

JAVASCRIPT

Course Duration: 26 training hours

Price: 99.00 €



COURSE OUTLINE

INTRODUCTION AND COURSE OVERVIEW

Part 1

Values, Types, and Operators

- Values and Numbers
- Arithmetic, Special number and Strings
- Boolean values and Logical operators

Program Structure

- Expressions and statements
- Bindings and Binding names
- Control flow

Functions

- Functions as values and Declaration notation
- Recursion and Growing functions

Data Structures: Objects and Arrays

- Data sets and Properties,
- Objects and Mutability
- Array loops
- Strings and their properties,
- Math objects and JSON

Higher-order Functions

- Script data set and Filtering arrays
- Transforming with map
- Strings and character codes
- Recognizing text

The Secret Life of Objects

- Encapsulation
- Methods and Prototypes
- Classes and Overriding derived properties
- Getters, setters, and statics
- Inheritance

Bugs and Errors

- Strict mode
- Types
- Testing and Debugging
- Error propagation
- Exceptions
- Selective catching

Regular Expressions

- Creating a regular expression
- Testing for matches
- Sets of characters
- Repeating parts of a pattern
- Grouping subexpressions
- The Date class
- The replace method
- Dynamically creating RegExp objects
- The search method

Modules

- Modules and Packages
- Evaluating data as code
- ECMAScript modules
- Building and bundling
- Module design

Asynchronous Programming

- Crow tech and Callbacks
- Promises and Failure
- Async functions and Generators

Part 2

JavaScript and the Browser

- Networks and the Internet
- The Web and HTML

The Document Object Model

- Document structure and Trees
- The standard
- Moving through the tree and Finding elements
- Changing the document
- Attributes
- Layout and Styling
- Query selectors

JQuery

- jQuery Methods
- jQuery Events
- jQuery Effects
- jQuery UI

Handling Events

- Events and DOM nodes
- Event objects and Propagation
- Mouse clicks and motion
- Touch events and other event

Drawing on Canvas

- SVG and canvas element
- Lines and surfaces
- Drawing a pie chart
- Transformation

HTTP and Forms

- The protocol, Browsers and HTTP
- Fetch and HTTP sandboxing
- Form fields and form as a whole
- Text fields, Checkboxes and radio buttons and other fields