

Advanced JavaScript

Course Summary

Description

This course will build upon the basics of JavaScript. The student will learn how to add DHTML into their web pages, manipulate DOM elements, use JSON and jQuery within their web pages, as well as more advanced techniques of working with custom objects, multi-dimensional arrays, and associative arrays. The student will also work extensively with the string object and use pattern matching with regular expressions.

Topics

- Building on the Basics
- Objects
- Arrays
- Regular Expressions
- Dynamic HTML
- JSON Overview
- jQuery Overview

Audience

This course is designed for JavaScript programmers.

Prerequisites

Before taking this course, students should have completed or have equivalent knowledge of introductory JavaScript.

Duration

Two days

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Course Outline

- I. Building on the Basics**
 - A. Review JavaScript Basics
 - B. External JavaScript Files
 - C. Troubleshooting
 - D. Debugging
 - E. Error Types
 - F. Syntax Errors
 - G. Runtime Errors
 - H. Logical Errors
 - I. console.log()
- II. Objects**
 - A. Built-in Objects
 - B. Custom Objects
 - C. The constructor Property
 - D. The toString() Method
- III. Arrays**
 - A. Working with Arrays
 - B. Manipulating Array Elements
 - C. Multidimensional Arrays
 - D. Associative Arrays
- IV. Regular Expressions**
 - A. What are Regular Expressions?
 - B. Using Regular Expressions
 - C. Form Validation
- V. Dynamic HTML**
 - A. Dynamic HTML / DOM
 - B. HTML DOM
 - C. DOM Methods and Properties
- VI. JSON Overview**
 - A. Overview
 - B. Defining JSON Data
 - C. JSON Data in an Array
 - D. Nesting JSON Data
 - E. Storing JSON Data
 - F. Retrieve JSON Data
- VII. jQuery Overview**
 - A. Overview
 - B. Getting Started with jQuery
 - C. jQuery Syntax
 - D. Element Selectors
 - E. Id Selectors
 - F. Class Selectors
 - G. Attribute Selectors
 - H. Other Selectors
 - I. Event Methods
 - J. jQuery Effects