

Introduction to JavaScript

GoSkills online course syllabus

Friday, December 1, 2023

Skill level

Beginner

Lessons

40

Accredited by

CPD

Pre-requisites

None

Video duration

2h 41m

Estimated study time

20h for all materials

Instructor

John Elder

Course Introduction

- 1** **Setting Up a Development Environment**
Set up the tools you need to use JavaScript.
- 2** **Where to Use JavaScript**
Where does JavaScript go? Putting JavaScript tags in the HTML head, vs body, vs external files.
- 3** **Syntax**
What does JavaScript code look like?
- 4** **Output**
Learn several ways to output data to the screen with JavaScript.

Basic JavaScript

- 5** **Statements and Comments**
Understanding the instructions that are executed by the web browser, and learning how to comment code.
- 6** **Variables**
How to store data in variables in JavaScript.
- 7** **Assignment Operators**
How to assign values to a variable, and do basic math assignment.

- 8 **Arithmetic Operators**
How to add, subtract, multiply, and divide with JavaScript. We'll also look at the modulus, incrementing and decrementing.
- 9 **Comparison and Logic Operators**
How to compare two or more variables and test with logic (and, or, not).
- 10 **Strings, Numbers, and Boolean Data Types**
Understanding the difference between strings and numbers; and understanding Boolean data types.
- 11 **Arrays**
What are arrays, and how does JavaScript use them?

Intermediate JavaScript

- 12 **Objects**
What are objects, and how does JavaScript use them?
- 13 **Functions**
Implementing and invoking blocks of code with functions.
- 14 **If and If/Else and If/Else If Statements**
Understanding conditional statements using If, If Else, and If Else If statements.
- 15 **Switch**
Understanding conditional statements using switch.
- 16 **For Loops**
Looping through things using For loops.
- 17 **While Loops**
Looping through things using While loops.
- 18 **Intro to JSON**
Introduction to JSON and why it is important.

Using JavaScript For The Web

- ## 19 A Short HTML/CSS Primer

JavaScript works with HTML and CSS, let's do a quick refresher video on HTML and CSS.
- ## 20 Intro to the HTML DOM

What is the DOM and why is it important?
- ## 21 DOM Methods and Properties

What are the actions you can perform on HTML elements and what properties can you get and set?
- ## 22 Dom Document Objects

Finding, changing, adding, and deleting elements.
- ## 23 Finding Dom Elements

Finding elements by ID, by tag name, by class name, by CSS selectors, and by collections.
- ## 24 Changing HTML Output, Content, and Attributes

How to change HTML output, content, and attributes with JavaScript.
- ## 25 Changing CSS

How to change your CSS with JavaScript.
- ## 26 Understanding Events

What is an event, and what can you do with it?
- ## 27 Event Listeners

What are event listeners, and how to listen for event handlers.
- ## 28 Navigating DOM Nodes

What is a DOM node and how do you navigate them.
- ## 29 Creating New Nodes

Adding new nodes on the fly with JavaScript.
- ## 30 The Node List

How to retrieve an array-like collection of nodes.
- ## 31 Form Validating

How to validate an HTML fill-out form with JavaScript.

32 Introduction to jQuery
What is jQuery, and why is it important?

AJAX

33 What Is AJAX
What is AJAX and what is it used for?

34 AJAX Requests - GET or POST?
What's the difference between GET and POST and when should you use them?

35 AJAX Response
How to handle an AJAX response.

Building a Math Flashcard App

36 Putting It All Together - What We'll Build
Introduction to building a simple math flashcard app with JavaScript and Ajax.

37 Create the Fill-Out Form
Let's create a fill-out form to enter our answers.

38 Checking for Numbers
Let's make sure the user entered a number!

39 Output the Result
How to output the answers to the screen.

40 Finishing Up
Create pages for Subtraction, Multiplication, and Division and finish the app.

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