

Difference between var, let and const keywords in JavaScript

JavaScript provides three ways to declare variables: var, let, and const, but they differ in scope, hoisting behavior, and re-assignment rules. Understanding these differences helps write more predictable and maintainable code.

- <u>var</u>: Declares variables with function or global scope and allows re-declaration and updates within the same scope.
- <u>let:</u> Declares variables with block scope, allowing updates but not re-declaration within the same block.
- <u>const:</u> Declares block-scoped variables that cannot be reassigned after their initial assignment.

Differences between var, let, and const

Here is the difference between var, let, const:

<u>var</u>	<u>let</u>	<u>const</u>
The scope of a Var variable is functional or global scope.	The scope of a let variable is blocking scope.	The scope of a const variable is block scope.
It can be updated and re-declared in the same scope.	It can be updated but cannot be re-declared in the same scope.	It can neither be updated or redeclared in any scope.

<u>var</u>	<u>let</u>	<u>const</u>
It can be declared without initialization.	It can be declared without initialization.	It cannot be declared without initialization.
It can be accessed without initialization as its default value is "undefined".	It cannot be accessed without initialization otherwise it will give 'referenceError'.	It cannot be accessed without initialization, as it cannot be declared without initialization.
These variables are hoisted.	These variables are hoisted but stay in the temporal dead zone until the initialization.	These variables are hoisted but stays in the temporal dead zone until the initialization.

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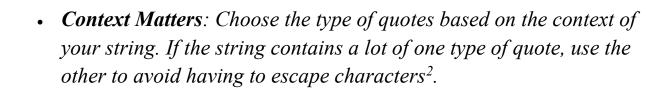
¹ https://www.geeksforgeeks.org/javascript/difference-between-var-let-and-const-keywords-in-javascript/

Difference between single-quoted and double-quoted

<u>Aspect</u>	Single-Quoted Strings(')	<u>Double-Quoted</u> <u>Strings(")</u>
<u>Enclosure</u>	Uses single quotes: 'text'	Uses double quotes: "text"
<u>Handling</u> <u>Ouotes</u> <u>Inside</u>	Double quotes don't need escaping: 'He said, "Hello!"'	Single quotes don't need escaping: "It's a great day!"
<u>Escaping</u>	Single quotes inside must be escaped: 'It\'s fine.	Double quotes inside must be escaped: "He said, \"Wow!\""
<u>Readability</u> <u>in HTML</u>	Single quotes are often used when embedding strings inside HTML attributes: <div class="example">.</div>	Double quotes may be more readable in HTML attributes: <div class="example">.</div>

Choosing Between Single-Quotes and Double-Quotes

• Consistency is Key: While there is no performance difference between the two, it's important to stick to a consistent style throughout your codebase. This improves readability and reduces errors.



 $^2\ https://www.geeksforgeeks.org/javascript/difference-between-single-quoted-and-double-quoted-strings-injavascript/$