

JavaScript Beginning to Mastery Syllabus

- JavaScript vs EcmaScript
- Install vscode and run first program

Basics of Programming in JavaScript

- Hello world program
- Declare variable using var
- More about variable
- Let
- Const
- String Indexing
- Useful string methods
- Template Strings
- Null, undefined, BigInt, typeof
- Booleans and Comparison Operator
- Truthy and Falsy Values
- If else statement
- Ternary Operator
- && || operator
- Nested if else
- If elseif else
- Switch statement
- While loop
- While loop examples
- For loop
- For loop examples
- Break and continue keyword
- Do while loop

Arrays in JavaScript

- Intro to arrays
- Push pop shift unshift
- Primitive vs reference data types
- Clone array & spread operator
- For loop
- use const for creating arrays

- While loop in array
- For of loop
- For in loop
- Array destructuring

Objects in JavaScript

- Intro to objects
- Dot vs Bracket Notation
- Iterate objects
- Computed properties
- Spread operator in objects
- Object Destructuring
- Objects inside Array
- Nested Destructuring

Functions in JavaScript

- Function declaration
- Function Expression
- Arrow Functions
- Function declarations are hoisted (covered in great detail , later in this course)
- Function inside function
- Lexical Scope
- Block Scope Vs Function Scope
- Default Parameters
- Rest Parameters
- Parameter Destructuring
- Very brief intro to callback functions(covered in great detail , later in the course)
- Functions returning Functions

Very Important Array Methods

- Foreach method
- Map method

- Filter
- Reduce
- Sort
- Find
- Every
- Some
- Fill method
- Splice method

More useful things

- Iterables
- Sets
- Maps
- Object.assign
- Optional chaining

Object Oriented JavaScript / Prototypal Inheritance

- Methods
- This keyword, Window object
- Call , apply and bind method
- Some warnings
- This inside arrow functions
- Short syntax for methods
- Factory functions & discuss some memory related problems
- First solution to that problem
- Why that solution isn't that great
- What is `__proto__` , `[[prototype]]`
- What is prototype
- Use prototype
- New keyword
- Constructor function with new keyword
- More discussion about proto and prototype
- Class keyword

- Example using class keyword
- Super keyword
- Method overriding
- Getters and setters
- Static methods and properties