

Updated on 29/11/2023

Sign up

JavaScript training : Advanced programming

3 days (21 hours)

Presentation

Have you attended our JavaScript training course and would like to learn more? Do you have a JavaScript application and are having trouble maintaining it? This training course will enable you to become an expert in JavaScript, as you discover the advanced concepts of the world's [most popular programming language](#). Our advanced JavaScript training course will enable you to master the new features of the language. You'll learn about the new ES6 syntax, methods for testing your JS projects, asynchronous programming, event handling and advanced DOM manipulation. This advanced JavaScript course will introduce you to the latest version of the language: [JavaScript 11 - ES2020](#).

Objectives

- Master the advanced features of JavaScript ES6
- Build an application using JavaScript's advanced features
- Browse and modify the DOM with the JQuery library
- Managing HTML5 JavaScript APIs
- Using JavaScript for different use cases: web applications, browsers, software, servers, etc.
- Understanding server-side development with Nodejs
- Mastering debugging
- An in-depth understanding of Object-Oriented Programming

Target audience

- Front-end developers
- Technical architects
- UI designer
- Project managers
- Design engineer

Prerequisites

- Have completed our initial [JavaScript](#) training
- Knowledge of HTML and CSS
- Basic knowledge of XML

Program of our JavaScript : Advanced programming

Advanced asynchronous JavaScript

- JavaScript's asynchronous functions
- Promises and asynchronous callbacks
- Asynchronous programming with async/await
- Find keywords
- Asynchronous function expression

OOP in Advanced JavaScript

- Understanding object-oriented programming?
- Object classes
- Using objects
- Defining object models
- Instantiation: create objects from a class

Moving the mouse with JavaScript

- How do Rollovers work?
- Shelley Biotech
- Image preloading
- Mouse and submenus
- Mouse and style sheets
- mouseover events
- Summary

Dynamic modification of table configuration

- Dynamic modification of table configuration
- Creating basic reports
- Advanced table configuration

Replacing image cards

- Replacement scenario
- Multiple image maps in HTML
- Information on image maps in JavaScript

Advanced syntax with JavaScript

- ES6
- IIFE advanced
- Pattern modules

Drop-down menu

- Navigation
- Modifying menu content
- Code overview
- Text fields, checkboxes, radio buttons and text boxes
- Copying text fields with checkboxes
- Radio buttons and text boxes

Form validation

- Providing information
- Adding to lists
 - Switch from an unordered to an ordered list
 - Insert line elements in specific positions
- User data validation
- Credit card number validation

DOM

- Introduction to web APIs
- About the Document Object Model
 - Details of a good DOM architecture
 - The latest in HTML5
 - The latest in CSS3
- DOM manipulation with HTML5 APIs
- AO
- The W3C DOM

Event objects

- The genesis of events
- Browser event management
- Event propagation
- Refer to event object
- Palette Man components
- Add functionality
- Color rotation

Hierarchical menus: Introduction

- YesterdayMenus
- Paintings
- DOM and main functions
- HM_ScriptDOM

Hierarchical menus: Behavior

- Menu behavior
- Moving layers
- Background
- Events and objects
- Drag and drop code
- The whole process

Regular expressions

- Introduction to Regular Expressions
- Creating regular expressions
- Properties of regular expression objects
- Executing regular expressions
- Test, read and replace text with regular expressions

Advanced JavaScript and ActionScript

- What is ActionScript?
- Call JavaScript using getURL
- FSCommand

FolderTree: Tree creation

- The purpose of FolderTree
- Creating folders and links
- Creating subfolders
- Add documents/links
- FolderTree: Tree display
- Tree display
- Drawing layers
- FolderTree: Finishing the tree
- Drawing the tree
- Open and close folders
- Scrolling news
- Layer slider

JQuery library

- Client-side development
- Modifying and managing the DOM
- How JQuery interacts with HTML
- Creating animations
- Event management
- Add/delete nodes

Elements and nodes

- Structure and syntax
- Special symbols and comments
- Code FolderTree
- ftexample.html
- folderTreeFrameGauche.html
- startPage.html
- defineMyTree.js

Introduction to Node.js

- The Node story
- How the framework works and why it's useful
- The different modules
- package.json
- Installation
- Creating an application with Nodejs

Debugging in JavaScript

- Server/client-side debugging

- Browse JavaScript code
- How do I start the debugger?

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.