

# Garbage Collection

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MD Docs [https://developer.mozilla.org/en-US/docs/Web/JavaScript/Memory\\_Management](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Memory_Management)

- JavaScript is a garbage-collected language, meaning that the JS runtime, rather than the developer, handles memory deallocation.
- In JS, values are allocated memory when it is created and is eventually automatically freed up when it is not in use
- This process of automatically freeing up memory is garbage collection
- When there are no variables, objects, or closures that maintain a reference to the object or value, JS marks the memory as eligible for GC

## How Closures Affect Garbage Collection

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SO Post <https://stackoverflow.com/questions/24468713/javascript-closures-concerning-unreferenced-variables>

- Since a closure stores a reference to all variables it can access, for as long as the closure exists, those variables must exist and JS can't GC any of these objects or values
- Global variables are eligible for GC after the program finishes running