code>\$(html, props)</code> flexibility.	2012-08-09
<a href="#">1.9</a>	Removal of deprecated interfaces and code cleanup	2013-01-15
<a href="#">1.10</a>	Incorporated bug fixes and differences reported from both the 1.9 and 2.0 beta cycles	2013-05-24
<a href="#">1.11</a>		2014-01-24
<a href="#">1.12</a>		2016-01-08
<a href="#">2.0</a>	Dropped IE 6–8 support for performance improvements and reduction in size	2013-04-18
<a href="#">2.1</a>		2014-01-24
<a href="#">2.2</a>		2016-01-08
<a href="#">3.0</a>	Massive speedups for some jQuery custom selectors	2016-06-09
<a href="#">3.1</a>	No More Silent Errors	2016-07-07
<a href="#">3.2</a>	No More Silent Errors	2017-03-16
<a href="#">3.3</a>	No More Silent Errors	2018-01-19

## Section 1.1: Getting Started

Create a file `hello.html` with the following content:

```
<!DOCTYPE html>
<html>
<head>
  <title>Hello, World!</title>
</head>
<body>
  <div>
    <p id="hello">Some random text</p>
  </div>
  <script src="https://code.jquery.com/jquery-2.2.4.min.js"></script>
  <script>
    $(document).ready(function() {
      $('#hello').text('Hello, World!');
    });
  </script>
</body>
</html>
```

[Live Demo on JSBin](#)

Open this file in a web browser. As a result you will see a page with the text: `Hello, World!`

### Explanation of code

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