

DES WEB

POO / JScript/ HTML / CSS3

40 horas

Development

Netec

INTRODUÇÃO

Al finalizar el curso el participante podrá hacer un recorrido por los temas fundamentales en el desarrollo de componentes WEB, desde conceptos de la programación orientada a objetos, el lenguaje de marcado HTML, CSS y JavaScript.

OBJETIVO DO CURSO

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PÚBLICO-ALVO

A cualquier persona con conocimientos básicos de programación que esté interesado en aprender desarrollo frontend.

PRÉ-REQUISITOS

Uso de editores de texto como Sublime Text, Atom, Visual Studio Code, Notepad++.

Uso de navegadores Web. Configuración de variables de ambiente e instalación de software.

Introduction to JavaScript

1. Overview of JavaScript Syntax using JavaScript ECMAScript6(ES6) specification

- Explain the purpose of JavaScript
- Describe the basic syntax of statements and comments in JavaScript
- Declare variables and write expressions by using JavaScript operators
- Arrays in JavaScript
- Create and call JavaScript functions
- Use conditional statements to control execution flow
- Use loop statements to implements to control execution flow
- Use JavaScript objects in your code
- Use JavaScript Object Notation (JSON) syntax to define an array of objects
- Programming the HTML DOM with JavaScript
- Displaying Data and Handling Events by Using JavaScript

2. Describe the purpose and basic structure of the DOM

- Select elements by using the DOM
- Add, remove, and modify elements by using the DOM
- Handle events form controls on a web page

3. Creating Objects and Methods Using JavaScript

4. Writing Well-Structure JavaScript

- Explain the scoping rules for local variables and describe how hoisting works
- Use immediately invoked functions, strict mode, and namespaces to minimize global name clashes
- Use common global objects and functions available in the standard JavaScript language

5. Creating Custom Objects (Review and additional examples)

- Create custom objects that contain properties and methods
- Use object literal notation to define the properties of objects
- Define constructor functions to assign a common set of properties to objects
- Use prototypes to implement object behavior
- Use the Object.create() function to create objects based on exiting prototype

6. Extending Objects (Review and additional examples)

- Implement encapsulation in JavaScript
- Implement inheritance in JavaScript
- Add functionality to existing native objects
- ECMAScript Collections
- Managing property access with proxies
- Regular Expressions
- JavaScript Modules

Programming in HTML5 with JavaScript and CSS3

7. Overview of HTML

- Describe the structure of an HTML page
- Explain basic HTML elements and attributes
- Create and correctly markup an HTML page containing text elements

- Display graphics in an HTML page by using image elements, and linkpage together by using anchor elements
- Create an HTML from page
- Integrate JavaScript code into HTML page
- Overview of CSS
- Explain basic CSS syntax
- Describe how CSS selector work
- Describe how CSS styles inherit and cascade
- Attach CSS to an HTML page

8. Creating and Styling HTML5 Pages

- Creating an HTML5 pages
- Describe the new features of HTML5
- Explain how to use the new HTML5 elements for describing areas of a document and marking up text
- Explain how to use the new HTML5 elements for adding hyperlinks and images to a page
- Styling an HTML5 Page
- Use CSS text styles to set the fonts used in a page and other text properties
- Explain how to use the CSS box model to position elements on a page
- Use CSS to set the background for the elements on a page

9. Creating Forms to Collect Data and Validate User Input

- Overview of Forms and Input Types
- Use the HTML5 <form> element and specify its common attributes
- Explain how to use the new HTML5 input types
- Describe the attributes available with the new HTML5 input types to improve the user's experience
- Validating User Input by Using HTML5 Attributes
- Explain the principles of client-side forms validation
- Add forms validation to ensure that mandatory fields are not left empty
- Validate numeric input
- Validate text input
- Style fields to highlight input requirements
- Validating User Input by Using JavaScript
- Describe how to use the onSubmit event of a form to perform validation and override the default validation messages implemented by the browser
- Perform complex data validation by using regular expressions
- Perform additional checks to verify that mandatory fields are not empty
- Provide dynamic feedback on validation errors

10. Communicating with a Remote Server

- Sending and Receiving Data by Using XMLHttpRequest
- Explain how to browser uses HTTP GET requests to retrieve remote data
- Explain how to use the XMLHttpRequest object to send a request to a remote server
- Describe how to handlereturned by a server in response to a request
- Handle the data returned by a server in response to a request
- Process the received data asynchronously
- Send messages that transmit data to aserver