











ES6/ES5 Features in JavaScript



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Overview of ES6 Features

-  let & const
-  Template Literals
-  Destructuring
-  Default Parameters
-  Arrow Functions
-  Promises
-  Classes
-  for...of Loop
-  Spread & Rest Operators
-  Modules

let & const

- • Block scoped variables
- • const: cannot be reassigned
- • Avoids hoisting issues seen with var

Template Literals

- • Backticks ``` for defining strings
- • Supports multiline strings
- • Supports string interpolation: ``${value}``

Destructuring

- • Extract values from arrays or properties from objects
- • Array: `const [a, b] = [1, 2];`
- • Object: `const {x, y} = point;`
- • Can be nested and used in function params

Default Parameters

- • Set default value for function parameters
- • Avoids undefined values in function calls

Arrow Functions

- • Short syntax: `const add = (a, b) => a + b;`
- • No binding of its own ``this``
- • Good for callbacks and array functions
- • Cannot be used as constructors

Classes

- • Syntactic sugar over prototype-based OOP
- • Use ``constructor()`` method to initialize
- • ``extends`` for inheritance
- • ``super()`` to call parent class constructor

for...of Loop

- Iterates over iterable objects like arrays and strings
- Syntax: `for (let item of iterable) { ... }`
- Cleaner than traditional for loops for arrays

Spread & Rest Operators

- • Spread: expands arrays/objects — `[...arr]`
- • Rest: gathers parameters — `(...args)`
- • Used in array cloning, merging, function arguments

Modules

- • Split code into reusable files
- • Use ``export`` to expose variables/functions
- • Use ``import`` to bring them into another file
- • Supports named and default exports

Promises

- • For handling async operations
- • States: pending → fulfilled / rejected
- • Use ``.then()`` and ``.catch()`` for chaining
- • Replaces callback hell with cleaner syntax

ES5

- • callback function
- • map
- • filter
- • reduce

Thank you