# **JavaScript & jQuery**

Give your websites a jolt of functionality and interactivity with JavaScript & jQuery. Learn to hide and show elements, customize animations, validate forms, and much more.

Group classes in NYC and onsite training is available for this course. For more information, email <a href="mailto:contact@nyimtraining.com">contact@nyimtraining.com</a> or visit: <a href="mailto:training-nyc.com/courses/javascript-jquery">training-nyc.com/courses/javascript-jquery</a>



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## **Course Outline**

## Section 1

#### **Fundamentals of JavaScript Code**

- JavaScript methods (such as alerts)
- Variables
- The importance of quotes
- Numbers vs. strings
- Concatenation

## **Reusing Code with Functions**

- · Defining functions
- Calling functions
- Defining parameters & passing arguments

## Simple Accordion with JavaScript

- Targeting elements by ID
- · Hiding & showing elements with JavaScript

#### If Statements: Clearing Form Fields

- · Testing code in the JavaScript Console
- Getting & setting properties
- Using if statements
- Reshowing text hints in empty form fields

#### Section 2

## Introduction to JavaScript Objects & the DOM

- Intro to objects
- The global object

· Breaking open & manipulating objects

#### **Dynamically Changing Content with Custom Objects**

- Checking the functionality of the select menu
- Getting the chosen value
- · Dynamically changing the state name value
- Dynamically changing the rest of the values

## **Introduction to Arrays & the Math Object**

- · Creating an array
- · Editing an array
- Creating an array of welcome headings
- The Math object
- Using the Math object to pick random headlines

#### **Introduction to For Loops**

- Creating a for loop
- · Using the for loop to set dropdown menus
- Clearing the To menu
- Optional bonus: refining the menu selection experience

## Section 3

## **Exploring JavaScript Selectors**

- Intro to JavaScript selectors
- · Selecting multiple elements & elements without IDs
- Getting a specific list item
- Getting elements by class name
- Getting multiple items using querySelectorAll()
- Getting a single item using querySelector()
- Chaining selectors together
- Targeting elements by data attribute

## **Photo Filter Website: User Friendly Navigation**

- Setting up the selectors with data attributes
- Getting the selectors on load
- Toggling the filter buttons
- Refining the filter buttons

#### **Photo Filter Website: Getting the Photos to Filter**

- · Creating an array to store the selectors
- · Getting the All button to select all filters
- · Getting the rest of the buttons to select the other filters
- · Initially hiding the photos
- Getting the photos to filter

#### **Photo Filter Website: Creating an Exclusive Filter**

• Adding a checkbox to toggle exclusive filtering on/off

- · Separating the inclusive & exclusive filters
- Writing a conditional to select the appropriate filter
- · Programming the exclusive filter
- · Rerunning the filter when the checkbox is toggled
- Improving the user experience

## **Section 4**

## **Showing/Hiding Content with jQuery Animation**

- Getting started with jQuery
- · Running code when the document is ready
- Click events
- Using jQuery's slideToggle() method
- · Supporting JavaScript disabled users

#### **Sharing JavaScript Across Pages**

- Externalizing JavaScript
- Linking to the JavaScript file

#### **jQuery Hover Animation**

- · Adding an outline with CSS
- Using jQuery's hover() method
- Using ¡Query's animate() method

#### More Advanced jQuery Showing/Hiding

- · Adding an animation to reveal hidden content
- Targeting the proper div: traversing the document
- · Swapping the button image with jQuery

## Section 5

#### jQuery Lightbox: A Pop-up Image Viewer

- · Linking to the plugin files
- Initializing the pop-up
- Grouping the photos into a gallery
- Adding captions
- · Removing the counter
- Customizing the appearance

### jQuery Cycle: A Simple Slideshow

- · Initial setup
- Defining what content gets cycled
- Adding more cycles & exploring options
- Reversing the animation

## **jQuery Cycle: Adding Slideshow Controls**

- Preventing a possible "flash of unstyled content"
- Enabling the slideshow
- Adding & customizing the controls

## Section 6

## jQuery Cycle: Adding a Pause Button

- Adding a pause/play button
- Styling the pause/play button
- Checking to see if the cycle is paused
- Making the pause/play button work

## jQuery Form Validation

- Initializing the plugin & setting options
- Customizing the error messages
- Changing the location of the error messages
- Styling the error messages

## **jQuery Image Carousel**

- Linking to the plugin files
- · Creating the carousel
- Styling the carousel
- An easy way to add prev & next buttons
- Adding custom prev & next buttons
- Setting how many items are shown