

# **jQuery**

CS 329E - Fall 2013

# Source

[www.w3schools.com/jquery](http://www.w3schools.com/jquery)

Click on “Next Chapter” to begin.

# Download and Use Script

jQuery.com/download:

Choose compressed or uncompressed.

Right-click page, "Save As".

Add to HTML (to head):

```
<script src = "jquery-1.10.2.min.js" > </script>
```

Or just use Google's copy:

```
<script src = "http://ajax.googleapis.com/ajax/libs/jquery/1.10.2/jquery.min.js" >  
</script>
```

Add the script *before* your other .js files.

# Syntax

```
$ (selector) .action ()
```

## Examples:

```
$(document).ready( function() { ... } );
```

```
$(this).hide();
```

```
$("#h1").show();
```

```
$("#someElement").fadeIn( "slow" );
```

```
$(".someClass").fadeOut( "fast" );
```

# Selectors

## Similar to CSS

```
$( ``*`` )
```

```
$( ``p.someClass`` )
```

```
$( ``[href]`` )
```

```
$( ``tr:even`` )
```

Select by ID ( # ) and class ( . ), etc.

\*By name (attribute): \$( `[name="someName"]` )

## List of Nice Examples:

[www.w3schools.com/jquery/jquery\\_selectors.asp](http://www.w3schools.com/jquery/jquery_selectors.asp)

# `$(document).ready()`

Sometimes you need to wait for everything to load.

- When you need your code to run right away.
- For example, if you need to do this right after you load the page:

```
$("#myDiv").hide();
```

- No need if the user triggers an event (e.g. pressing a button).

```
$(document).ready( function() {  
    // code goes here  
});
```

# Manipulating CSS

```
$("#myElement").css("color", "red");
```

```
$(".myClass").css("margin", "30px");
```

```
$("body").css("background-color",  
"#FFFF00");
```

# jQuery Events

## Common Mouse Events:

`click, dblclick, mouseenter, mouseleave, hover`

## Common Keyboard Events:

`keypress, keydown, keyup`

## Common Form Events:

`submit, change, focus, blur`

## Common Document Events:

`load, resize, scroll, unload`

[www.w3schools.com/jquery/jquery\\_events.asp](http://www.w3schools.com/jquery/jquery_events.asp)



# Event Examples

```
$("#myElement").click( function() {  
    alert("You clicked me!");  
});
```

```
$("#p").dblclick( function() {  
    $(this).hide();  
});
```

```
$(".colorful").hover( function() {  
    $(this).css("background-color: FF0000"); // mouse enter  
}, function () {  
    $(this).css("background-color: 0000FF"); // mouse exit  
}
```

# Useful jQuery Effects

`$(selector).function(speed, callback)` - params are optional  
*callback*: function that is called when finished

`hide()`, `show()`, `toggle()`

```
$("#myDiv").hide(500, function() { alert("I am hidden."); });
```

`fadeIn()`, `fadeOut()`, `fadeToggle()`, `fadeTo()`

```
$("#myDiv").fadeTo("slow", 0.5); // *second param is opacity
```

`slideUp()`, `slideDown()`, `slideToggle()`

`animate({params}, speed, callback)` - goes to given params over time

`stop` - stop animation before it's finished

# jQuery Chaining

## jQuery Usually Returns the Object.

Avoid making the browser find the same element over and over.

### Example:

```
$("#myElement").css("color", "red")  
    .slideUp(2000)  
    .slideDown(2000);
```

# Content and Attributes

## Getting and Setting Content from DOM:

```
text(), html(), val(), attr()
```

### Example:

```
alert("Your input is: " + $("#myDiv").text()); alert  
("The HTML is: " + $("#myDiv").html());  
$("#myDiv").text("Hello, World!"); // set text  
$("#myDiv").html("<b>Hello, World!</b>"); // set html
```

### Attribute Example:

```
alert("The URL is: " + $("#myLink").attr("href"));
```

# Other Useful Methods

`append()`, `prepend()`, `after()`, `before()`

[www.w3schools.com/jquery/jquery\\_dom\\_add.asp](http://www.w3schools.com/jquery/jquery_dom_add.asp)

`remove()`, `empty()`

[www.w3schools.com/jquery/jquery\\_dom\\_remove.asp](http://www.w3schools.com/jquery/jquery_dom_remove.asp)

`addClass()`, `removeClass()`, `toggleClass()`, `css()`

[http://www.w3schools.com/jquery/jquery\\_css\\_classes.asp](http://www.w3schools.com/jquery/jquery_css_classes.asp)

`width()`, `height()`, etc.

[http://www.w3schools.com/jquery/jquery\\_dimensions.asp](http://www.w3schools.com/jquery/jquery_dimensions.asp)

# Traversing Element Trees

`parent(), parents(), children(), find()`

[http://www.w3schools.com/jquery/jquery\\_traversing\\_descendants.asp](http://www.w3schools.com/jquery/jquery_traversing_descendants.asp)

```
$("#myDiv").find("span"); // returns all span descendants
```

```
$("#myDiv").find("*"); // returns all descendants
```

`siblings(), next(), nextAll(), nextUntil(),`

`prev(), prevAll(), prevUntil()`

[http://www.w3schools.com/jquery/jquery\\_traversing\\_siblings.asp](http://www.w3schools.com/jquery/jquery_traversing_siblings.asp)

`first(), last(), eq(), filter(), not()`

[http://www.w3schools.com/jquery/jquery\\_traversing\\_filtering.asp](http://www.w3schools.com/jquery/jquery_traversing_filtering.asp)

# Ajax

## “Aynchronous Javascript and XML”

Get data without reloading your page.

[http://www.w3schools.com/jquery/jquery\\_ajax\\_intro.asp](http://www.w3schools.com/jquery/jquery_ajax_intro.asp)

```
$(selector).load(URL, data, callback)
var myURL = "someFile.txt"; // or "http://www.mysite.com/myFile.txt"
$("#myButton").click( function() {
    // Pass in the URL and a callback function.
    // xhr is the XMLHttpRequest object.
    $("#myDiv").load(myURL, function(response, status, xhr) {
        if(status == "success")
            alert(response);
        else if(status == "error")
            alert("Error: " + xhr.statusText);
    });
});
```

# Ajax: GET and POST

You know all about GET and POST.

```
$.get(URL, callback);
```

```
$.post(URL, data, callback);
```

```
var myURL = "someScript.php"; // or some server-side script
$.post(
    myURL, // URL of script
    { // data to submit in the form of an object
      name: "John Smith",
      age: 433
    },
    function(data, status) { ... } // callback function
);
```



# Useful Links

**jQuery Tricks:**

<http://net.tutsplus.com/tutorials/javascript-ajax/14-helpful-jquery-tricks-notes-and-best-practices/>

**Some jQuery Plugins**

<http://tutorialzine.com/2013/04/50-amazing-jquery-plugins/>

**jQuery UI:**

<http://jqueryui.com/>

# jQuery Documentation

[api.jquery.com](http://api.jquery.com)