Live demo: [click here](#)

jQuery

CS 329E - Fall 2014

Source

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

`$(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

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)
```
`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

remove(), empty()

www.w3schools.com/jquery/jquery_dom_remove.asp

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

http://www.w3schools.com/jquery/jquery_css_classes.asp

width(), height(), etc.

http://www.w3schools.com/jquery/jquery_dimensions.asp

Traversing Element Trees

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

```
first(), last(), eq(), filter(), not()
```
http://www.w3schools.com/jquery/jquery_traversing_filtering.asp

Ajax

"**A**synchronous **J**avascript **a**nd **X**ML"

Get data without reloading your page.

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