

# Module 1: Introduction to JS basics

In this Module:

Basic concepts of Javascript language.

- Data structures
- Operations
- Conditional logic
- Loops
- Basic functions

A re-introduction to JavaScript:

[https://developer.mozilla.org/en-US/docs/Web/JavaScript/A\\_re-introduction\\_to\\_JavaScript](https://developer.mozilla.org/en-US/docs/Web/JavaScript/A_re-introduction_to_JavaScript)

Introduction to JavaScript (video):

- Data types
- Variables
- Strings
- Numbers
- Booleans
- Arrays
- Objects
- Arithmetic operations
- Relational operations
- Increment & decrement
- If, else if, else
- Switch statements
- For loops
- While & Do While
- Functions

<https://www.youtube.com/watch?v=y9oxzTGERs>

## Understanding Variable Scope & Closures Without Losing your Mind

*"In JavaScript there are two types of scope:*

- *Local scope*
- *Global scope*

*JavaScript has function scope: Each function creates a new scope.*

*Scope determines the accessibility (visibility) of these variables.*

*Variables defined inside a function are not accessible (visible) from outside the function.."*

<https://www.youtube.com/watch?v=iSlSxDNarDY>

## let vs var:

*"var and let are both used for function declaration in javascript but the difference between them is that var is function scoped and let is block scoped"*

<https://www.youtube.com/watch?v=q8SHaDQduI0>

## const:

*"Constants are block-scoped, much like variables defined using the let statement. The value of a constant cannot change through reassignment, and it can't be redeclared."*

<https://www.youtube.com/watch?v=2iLVFyYwyRA>

## var, let and const - What, why and how

*"In this video, we explore the what, why, and how of var, let and const, and I also do a little lecture on the value of minimising mutable state"*

<https://www.youtube.com/watch?v=sjyJBL5fkp8>

## Grammar and types documentation

[https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Grammar\\_and\\_types#Declarations](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Grammar_and_types#Declarations)

## Typing: Static vs Dynamic, Weak vs. Strong

*"Learn about types in JavaScript, and understand the difference between dynamic and static typing and weak and strong typing."*

<https://www.youtube.com/watch?v=C5fr0LZLMAs>

## JS Equality table:

*"Why you should never use == and always ==="*

<https://dorey.github.io/JavaScript-Equality-Table/>

## ES6 presentation (by Natalia Gruzdeva)

<https://slides.com/ginvaell/es6#/>