# JavaScript for Front-End

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:nyc@careercenters.com">nyc@careercenters.com</a> or visit: <a href="https://www.careercenters.com/courses/javascript-jquery">https://www.careercenters.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 jQuery'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