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

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

2. Include from a CDN

```html
<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()

jQuery Effects: Slide

jQuery Effects: Animate

jQuery Effects: stop()

jQuery Effects: Callback

jQuery Effects: Chaining

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 od the selected elements

3. after() - Inserts content adter the selected elements

4. before() - Inserts content before the selected elements

```javascript
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()

```javascript
$(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 elemnt 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"
  },
```