JavaScript

1. Introduction to JavaScript

- Introduction to web development and JavaScript
- How to create a JavaScript application
- How to test and debug a JavaScript application
- XHTML
- CSS

2. JavaScript Essentials

- How to get input and displays output
- How to work with numbers, strings, dates
- How to code control statements
- How to create and use array
- How to create and use function
- How to create and use objects
- How to use regular expressions, handle exceptions, and validate data

3. DOM Scripting

- Basic DOM scripting
- event handling
- DOM manipulation
- How to script CSS
- How to script tables and forms
- Animation with DOM scripting

4. Advanced JavaScript: Objects and Functions
- Object: Inheritance and the Prototype Chain
- Creating Objects: Function Constructors
- The Prototype Chain in the Console
- Creating Objects: Object.create
- Primitives vs. Objects
- First Class Functions: Passing Functions as Arguments
- First Class Functions: Functions Returning Functions
- Immediately Invoked Function Expressions (IIFE)

5. Asynchronous JavaScript: Promises, Async/Await and AJAX

- An Example of Asynchronous JavaScript
- Asynchronous JavaScript: The Event Loop
- Asynchronous JavaScript with Callbacks
- From Callback Hell to Promises
- From Promises to Async/Await
- AJAX and APIs
- Making AJAX Calls with Fetch and Promises
- Making AJAX Calls with Fetch and Async/Await

6. JavaScript: Intro to ES6

- What's new in ES6
- Variable Declarations with LET and CONST
- Strings in ES6
- Arrow Functions: Basics
- Arrow Functions: Lexical 'this' Keyword
- DE structuring
- Arrays in ES6
- The Spread Operator
- Rest Parameters
- Default Parameters
- Classes