# **JavaScript Roadmap 2022**

#### 1. BEGINNERS

- I. Running JavaScript
  - a. Script Tag
  - b. Link External File
  - c. Browser Console
  - d. With Node

#### II. Variables

- a. Declaration
  - ➤ Let
  - > Var
  - Const
- b. Scope
  - ➢ Global
  - > Function
  - **➢** Block
- c. Hoisting

# III. Data Types and Data Structure

- a. Primitive Types
  - Undefined
  - Boolean
  - Number
  - ➢ BigInt
  - String
  - > Symbol
- b. Null
- c. Object
- d. Function
- e. Data Structure
  - Array
  - Map / Weak Map
  - > Set / Weak Set
  - Date

# IV. Type Conversion

- a. Explicity Conversion
- b. Inplicit Conversion

# V. Equality

a. == vs ===

# VI. Loops

- b. While
- c. Do...While
- d. For
- e. Break / Continue
- f. For...in
- g. For...of

# VII. Control Flow / Conditional Statements

- a. If
- b. If...else
- c. Switch
- d. Try / Catch / Throw

# VIII. Expressions / Operators

- a. Assignments
- b. Arithmetic
- c. Logical
- d. Conditional
- e. Comparison
- f. Relational
- g. Bitwise
- h. String
- i. Comma
- j. Unary

#### IX. Functions

- a. Function Declaration
- b. Function Expressions
- c. Calling Functions
- d. Parameters / Arguments
- e. Scope
- f. Arrow Functions

# 2. ADVANCE

#### I. Advanced Scope

- a. Nested Function
- b. Lexical Scope
- c. IIFE
- d. Revealing Module Pattern

- II. Closure
- III. Currying
- IV. This
  - a. Implicit Binding
  - b. Explicit Binding
  - c. New Binding
  - d. Lexical Binding
  - e. Default Binding
- V. Prototype
- VI. Prototypical Inheritance
- VII. Class
- VIII. Iterators
  - IX. Generators
  - X. Event Loop
  - XI. Asynchronous JavaScript
    - a. setTimeOut
    - b. setInterval
    - c. callbacks
    - d. Promises
    - e. Async Await

# XII. Module System

- a. CJS
- b. ESM
- c. Import / Export
- d. Default and Name Exports

#### 3. WEB APIS

- I. DOM
- II. XHR / Fetch
- III. Storage
- IV. Video / Audio
- V. Drawing Graphics

# 4. TOOLING & MISC

- I. Linters
  - a. eslint
  - b. Rome

# **II.** Code Formatters

a. Prettier

# III. Bundlers

- **a.** Webpack / Rollup / Parcel
- **b.** Snowpack / esbuild / Vite
- IV. Typescript
- V. Next Steps