| VAR | Let | Const |
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| var was traditionally used in JavaScript for variable declaration. Variables declared with var are function-scoped or globally scoped. They can be re-declared,re-assign and re-initialization can be done and updated within their scope. | Introduced in ES6 (ECMAScript 2015) to address some of the issues with var. Use let for variables that need to be reassigned. Block Scope: Variables declared with let are blockscoped, meaning they are limited to the block ({}) in which they are defined. | Also introduced in ES6, const is used to declare constants, which are read-only. const for variables that do not need reassignment. Constant Value: Variables declared with const must be initialized with a value, and that value cannot be changed through reassignment. |
| Hoisting: Variables declared with var are hoisted to the top of their scope. This means you can access the variable before it's declared, but it will have an initial value of undefined. Global Scope: If var is used | No Hoisting Issues: Unlike var, variables declared with let are not hoisted to the top of their block. They behave as you would expect them to. Can Be Updated: Variables declared with let can be reassigned a new value within | Block Scope: Like let, variables declared with const are block-scoped. Immutable Binding: Although the value assigned to a const variable is immutable, it does not mean the value itself is immutable if it's an object or array. You can change the properties or elements of the object or array. |
| outside of any function, it becomes a global variable, which can lead to unintended consequences and pollute the global namespace. • Function Scope: Variables declared with var are function-scoped, meaning they are | Cannot Be Redefined: You cannot declare another variable with the same name in the same scope using let. | • Must Be Initialized: You must assign a value when declaring a const variable. Unlike let, you cannot declare a const variable without initializing it. |
| visible throughout the function in which they are declared. • No Block Scope: Unlike let and const, variables declared with var are not block-scoped. They are function-scoped or globally scoped. | | |