Javascript Roadmap

From Beginner to Advance







Basics of Javascript

- Variables (let, const, var)
- Data Types (String, Number, Boolean, Object, Array)
- Operators (Arithmetic, Comparison, Logical)

Control Structures

- Conditional Statements (if-else, switch)
- Loops (for, while, do-while)
- Break and Continue







Functions

- Function Declaration and Expression
- Arrow Function
- Callback Function
- Higher-Order Function

Objects and Arrays

- Object creation and Manipulation
- Array Methods (map, filter, reduce)







Asynchronous Javascript

- Promises
- Async/Await
- Callback Hell and How to Avoid It

DOM Manipulation

- Selecting Elements (getElementById, querySelector)
- Changing Content and Styles
- Event Listeners (click, input, submit)







ES₆

- Destructuring
- Spread and Rest Operators
- Template Literals
- Default Parameters
- Modules (import/export)

Data Structures

- Arrays and Objects
- Sets and Maps
- WeakSets and WeakMaps







Advanced Concepts

- Closures
- Hoisting
- Prototypes and Inheritance
- The 'this' keyword
- Scope (Global, Local, Block)

Javascript in the Browser

- Event Loop
- Browser APIs (LocalStorage, Fetch API)
- Web Components







Frameworks

- Overview of Popular Frameworks
- (React, Angular, Vue)

Tooling and Build Systems

- npm and Yarn
- Webpack and Babel
- ESLint and Prettier for Code Quality







Testing in Javascript

- Unit Testing with Jest
- Integration Testing
- End-to-End Testing with Cypress

Performance Optimization

- Understanding the Call Stack
- Debouncing and Throttling
- Memory Management and garbage Collection







Deployment

- CI/CD Basics
- Hosting Javascript Apps (Netlify, Vercel)
- Minification and Bundling for Production

Security in Javascript

- XSS and CSRF Prevention
- Content Security Policy (CSP)
- Sanitizing Inputs







Build and Deployment

- Using Parcel or Webpack for Bundling
- Continuous Integration/Continuous Deployment (CI/CD)
- Deploying on Platforms like Heroku, Netlify, Vercel

Libraries and Tools

- jQuery (for legacy projects)
- Lodash for Utility Functions
- Moment.js for Date Handling









Which Javascript Concept has been the most Challenging for You?

Drop it in Comments, and let's Discuss







For More Web Dev & Programming Contents



Sumit Jha
Front-End Developer



