

JavaScript Fundamentals

Prepared for Salesforce

Last Updated: May 17, 2023

Course Overview:

This introduction to JavaScript course teaches developers to utilize the fundamentals of the JavaScript programming language to make basic scripts and web applications. The course begins with the fundamentals of the language, including primitives, arrays, variables, objects, and functions. It then transitions into more advanced topics, such as the manipulation of the Document Object Model (DOM), events, and JavaScript frameworks/libraries (like Angular and React). The course concludes with segments on storage and testing. The course is meant for developer and developer teams looking to take the next step from HTML/CSS, and back-end programmers needing to brush up on their client-side skills.

Course Duration: This course will be delivered in 3 days

Course Prerequisites:

- Familiarity with any programming language
- Basic understanding of HTML & CSS

Course Objectives

- After this course, you will be able to:
 - Leverage JavaScript syntax and data types to make basic functioning scripts
 - Select and manipulate the DOM using JavaScript
 - Handle and validate forms using JavaScript methods
 - Test applications using JavaScript

Technical Setup

- Chrome Browser
- Node.js (<https://nodejs.org>)
- Any editor (Visual Studio Code / WebStorm / Atom etc)

Course Outline

- Introduction to JavaScript

- What is JavaScript
 - Where can JavaScript be found
 - Working with the Console
 - The Stateless Web
 - AJAX Revolution
- Core Concepts
 - Primitives
 - Variables
 - Objects
 - Arrays
 - Loops
 - Functions
- DOM
 - What is the Document Object Model
 - Object Orientation
 - Creating and Adding Elements
 - Writing Functions
- Objects
 - Object Literal Notation
 - JSON
 - Working with Arrays
 - Built In Objects
 - AJAX
- Event Handling
 - Common Event Types in JavaScript
 - Timing
 - Date and Time
 - Mouse Events
- Forms
 - Validating Forms
 - Displaying and Hiding Form Areas
 - Writing Regular Expressions
- Storage
 - Web Storage
 - Cookies
- JavaScript Testing
 - Testing Overview
 - Test-driven Development (TDD)
 - Debugging Tools
 - JSLint-ing Your Code