COURSE SYLLABUS

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 (NYC) and onsite training are available for this course. For more information, email corporate@nobledesktop.com or visit: https://www.careercenters.com/courses/javascript-jquery



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Course Outline

Section 1

Fundamentals of JavaScript Code

- JavaScript methods (such as alerts and console.log)
- Variables
- Using Chrome's DevTools: The JavaScript Console
- The importance of quotes
- Numbers vs. strings
- Concatenation
- Booleans
- Error messages & troubleshooting JavaScript

The DOM & Getting/Setting Properties

- Selecting HTML elements with getElementById()
- Manipulating selected elements
- Getting & setting properties (such as adding a class)

Functions & Event Handlers

- Defining & calling functions
- Defining parameters & passing arguments
- Using an event listener

Section 2

Arrays, Math Object, & Displaying a Random Testimonial

- Creating an array
- Editing an array
- The Math object

- Picking a random item from an array

For Loops

- Creating a for loop
- Using the for loop to set menus
- The JavaScript Keyword This
- Using a For Loop In the Product Chooser

External JS Files: Sharing JavaScript Across Pages

- Externalizing JavaScript
- Linking to the JavaScript file

If Else, the Date Object, & Creating Elements

- Conditional Logic: Using if-else statements
- Single (=) vs. Double (==) Equal Signs
- The Date Object
- Creating Elements in a Page with JavaScript

Section 3

JavaScript Objects

- Intro to objects
- Defining an Object
- Accessing & manipulating objects

Dynamically Changing Content with Custom Objects

- Referencing the Menu
- Listening For When the Menu is Changed & Getting the Chosen Value
- Loading in Data from an External File
- Dynamically Changing Info on the Page

Using a JavaScript Library: Tabs

- Using premade JavaScript Libraries
- Creating tabbed sections within a webpage

Section 4

Using a JavaScript Library: Slideshow/Carousel

- Setting Up the HTML Content
- Linking to the Provided Files
- Initializing the Script
- Customizing the Script Using Provided Options
- Tweaking Some CSS

Intro to the GreenSock Animation Platform (GSAP)

- Loading the GSAP JavaScripts
- Anatomy of a GSAP Tween
- The gsap.from() Method

- Tweening Multiple Properties
- Easing

GSAP Timelines: Animating Multiple Elements in Sequence

- Animating Multiple Elements
- Creating & Using a Timeline
- Cleaning Up the Syntax with Chaining
- Timeline repeat & repeatDelay Properties

Section 5

GreenSock: Staggered Animations & Animating SVG

- Animating SVG
- Transform Origin
- Stagger: Animating Multiple Elements from a Single Tween

GreenSock: Animating an HTML5 Ad (Google Banner Ads)

- Linking to the Google Hosted Version of GreenSock
- Creating a Timeline & Animating Multiple Scenes
- X & Y versus xPercent & yPercent
- Timeline Labels & Using Seeking to Jump to a Specific Part of a Timeline

GreenSock: Preventing Flash of Unstyled Content on Load

- Using Chrome's DevTools to Simulate a Slow Network
- Preventing Flash of Unstyled Content on Load
- Checking Your Ad Using the Google Ads HTML5 Validator

Section 6

GreenSock: Intro to Scrolling Animations (ScrollTrigger)

- Setting Up a ScrollTrigger
- Toggle Actions
- Turning on Markers
- Scrubbing: Linking an Animation to the Scrollbar
- Starting & Ending Scroll Positions

GreenSock: Parallax Animation

- Setting Up the HTML
- Styling the Parallax Layers
- Adding the Depth Info
- Using GSAP to Make the Parallax Work

GreenSock: ScrollTrigger on Multiple Alternating Elements

- Making ScrollTrigger Work with Each Element Individually
- Alternating Directions For Each Row
- Fixing Unwanted Horizontal Scrolling