Indie's Clan

Full **JavaScript**

- **Introduction to JavaScript**
  - What is JavaScript
  - Versions of JavaScript
  - How to run JavaScript (Browser vs Node)
  - Variable Declarations and Definition
  - Hoisting
  - Variable Naming Rules
  - Variable Scopes (Block, Function, Global)

- **Expressions and Operators**
  - **Assignment** Operators
  - **Comparison** Operators
  - **Arithmetic** Operators
  - **Bitwise** Operators
  - **Logical** Operators
  - **BigInt** Operators
  - **String** Operators
  - **Conditional** Operators
  - **Comma** Operators
  - **Unary** Operators
  - **Relational** Operators

- **Data Types in JavaScript**
  - **Primitive Data Types**

- String

- Number

- BigInt

- Symbol

- Boolean

- undefined

- null

- **Reference Data Type**

  - Objects

  - Functions

  - Arrays

  - Dates

  - Collections

- **typeof** operator

- **Functions**

  - Function Definition and Function calling

  - Function Parameters

    - Default Parameters

    - Rest Parameters

    - Spread Parameters

  - Function Arguments

  - Arrow Functions

  - IIFE (Immediate Invoked Function Expression)

  - Argument Object

  - Function Scope and Function (Call)Stack

    - Recursion

    - Lexical Scoping

- Closures
- Built-in Functions
- **Objects in JavaScript**
  - Object Prototype
  - Object prototypal Inheritance
  - Built in Objects
- **Type Conversion**
  - Type Casting vs Type Coercion
  - Explicit Type casting vs Implicit Type casting
- **Data Structures**
  - Keyed Collections
    - Map vs Weak Map
    - Set vs Weak Set
  - Indexed Collections
    - Arrays vs Typed Arrays
  - Structured Data
    - JSON
- **Value Comparison Operators**
  - == vs === vs Object.is
- **Loops and Iterations**
  - **for** statement
    - **for..in** statement
    - **for..of** statement
- **while** statement
- **do..while** statement
- **Break** / **Continue**
  - **Labelled** Statement

- **Control Flow**
  - **Conditional** Statement
    - **if..else**
    - **switch** statement
  - **Exception Handling**
    - **throw** statement
    - **try/catch/finally** statement
    - **Utilizing Error Objects**
- **Strict Mode**
- **(this)** keyword
  - in a method
  - in a function
  - using it alone
  - in event handlers
  - in arrow functions
  - **Function Borrowing**
  - **Explicit Binding**
    - **call**
    - **apply**
    - **bind**
  - **Asynchronous JavaScript**
    - **Event Loop**
    - **Callbacks**
      - **Callback Hell**
    - **Promises**
    - **async/await**
    - **setTimeout**