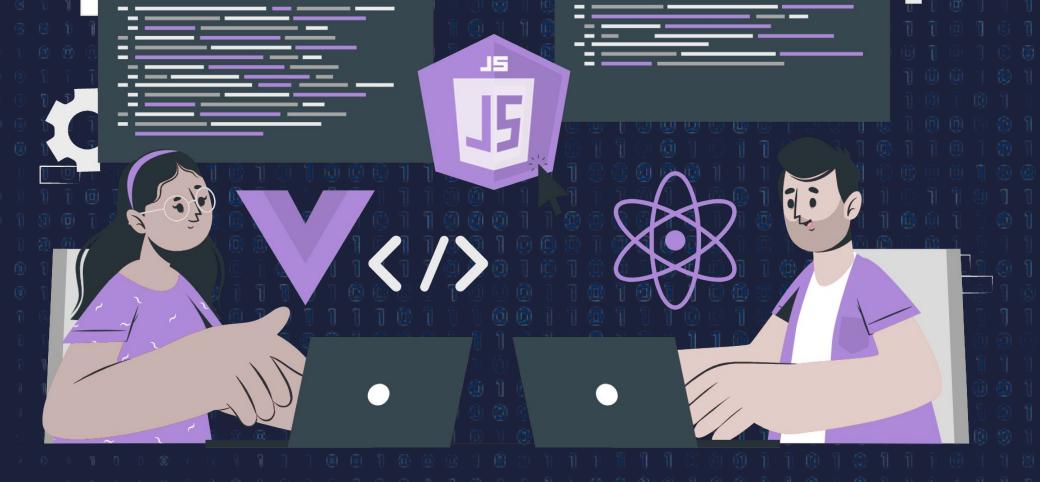


# Explaining what is closure?





## Topics

- 1. Lexical environment
- 2. Why lexical environment is important for closure
- 3. Closure
- 4. Summary



### Lexical environment

Every time the JavaScript engine creates an execution context to execute the function or global code, it also creates a new lexical environment to store the variable defined in that function during the execution of that function.



## Why lexical environment is important for clouser?

Lexical environment determines the scope in which a variable is defined and accessible. Closures allow a function to access and use variables from its parent function, and this is possible because the closure "closes over" the variables in the parent function's lexical environment, creating a snapshot of the relevant variables at the time the closure was created. Without lexical environment, closures would not be able to access variables from their parent functions, severely limiting their functionality.



#### Closure

a closure is created when a function is defined inside another function (the outer function). The inner function has access to the variables and parameters of the outer function, even after the outer function has returned.



## Summary

In summary, closures are intimately related to lexical scoping in JavaScript.

When a function is defined inside another function, it creates a closure over the variables and functions in the outer scope. This allows the inner function to maintain access to the outer variables and functions, even after the outer function has returned



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