

Introduction to JavaScript | Modern JavaScript Essentials (TT4110)

Category: Software Development & Programming | **Vendor:** Trivera Tech

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Introduction to Modern JavaScript | JavaScript Essentials® is a hands-on geared for web developers who need to learn basic JavaScript to use with today's systems and architectures to build sophisticated web interfaces.® The training will guide students through a balanced mixture of theory and practical labs to gain core JavaScript development skills and have them explore its related technologies through to the use of tools and libraries to ease the development of advanced web applications.

About This Course

Introduction to JavaScript | Modern JavaScript Essentials is a hands-on geared for web developers who need to learn basic JavaScript to use with today's systems and architectures to build sophisticated web interfaces. The training will guide students through a balanced mixture of theory and practical labs to gain core JavaScript development skills and have them explore its related technologies through to the use of tools and libraries to ease the development of advanced web applications. Course attendees will be able to hit the ground running right after class, applying essential JavaScript to projects at both an architectural as well as a line by line coding level.

Who Should Attend

This Introductory-level course is targeted for aspiring web developers who have software development experience or background. The course can also be adjusted for non-developers upon request.

Prerequisites & Entry Requirements

General Prerequisites:

This is an introductory level course for experienced software developers seeking to enhance and extend their core web development skillset leveraging JavaScript. Attendees should have practical experience developing basic software applications. This course provides an excellent foundation for continued learning to gain in-demand skills in in-demand skills and technologies such as NodeJS, Angular, React, Redux and more. This course can also be tailored for less experienced or non-developers as needed. Please inquire for details.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Throughout this course, students will explore the practical use of the umbrella of technologies that work in conjunction with JavaScript as well as some of the tools, toolkits, and frameworks that can be used in conjunction with web development and deployment. The course thoroughly explores JavaScript and how it is used within the context of web applications, walking students through the different technologies that are used with JavaScript and exploring core aspects of JavaScript in terms of web applications, security, tools, and frameworks.

Working within in a hands-on learning environment guided by our expert team, attendees will learn to:

- Understand what JavaScript is and how it is used within the context of web applications
- Work with the different technologies that are the foundation for web applications.
- Understand and work with the fundamental aspects of JavaScript in terms of web applications, security, tools, and frameworks
- Learn to how to effectively work with the newest advances in JavaScript such as ES6 and TypeScript
- Develop code using conventions and optimal constructs for performance

Detailed Course Outline

Session: HTML Refresher (optional)

Lesson: HTML

Define HTML and review its history

Look at XHTML and its relationship to HTML

Identify HTML limitations and improvements

Lab: Working with HTML

Lesson: HTML5

HTML5 Overview

HTML5 Semantic Structure

HTML5 Forms

HTML5 Media Delivery

Exercise: Writing a Valid HTML5 Document

Exercise: Writing HTML5 Forms

Session: CSS Refresher (optional)

Lesson: CSS

Learn the basics of CSS

Meaning of cascading in CSS

Declaring CSS within your HTML page

Creating styles in an external CSS file

Control how to display and position HTML elements

Overriding standard tag behavior

Adding new classes

Using custom classes in your page

Lab: Working with CSS

Lesson: CSS3 Overview

What is new in CSS3

The Advantages of CSS3

Browser Support for CSS3

Lab: Working with CSS3

Session: Introduction to JavaScript

Lesson: JavaScript Basics

JavaScript Defined

Variables and Operators

Flow Control and Conditionals

Lab: JavaScript Basics

Lesson: Debugging Tools

Using the strict mode and setting breakpoints

Browser debugging tools

Monitoring resource usage and performance

Emulating devices Exceptions in JavaScript

Lab: JavaScript Debugging

Lesson: JavaScript Functions

Functions in JavaScript

Invoking Functions

Function Constructor

Function Scope and Closures

Lesson: JavaScript Arrays, Math and Date

JavaScript Literals

JavaScript Arrays

Working with Numbers and Dates

Lab: JavaScript Built-in Objects

Lesson: JavaScript Event Handling and the DOM

Events and Event Handling

HTML Document Object Model

Accessing the DOM

Dynamically Working with the DOM

DOM Challenges

Lab: Using Events and the DOM

Lesson: Object-Oriented JavaScript

JavaScript “Objects” and “Classes”

Constructors and Prototypes

Prototypes

Extending Classes with Prototype

Reusable, Flexible Classes

Lab: Working with Classes

Session: Advanced JavaScript Topics

Lesson: ES6: The Next Step

ES6 Defined

ES6 Default and Rest Parameters

IIFE and Closures

ES6 Importing/Exporting Modules

Arrays, ES6 Maps, and ES6 Sets

Working Arrays with ES6

Working Strings with ES6 Strings

ES6 Constructs and Inheritance

ES6: Getters and Setters

Lab: Working with ES6

Lesson: TypeScript

Strong Data Typing

Compiling TypeScript to JavaScript

TypeScript Datatypes

TypeScript Classes and Interfaces

Lesson: Introduction to JSON and Ajax

JavaScript Object Notation

AJAX: Load Once and Change Data

XMLHttpRequest is at the Center

Calling the Service

The Callback

Lab: Implementing JSON

Lesson: JavaScript Best Practices

Code Conventions for the Lifecycle

Resolving Shared Resources

Constructs to Use

Constructs to Avoid

Memory Considerations

Lesson: JavaScript Scheduling, Execution, and Security

Timers and Scheduling

Execution Contexts

Same Origin Policy and JavaScript

Security Considerations

Lesson: HTML5 JavaScript API

Cross-Domain Messaging

Working with Web Storage

Offline with Application Cache

Geolocation: What, Why, and How

Lab: Using the Web Storage API

Lab: Using the ApplicationCache API

Session: Working with XML (Optional)

Lesson: XML DOM Mechanics

HTML vs XML DOM

Building an XML DOM

Integrating XML into HTML

XML Response Processing

Lab: Loading XML Data into an HTML Page

Lesson: XSLT Applied

XSLT in the Browser

XSLT in Specific Browsers

Sarissa Assistance

XSLT Pluses and Minuses

Lab: XSLT Transformations with Sarissa

Additional Course Details

Nexus Humans Introduction to JavaScript | Modern JavaScript Essentials (TT4110) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Introduction to JavaScript | Modern JavaScript Essentials (TT4110) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Introduction to JavaScript | Modern JavaScript Essentials (TT4110)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 3-day Introduction to JavaScript | Modern JavaScript Essentials (TT4110) course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Introduction to JavaScript | Modern JavaScript Essentials (TT4110) training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Introduction to JavaScript | Modern JavaScript Essentials (TT4110)?

Yes, we provide corporate training, dedicated training, and closed classes for Introduction to JavaScript | Modern JavaScript Essentials (TT4110). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: JavaScript

Q: Why choose Nexus Human for Introduction to JavaScript | Modern JavaScript Essentials (TT4110)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Introduction to JavaScript | Modern JavaScript Essentials (TT4110) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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