
JQUERY

— Learn jQuery Fundamentals - —
Get started quickly with jQuery

jQuery Course

Step by step learning covering the core parts of jQuery to get you coding quickly. **Source code** and **everything you need to get started is included.**

Course covers

- explore how to write jQuery basics
- how to select elements to apply manipulations too
- learn about applying style and classes
- adding effects to elements like hide and show
- make you web page come to life with animations and effects slide, fade and animation
- create interaction with your page using event listeners like mouse events and keyboard events
- use AJAX to connect to JSON data to easily populate content into your page
- all this and much more

Getting started with JQUERY

The most popular JavaScript library in use today

Installed on 65% of the top 10 million highest-trafficked sites on the Web

jQuery is free, open-source software licensed under the MIT License

jQuery is a JavaScript Library

It simplifies JavaScript programming

What JQUERY does

jQuery wraps common JavaScript tasks into a method which you can then call with simple lines of code.

2006 introduced - JavaScript file that added more to what you could do

DOM manipulation made easy - helps us manipulate the DOM

- jQuery comes with own methods
- Makes it easier to navigate a document selecting elements.
- Manipulate and create DOM elements
- Create animations and effects
- Handles Events
- Use AJAX

Dynamic Web Pages with JQuery

Create powerful dynamic interactions with web users via jQuery

Where to learn more about jQuery

[jQuery.com](https://jquery.com)

Having a experience with JavaScript and CSS will help you get started with jQuery quicker

Benefits of using jQuery

It's small in size and loads quickly

Really powerful features allow you to create interactions faster

Simple straight forward. It's easy to learn and get started with

Easy to use - similar to CSS for selection.

Cross browser support

Fixes broken DOM

Its popular

Easier to add JavaScript functionality to your website

Introduction to jQuery

There are a number of way to get jquery

- <http://jquery.com/download/>
- Use CDN (Content Delivery Network) <https://developers.google.com/speed/libraries/>

If you download make sure you place it in a directory that your can access it from.

Benefits of CDN - visitors may already have it cached within their browsers, which allows for quicker load times.

Including the library jQuery

Link to CDN content delivery network - take a little longer to use not noticeable, but much easier to get started with.

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.2/jquery.min.js"></script>
```

Or download and link to it locally `<script src="jquery.min.js"></script>`

Minified - whitespace is gone, all names of variables and properties as single character. Not human readable.

Type jQuery into console to ensure you have it working

Introduction to Document Object Model

jQuery, at its core, is a DOM (Document Object Model) manipulation library.

So understanding the DOM is important to understanding how jQuery works.

Introduction to Document Object Model

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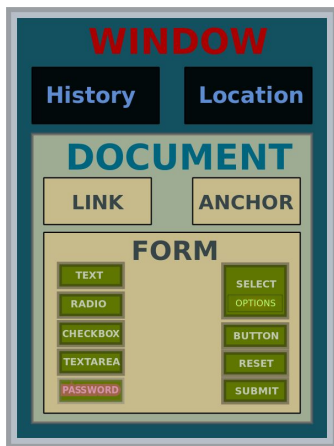
So understanding the DOM is important to understanding how jQuery works.

What is the DOM? Document Object Model

https://en.wikipedia.org/wiki/Document_Object_Model

The Document Object Model (DOM) is a cross-platform and language-independent convention for representing and interacting with objects in HTML, XHTML, and XML documents. The nodes of every document are organized in a tree structure, called the DOM tree. Objects in the DOM tree may be addressed and manipulated by using methods on the objects. The public interface of a DOM is specified in its application programming interface (API).

What is the DOM? Document Object Model



JavaScript allows for client-side interactivity.

DOM is the standardized format for the complete model of the webpage. It provides a means to change any portion of the document, handle events, and more.

To render an HTML page, most web browsers use an internal model similar to the DOM. Nodes (all the pieces of the page) are organized in a tree structure. The tree stems from a main node referred to as the document object.

jQuery \$

jQuery Object \$ uses \$ to define jQuery. jQuery has two usage styles:

Via the \$ function, which is a factory method for the jQuery object. These functions, often called commands, are chainable as they all return jQuery objects.

Via \$.-prefixed functions. These are utility functions, which do not act upon the jQuery object directly.

Selectors are CSS syntax - if you are familiar with CSS selectors, jQuery selectors will be straightforward.

jQuery

jQuery is run when the document is ready.

```
<script type="text/javascript">  
$(document).ready(function(){  
    // jQuery code  
});  
</script>
```

jQuery

Same as the `$(document).ready(function(){` but shorter. You can use either.

```
<script type="text/javascript">  
$(function(){  
  // jQuery code  
});  
</script>
```

JQUERY

Selectors

jQuery selectors

jQuery Selectors

Works like CSS and has its own custom selectors.

Once selected you probably will want to do something with the element.

Example l1.html

HTML and DOM manipulation

The DOM allows scripts to access and manipulate web documents.

`text()`

`html()`

`val()`

Example script1.js

Selectors SET

```
$("#id").html('new');
```

```
$(".class").html('new');
```

```
$("#p").html('new');
```

Setting content to value of new

Changing page content

Update your HTML with jquery

Selectors GET

```
$("#id").html();
```

`$(".class").html();` - this returns the first class value

`$("#p").html();` - this returns the first tag value

You should be specific with get on the content. Content should be retrieved from a single element.

Get page content

Selectors Explicit iteration

Looping of multiple elements.

When you loop you generally may want to apply specific changes to each of the matching selections.

Appending of content

But you can also list out selections individually....

Updating HTML using jQuery

Append

After

prepend

Before

Empty

Remove

Although they may initially sound similar there are differences.

JQUERY

Events

jQuery EVENTS event binding

User initiates a trigger

Most commonly used are click events

```
$( 'li' ).click(function( event ) {  
  
    console.log( 'clicked', $( this ).text() );  
  
});
```

jQuery event.preventDefault()

stops the default action of an element from happening.

```
event.preventDefault();
```

`<a>` hyperlinks.....

jQuery mouse events

`hover()`

`dblclick()`

jQuery Mouse Events

`Mousedown()`

`mouseenter()`

`mousemove()`

`mouseleave()`

`mouseover();`

`mouseup();`

jQuery Keyboard Events

`keydown()` `keyup()`

`keypress()`

Get key information

jQuery Form events

`blur()`

`focus()`

`change()`

`submit()`

JQUERY

Traversing

jQuery Traversing

HTML elements in relation to other HTML elements.

Moving from the starting point element to other elements within the page until you reach the desired element.

Parents

Children

siblings

jQuery Traversing family

First top element that contains others is an ancestor or parent to the elements within it.

Child is descendant of the parent, and sibling to the other elements that share the same parent.

Parent is the immediate parent whereas parents are all ancestors up to html

jQuery Traversing find

Gets all the descendants of each element

jQuery Traversing Siblings

`next()`

`siblings()`

`nextAll()`

jQuery Traversing Filtering

`first()`

`last()`

`eq()`

JQUERY

CSS

jQuery working with CSS

`css(propName,value)`

Add classes

Remove classes

JQUERY

— EFFECTS and ANIMATIONS —

jQuery effects

Simple `hide()` and `show()`

jQuery effects

Fading effects

`fadeIn()`

`fadeOut();`

`fadeTo();`

jQuery effects

Sliding moving the element

`slideDown()`

`slideUp()`

`slideToggle()`

jQuery .animate()

You can perform animation

`.animate()`

jQuery chaining effects together

You can add more than one effect chaining methods together in jQuery

jQuery AJAX

Powerful

What is AJAX

asynchronous JavaScript and XML

Using AJAX web applications can send data to and retrieve data from a server without page reloads.
Ability to change content dynamically.

Despite the name, the use of XML is not required (JSON is often used in the AJAJ variant), and the requests do not need to be asynchronous.

JavaScript Object Notation (JSON) is often used as an alternative format for data interchange, although other formats such as preformatted HTML or plain text can also be used

[https://en.wikipedia.org/wiki/Ajax_\(programming\)](https://en.wikipedia.org/wiki/Ajax_(programming))

AJAX

AJAX requests happen in the background making them invisible to the user.

Allowing you to access data that is not currently loaded within the page.

Behavior is smooth and seamless

jQuery make AJAX easy

`$.get()`, `$.post()`, `load()`, `$.getJSON()`, `$.post()`, `$.ajax()`

Using LOAD() to get data

```
$("#output").load('php.php');
```

Uses Selectors to load the result of the AJAX call inside the selected element

Using Get to get data

```
$.get('php.php', function (data) {
```

```
///reads contents of php.php into data
```

```
});
```

Handles the success response of the AJAX call

Free to define the behavior you want

Simple way to make AJAX calls

Static and dynamic documents both work

Using GetJSON to get data

```
$.get('php.php', function (data) {
```

```
///reads contents of php.php into data
```

```
});
```

Result type is expected JSON format

Shorthand for get retrieving JSON data

Using AJAX post

```
$.post('php.php', data, function (data) {
```

```
///reads contents of php.php into data
```

```
});
```

Send data to server securely

jQuery \$.ajax()

More control with settings

Used when other methods cannot be used

More about AJAX

<http://api.jquery.com/category/ajax/>

Same Origin policy

https://en.wikipedia.org/wiki/Same-origin_policy

https://en.wikipedia.org/wiki/Cross-origin_resource_sharing

Thank you

Thank you for taking the course, and reading this PDF. If you have any questions or suggestions please connect with me on Udemy.

<https://www.udemy.com/user/lars51/>

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