

## JavaScript: From Procedural to Object Oriented

Duration: 12 Hours

### 1. Introduction

1. Welcome
2. What you need to know?
3. Essential Tools to learn JavaScript
4. Creating first JavaScript Program

### 2. Data types and Type Casting

1. Number, String, Boolean
2. Object, Function, Array
3. Date, Regexp
4. NULL, Undefined
5. TypeCasting

### 3. Variables

1. Declaring Variable I
2. Declaring Variable II
3. Variables III
4. Concating Variable
5. Complex Variable
6. Length and Sum
7. String Concatenation

**Rynet Malaysia Sdn. Bhd. (899837-K)**

1005, Block B, Level 10, Phileo Damansara 1, 9 Jalan 16/11, Off Jalan Damansara, 46350 Petaling Jaya,  
Selangor, Malaysia.

**Phone: +603-7623-1088 | Fax: +603-7660-9393 | [www.rynet.com.my](http://www.rynet.com.my)**

#### 4. Script Tags and external files

1. The Script Tag
2. Reach a JavaScript Source File
3. Create Variables in Files
4. JS Console

#### 5. Loops and Conditionals

1. Basic While Loop
2. Loop Operations
3. For Loop
4. Basic Conditional
5. Conditionals & Using Boolean
6. Loop Problem
7. Conditionals and Loop Problem
8. Pop-Up Windows I
9. Pop-Up Windows II
10. An Entry Confirmation Loop
11. Comments Consoles and Alerts

#### 6. Functions

1. Introduction to Functions
2. Declaring Functions
3. Calling Functions
4. Function Refactoring
5. Solving Problems with Functions

## 7. Arrays

1. Composite Datatype Array
2. Building Arrays
3. Array Functions
4. Array Functions II
5. 2 Dimensional Arrays I
6. 2 Dimensional Arrays II
7. Searching Array Elements
8. Array Iteration

## 8. Working With the DOM

1. Select HTML Elements
2. Manipulate HTML Elements
3. Traversing DOM
4. Add and Removw Elements
5. Native DOM events

## 9. Anonymous Functions

1. Function Expressions
2. Change Declarations to Expressions
3. Function Expressions with Parameters
4. Show Function Contents
5. Functions as Parameters and Return Values
6. Send Function Expressions As Parameters
7. Function Expressions and Arrays
8. Function Invocation

## 10. Closures in JS

1. Introduction to Closure
2. Building Closure 1
3. Building Closure 2
4. Using Closure
5. Changing bound values in Closure
6. Hoisting
7. Analyzing Load Order I
8. Analyzing Load Order II

## 11. Object Oriented Programming

1. Introduction to OOP
2. Objects
3. Create Objects I
4. Create Objects II
5. Access Objects I
6. Access Objects II

## 12. Object Functionality

1. Object Functionality
2. Functions as Properties I
3. Accessing Function Properties I
4. Functions as Properties II
5. Calling Function Properties II
6. Objects & Enumeration

### 13. Inheritance and Prototypes

1. Object Functionality
2. Constructors and Inheritance
3. Introduction to Prototypes
4. Creation with Prototypes I
5. Creation with Prototypes II
6. Constructor I
7. Constructor II
8. Overriding Prototypal Methods

### 14. Conclusion

1. QA
2. Useful WordPress Resources
3. Feedback