Web Development

jQuery Library

jQuery Intro

<u>iQuery</u> is a lightweight, "write less, do more", JavaScript library.

The purpose of jQuery is to make it much easier to use JavaScript on your website.

jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.

jQuery will run exactly the same in all major browsers, including Internet Explorer 6!

jQuery Intro

jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation. The jQuery library contains the following features:

- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

In addition, jQuery has plugins for almost any task out there.

Adding jQuery Library

You can add the compressed and uncompressed copies of jQuery files.

- The uncompressed file is best used during development or debugging.
- The compressed file saves bandwidth and improves performance in production.

You can download and have locally or use CDN (Content Delivery Network) from Google or Microsoft for example.

```
1 <!-- CDN -->
2 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
3
4 <!-- Local file -->
5 <script src="assets/js/jquery-3.2.1.min.js"></script></script>
```

jQuery Syntax

With jQuery you select (query) HTML elements and perform "actions" on them.

The jQuery syntax is tailor-made for selecting HTML elements and performing some action on the element(s).

Basic syntax is: \$(selector).action()

A \$ sign to define/access jQuery

A (selector) to "query (or find)" HTML elements

A jQuery action() to be performed on the element(s)

jQuery Syntax

```
1 // Normal JavaScript
2 window.onload=function(){
3 ...
4 }
5
6 // jQuery
7 $(document).ready(function(){
8 ...
9 });
```

Some 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".
```

jQuery selectors allow you to select and manipulate HTML element(s).

jQuery selectors are used to "find" (or select) HTML elements based on their name, id, classes, types, attributes, values of attributes and much more.

It's based on the existing CSS Selectors, and in addition, it has some own custom selectors.

All selectors in jQuery start with the dollar sign and parentheses: \$().

The jQuery element selector selects elements based on the element name.

```
1 $(document).ready(function(){
2    $("button").click(function(){
3         $("p").hide();
4    });
5 });
```

The #id selector uses the id attribute of an HTML tag to find the specific element.

An id should be unique within a page, so you should use the #id selector when you want to find a single, unique element.

```
1 $(document).ready(function(){
2    $("button").click(function(){
3         $("#test").hide();
4    });
5 });
```

The class selector finds elements with a specific class.

```
1 $(document).ready(function(){
2    $("button").click(function(){
3         $(".test").hide();
4    });
5 });
```

Syntax	Description
\$(this)	Selects the current HTML element
\$("p.intro")	Selects all elements with class="intro"
\$("p:first")	Selects the first element
\$("[href]")	Selects all elements with an href attribute
\$("a[target='_blank']")	Selects all <a> elements with a target attribute value equal to "_blank"
\$(":button")	Selects all <button> elements and <input/> elements of type="button"</button>

Take a look at this link to see more iQuery Selectors

DEMO!

Useful resources

- <u>iQuery Documentation</u>
- <u>iQuery Learning Center</u>
- W3Schools