Essential JavaScript Topics for Django Full Stack Developers

Optimized for Frontend (React) + Python Django Backend

1. Variables & Data Types

- Use let and const for variable declarations
- Understand primitive types: string, number, boolean, null, undefined
- Understand reference types: array, object

2. Functions & Scope

- Function declarations, expressions, and arrow functions
- Parameters and return values
- Scope: global vs local (basic closures only)

3. Arrays

- Create and manipulate arrays using map, filter, for Each, push, reduce
- Loop through and transform data lists (common in UI rendering)

4. Objects

- Define, access, and modify object properties
- Use destructuring and dynamic keys
- Apply in state management and API responses

5. DOM Manipulation (for Django Templates)

- Select elements with querySelector, getElementById
- Handle events with addEventListener
- Change content with innerHTML, value, classList

6. ES6+ Features

- Template literals (`Hello \${name}`)
- Destructuring arrays and objects
- Spread/rest syntax, optional chaining, nullish coalescing

7. Asynchronous JavaScript

- Use fetch() to call Django APIs
- Work with Promises and async/await syntax

- Handle API response with try/catch

8. JSON & API Integration

- Parse and stringify JSON
- Send and receive JSON to/from Django views or REST API endpoints
- Headers, POST/GET methods using fetch

9. Control Flow

- Conditional logic with if, else, switch
- Loops with for, while
- Ternary operator for concise conditionals

10. Modules & Imports

- Use import/export to organize code in modules
- Essential for React and large frontend projects