

Basics in jQuery

Topics

1. Introduction
2. jQuery HTML
3. jQuery Traversing
4. jQuery AJAX

Introduction

Introduction: How to import

1. Download the minified file and import as script

```
<head>  
<script src="jquery-3.7.1.min.js"></script>  
</head>
```

2. Include from a CDN

```
<head>  
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.7.1/jquery.min.js"></script>  
</head>
```

Introduction: General Syntax

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

```
// 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"
```

General tip: make sure to execute jQuery method only after the page is completely loaded

Introduction: Selectors

1. Element Selector

```
$(document).ready(function(){  
    $("button").click(function(){  
        $("p").hide();  
    })  
})
```

2. #id Selector

```
$(document).ready(function(){  
    $("p").click(function(){  
        $("#test").hide();  
    })  
})
```

Introduction: Selectors (2)

3. .class Selector

```
$(document).ready(function(){  
    $("button").click(function(){  
        $(".test").hide();  
    })  
})
```

Introduction: Event

Common events: ready, click, dblclick, mouseenter, mouseleave, mousedown, mouseup, hover, focus, blur, on

jQuery Effects: Hide and Show

1. Example hide

```
// general syntax: $(selector).hide(speed, callback)

$('#hide').click(function(){
    $("p").hide();
});
```

2. Example show

```
// general syntax: $(selector).show(speed, callback)

$("#show").click(function(){
    $("p").show();
});
```

jQuery Effects: Fading

1. `fadeIn()`
2. `fadeOut()`
3. `fadeToggle()`
4. `fadeTo()`

Fade an element in and out of visibility.

jQuery Effects: Slide

1. slideDown()

2. slideUp()

3. slideToggle()

Create a sliding effect on elements.

```
$(selector).slide(speed,callback); // general syntax
```

jQuery Effects: Animate

Method used to create custom animations.

```
$(selector).animate({params},speed,callback);

// concrete example
$("button").click(function(){
    $("div").animate({left: '250px'});
});
```

jQuery Effects: stop()

Method used to stop an animation or effect before it is finished.

```
$(selector).stop(stopAll,goToEnd);  
  
$("#stop").click(function(){  
    $("#panel").stop();  
});
```

jQuery Effects: Chaining

Chaining technique: chaining the effects applied to an element

```
$("#p1").css("color", "red").slideUp(2000).slideDown(2000);
```

jQuery HTML: Topics

1. Get
2. Set
3. Add
4. Remove
5. CSS Classes
6. `css()`
7. Dimensions

jQuery HTML: get

1. text()
2. html()
3. val()
4. attr()

```
$("#btn1").click(function(){  
    alert("Text: " + $("#test").text());  
});  
$("#btn2").click(function(){  
    alert("HTML: " + $("#test").html());  
});
```


jQuery HTML: set

1. text(), text(callback_function())
2. html(), html(callback_function())
3. val(), val(callback_function())
4. attr(), attr(callback_function())

```
$("#btn1").click(function(){
    $("#test1").text("Hello world!");
});
$("#btn1").click(function(){
    $("#test1").text(function(i, origText){
        return "Old text: " + origText + " New text: Hello world!
        (index: " + i + ")";
    });
});
```

jQuery HTML: add

1. `append()` - inserts content at the end of the selected elements
2. `prepend()` - Inserts content at the beginning of the selected elements
3. `after()` - Inserts content after the selected elements
4. `before()` - Inserts content before the selected elements

```
function appendText() {  
    var txt1 = "<p>Text.</p>";           // Create element with HTML  
    var txt2 = $("<p></p>").text("Text."); // Create with jQuery  
    var txt3 = document.createElement("p"); // Create with DOM  
    txt3.innerHTML = "Text.";              
    $("body").append(txt1, txt2, txt3);   // Append the new elements  
}
```

jQuery HTML: remove

1. `remove()` - Removes the selected element (and its child elements)
2. `empty()` - Removes the child elements from the selected element

```
$("#div1").empty();
```

3. filter the elements to be removed

```
$("p").remove(".test, .demo");
```

jQuery HTML: CSS Classes

1. `addClass()` - Adds one or more classes to the selected elements
2. `removeClass()` - Removes one or more classes from the selected elements
3. `toggleClass()` - Toggles between adding/removing classes from the selected elements
4. `css()` - Sets or returns the style attribute

```
$("#button").click(function(){  
    $("h1, h2, p").addClass("blue");  
    $("div").addClass("important");  
});
```

jQuery HTML: css()

1. Return a CSS Property
2. Set a CSS Property
3. Set Multiple CSS Properties

```
css("propertyname"); // returns a property
```

```
css({"propertyname":"value","propertyname":"value",...}); // setting multi props
```

jQuery HTML: Dimensions

1. width()
2. height()
3. innerWidth()
4. innerHeight()
5. outerWidth()
6. outerHeight()

```
$("#button").click(function(){  
    var txt = "";  
    txt += "Outer width: " + $("#div1").outerWidth() + "</br>";  
    txt += "Outer height: " + $("#div1").outerHeight();  
    $("#div1").html(txt);  
});
```

jQuery Traversing: Ancestors

1. parent()
2. parents()
3. parentsUntil()

```
$(document).ready(function(){  
    $("span").parents(); // all parents until html  
});
```

```
$(document).ready(function(){  
    $("span").parents("ul"); // all parents that are ul  
});
```

```
$(document).ready(function(){  
    $("span").parentsUntil("div");  
});
```

jQuery Traversing: Descendants

1. children() - returns all direct children of the selected element

```
$(document).ready(function(){  
    $("div").children();  
});
```

2. find() - returns descendant element of the selected element, to the last descendant

```
$(document).ready(function(){  
    $("div").find("span");  
});
```


jQuery Traversing: Siblings

1. `siblings()`
2. `next()`, `nextAll()`, `nextUntil()`
3. `prev()`, `prevAll()`, `prevUntil()`

jQuery Traversing: Filtering

1. first(), last(), eq(), filter(), not()

```
$(document).ready(function(){  
    $("div").first();  
});
```

jQuery AJAX

1. Load
2. Get/Post

jQuery AJAX: load

1. `$(selector).load(URL,data,callback);`

```
$("#button").click(function(){
    $("#div1").load("demo_test.txt", function(responseTxt, statusTxt, xhr){
        if(statusTxt == "success")
            alert("External content loaded successfully!");
        if(statusTxt == "error")
            alert("Error: " + xhr.status + ": " + xhr.statusText);
    });
});
```

jQuery AJAX; get() and post()

1. get request example

```
$.get(URL,callback);
$("button").click(function(){
    $.get("demo_test.asp", function(data, status){
        alert("Data: " + data + "\nStatus: " + status);
    });
});
```

2. post request example

```
$.post(URL,data,callback);
$("button").click(function(){
    $.post("demo_test_post.asp",
    {
        name: "Donald Duck",
        city: "Duckburg"
    },
```