

# jQuery® Notes for Professionals

## Chapter 2: Selectors

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

### Section 2.1: Overview

Elements can be selected by jQuery using `jQuery.Selectors`. The function returns either an array or elements.

**Basic selectors**

```
$() // All elements
$("div") // All <div> elements
$(":blue") // All elements with class=blue
$(":blue, :red") // All elements with class=blue and class=red
$(":all") // All elements with class=blue or class=red
$(":first") // The first element with class=blue
$(":last") // All elements with class=red
$(":even") // All even elements
$(":odd") // All odd elements
$(":parent") // All <div> elements that are descendants of a <div>
$(":parent ~ :even") // All <div> elements that are a direct child of a <div> and have even siblings following an even index
$(":parent ~ :even ~ :even") // All <div> elements that are immediately after an even index and have even siblings following an even index
$(":parent ~ :even ~ :even ~ :even") // All <div> elements that are immediately after an even index and have even siblings following an even index and have even siblings following an even index
```

**Relational operators**

```
// all <div> elements that are descendants of a <div>
$(":div")
// all <div> elements that are a direct child of a <div>
$(":div ~ :parent")
// all <div> elements that have siblings following an even index
$(":div ~ :even")
// all <div> elements that are immediately after an even index
$(":div ~ :even ~ :even")
```

### Section 2.2: Types of Selectors

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

- Type
- Class
- ID
- Possession of Attribute
- Attribute Value
- Indirect Selector
- Pseudoselectors

If you know CSS selectors you will notice selectors in jQuery are the same (with some additions).

Take the following HTML for example:

```
<a href="#index.html"><br>
<a id="second-link"><br>
<a class="example" href="#about.html"><br>
<a class="example" href="#"><br>
<a class="example" href="#index.html">
```

**Selecting by Type:**  
The following jQuery selector will select all `a` elements, including 1, 2, 3 and 4.

```
$(a)
```

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## 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://stackexchange.com">link</a>);
```

You can optionally pass a second argument with element attributes:

```
var myLink = $(<a href="http://stackexchange.com">link</a>, { href: "http://stackexchange.com" });
```

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

`{ href: "http://stackexchange.com" } → the second argument is a javaScript.Object containing attribute name/value pairs.`

the `name/value` pairs will appear between the `< >` of the first argument, for example `<a href="value">` which for our example would be `<a href="http://stackexchange.com">link</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://www.w3schools.org/w3css/paragraphs">paragraph</a>
  with a <code>class="trusted"> href="http://stackexchange.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.

```
$().hasClass("small-paragraph"); // true
$().hasClass("large-paragraph"); // false
// add a class to all links within paragraphs
$(a).addClass("untrusted-link-in-paragraph");
// remove the class from a trusted
$(":trusted.untrusted-link-in-paragraph").removeClass("untrusted-link-in-paragraph");
$(":trusted").addClass("trusted-link-in-paragraph");
```

#### Toggle a class

Given the example markup, we can add a class with our first... `toggleClass()`:

```
$(":small-paragraph").toggleClass("pretty");
```

Now this would return `true`: `B(":small-paragraph").hasClass("pretty")`.

`toggleClass` provides the same effect with less code as:

```
if($(":small-paragraph").hasClass("pretty")){}
```

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## Chapter 10: Element Visibility

### Parameter

Duration When passed, the effects of `.hide()`, `.show()` and `.toggle()` are animated; the elements will gradually fade in or out.

**Details** [Details](#)

### Section 10.1: Overview

```
$element.hide();
$element.show();
$element.toggle();
$element.cssVisible()
$element.isVisible()
$element.isHidden()

$element.fadeIn();
$element.fadeOut();
$element.fadeIn(1000);
$element.fadeOut(1000);
$element.fadeIn(1000, function());
$element.fadeOut(1000, function());
```

**Details** [Details](#)

### Section 10.2: Toggle possibilities

#### Simple `toggle()` case

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

#### With specific duration

```
function toggleDuration(){
  $(targetEl).toggle("slow");
} // a millisecond duration value is also acceptable
```

#### ...and callback

```
function toggleWithCallback(){
  $(targetEl).toggle("slow", function(){ alert("now do something"); });
} // or with easing and callback.
```

```
function toggleEasingAndCallback(){
  // You may use JqueryUI as the core only supports linear and using easing
  $(targetEl).toggle("slow", "linear", function(){ alert("now do something"); });
} // or with easing and callback.
```

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# 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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