

JS

Most Frequently Asked JavaScript Interview Questions

Are you new to JavaScript ? Wondering about its benefits and the frequently asked questions? This presentation will provide all the answers you need!



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What is JavaScript ?

JavaScript is a high-level, interpreted programming language primarily used for web development. It enables dynamic content on websites, interacts with users, and enhances the user experience.

What are the key differences between **let**, **const**, and **var** ?

let and **const** are block-scoped, while **var** is function-scoped. **let** allows reassignment, **const** is for constant values, and **var** is outdated.

Explain Hoisting in JavaScript.

Hoisting is a behavior where variable and function declarations are moved to the top of their scope during compilation, allowing you to use them before their actual declaration.

What is the Event Loop in JavaScript ?

The Event Loop is a mechanism that allows JavaScript to handle asynchronous operations by placing them in a queue and executing them in a loop when the call stack is empty.

Explain Closures in JavaScript.

Closures are functions that have access to variables from their outer (enclosing) scope, even after that scope has finished execution. They "close over" the variables.

What is the `this` keyword in JavaScript ?

`this` refers to the current execution context. Its value depends on how a function is called. In a method, it refers to the object the method was called on. In a regular function, it refers to the global object.

What is the difference between `==` and `===`?

`==` is the equality operator that performs type coercion, while `===` is the strict equality operator that checks both value and type without coercion.

Explain the concept of callbacks.

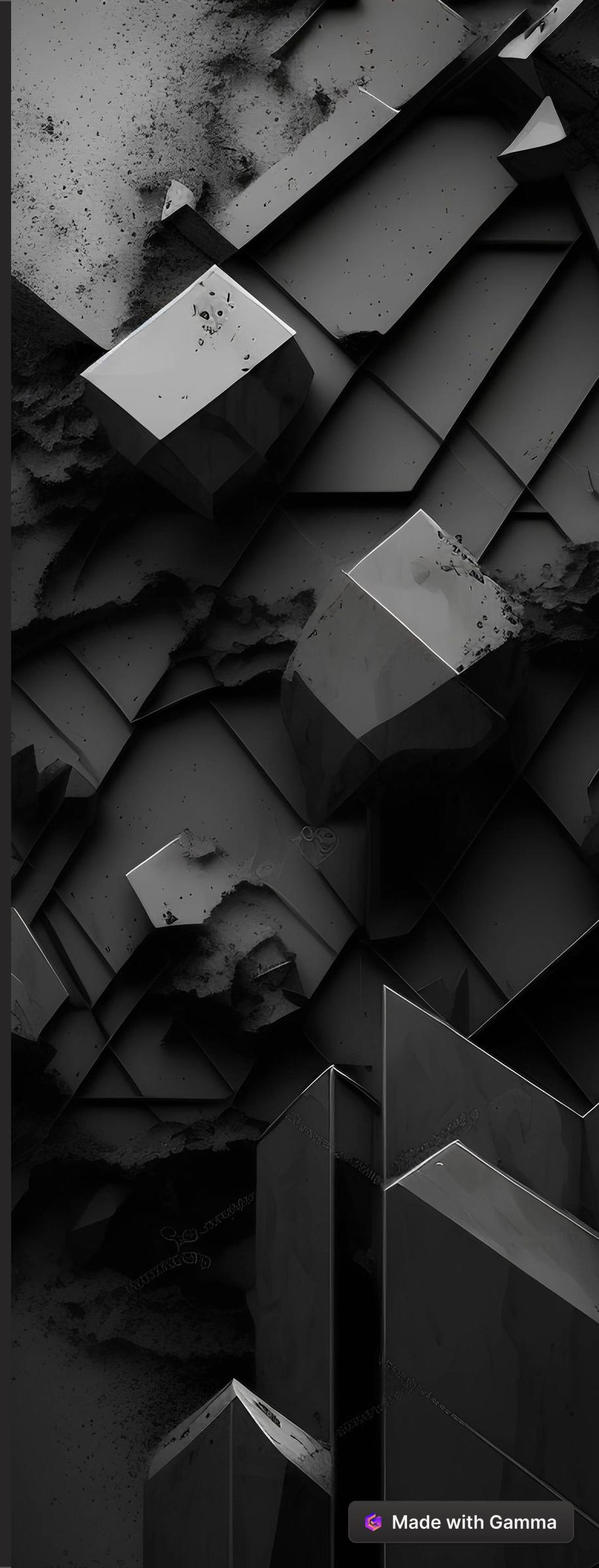
Callbacks are functions passed as arguments to another function, which will be invoked later after the completion of an asynchronous operation or a certain task.

What is the purpose of the `async` and `await` keywords ?

`async` is used to declare that a function returns a promise, and `await` is used to pause the execution of an `async` function until the promise is settled.

How does prototypal inheritance work in JavaScript ?

JavaScript uses prototypal inheritance, where objects can inherit properties and methods from other objects. Each object has a prototype object, and properties/methods not found in the object itself are looked up in its prototype chain.

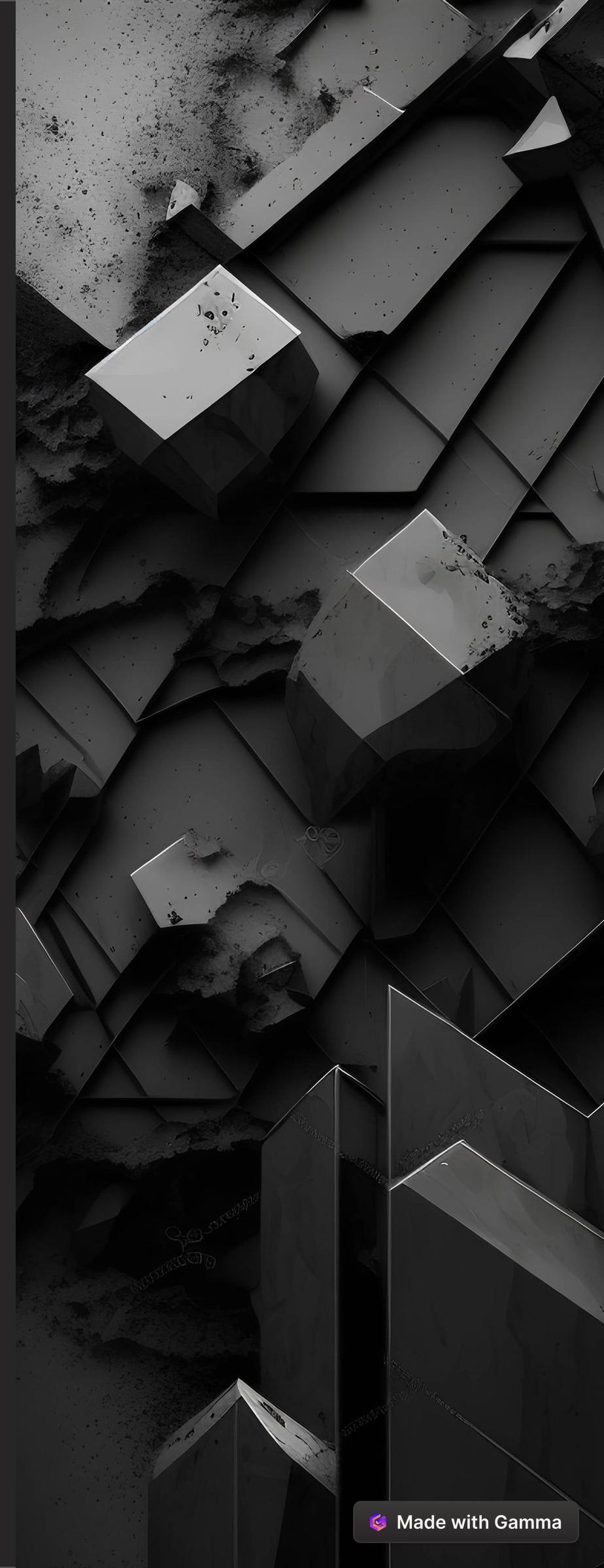


What is the difference between `null` and `undefined` ?

`null` represents the intentional absence of any object value, while `undefined` is the default value of variables that have not been assigned a value.

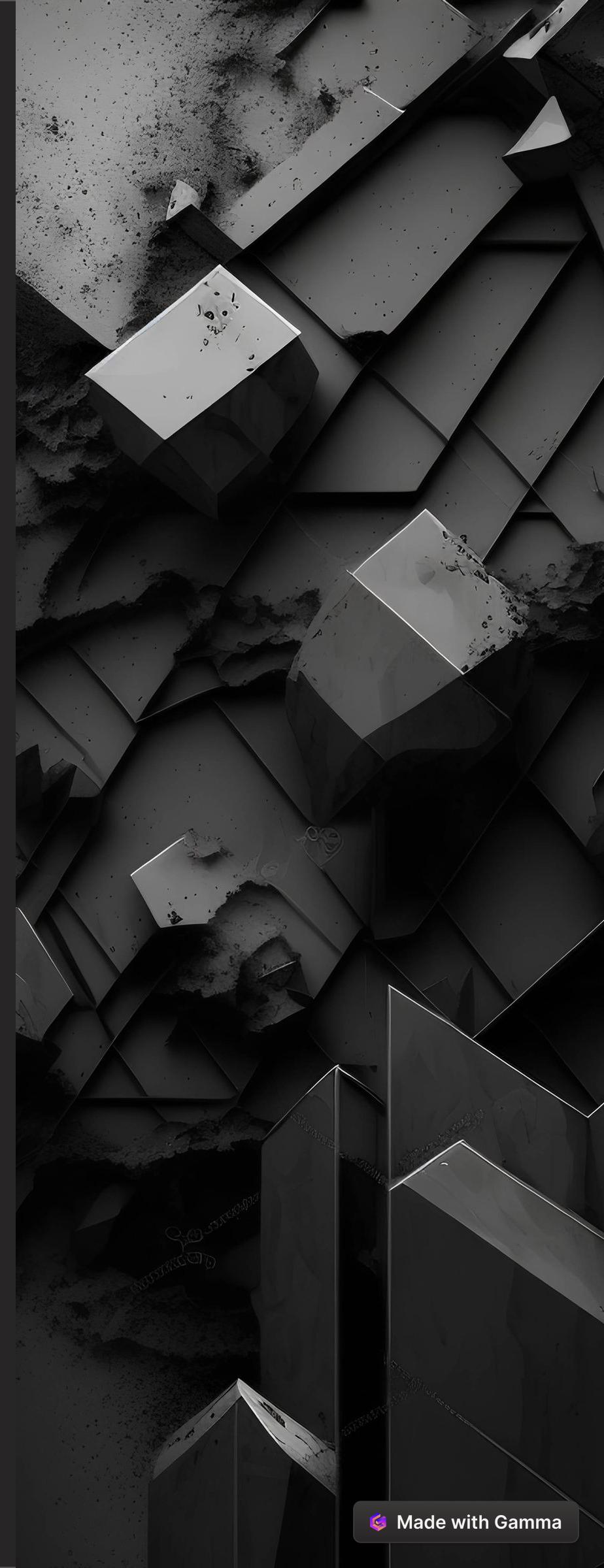
Explain the difference between arrow functions and regular functions.

Arrow functions do not have their own `this` and `arguments`, and they cannot be used as constructors. They have a shorter syntax and inherit `this` from the surrounding scope.



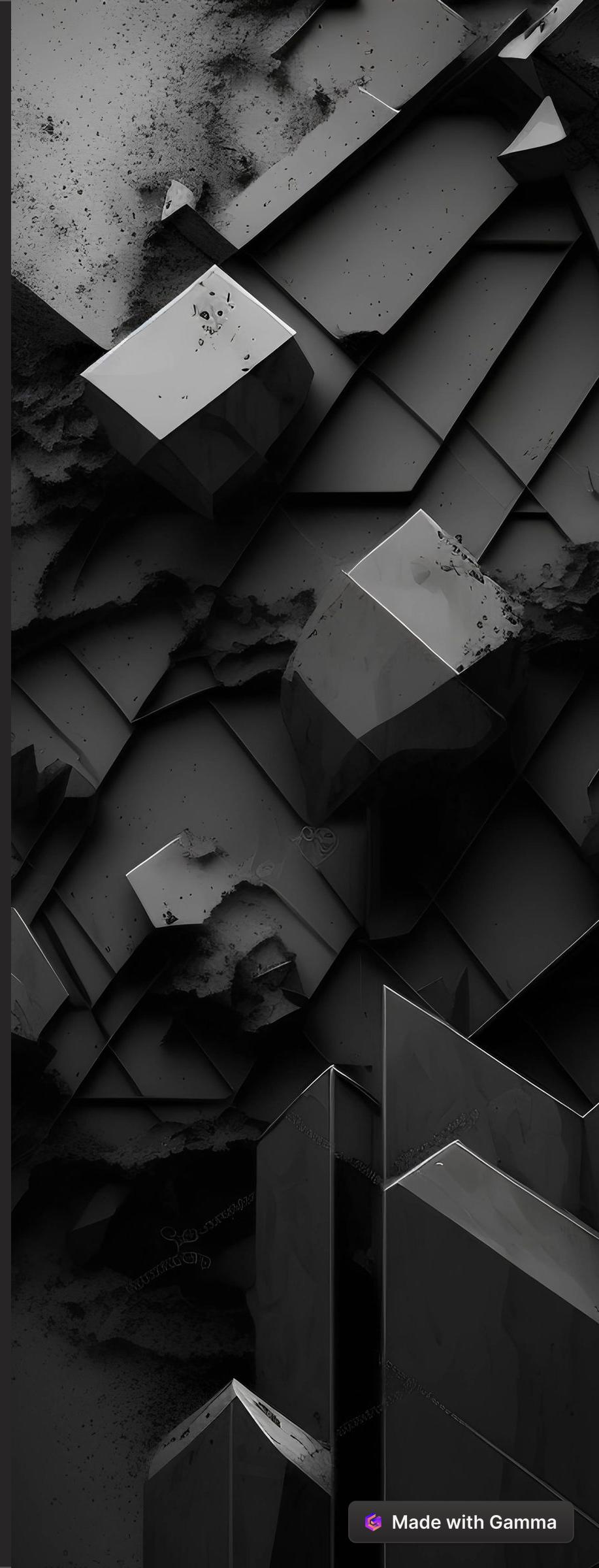
What is the purpose of the **map** and **filter** functions in JavaScript?

The **map** function is used to transform each element of an array, while the **filter** function is used to create a new array with elements that pass a certain condition.



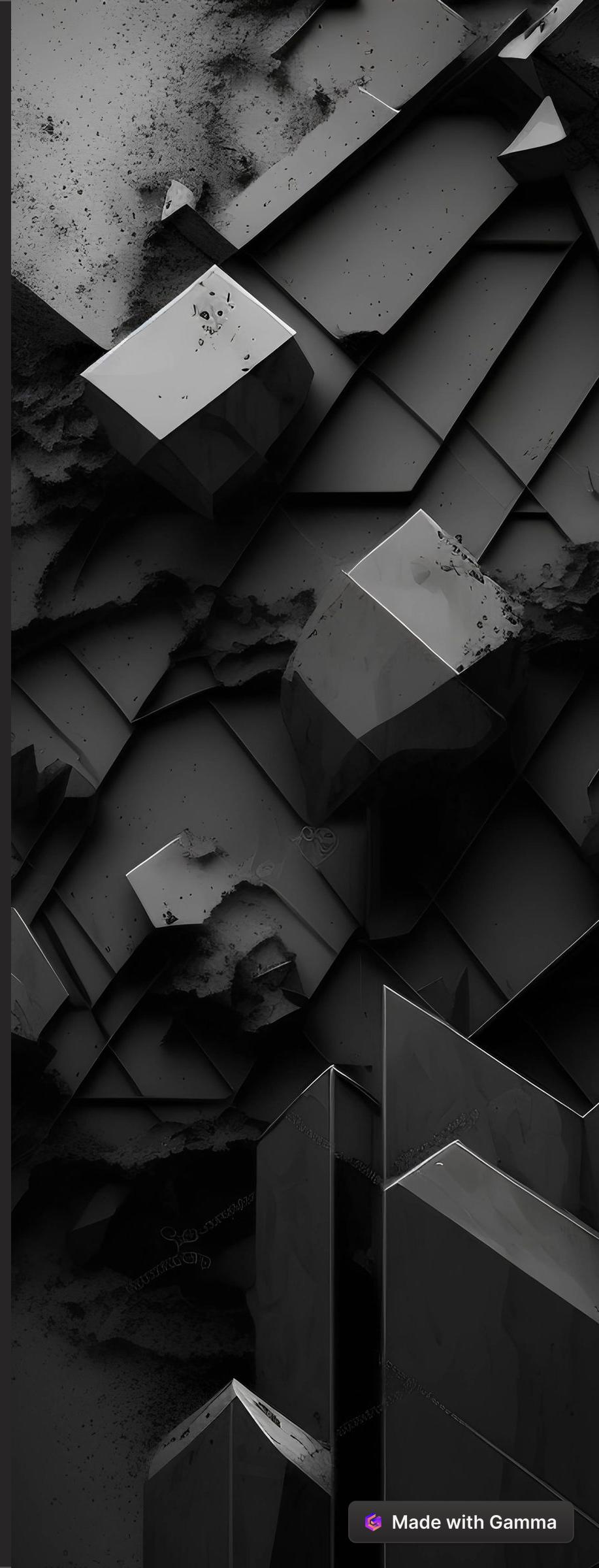
How does the localStorage differ from sessionStorage ?

Both `localStorage` and `sessionStorage` are web storage objects with the same API, but `localStorage` persists even when the browser is closed, while `sessionStorage` is limited to the duration of the page session.



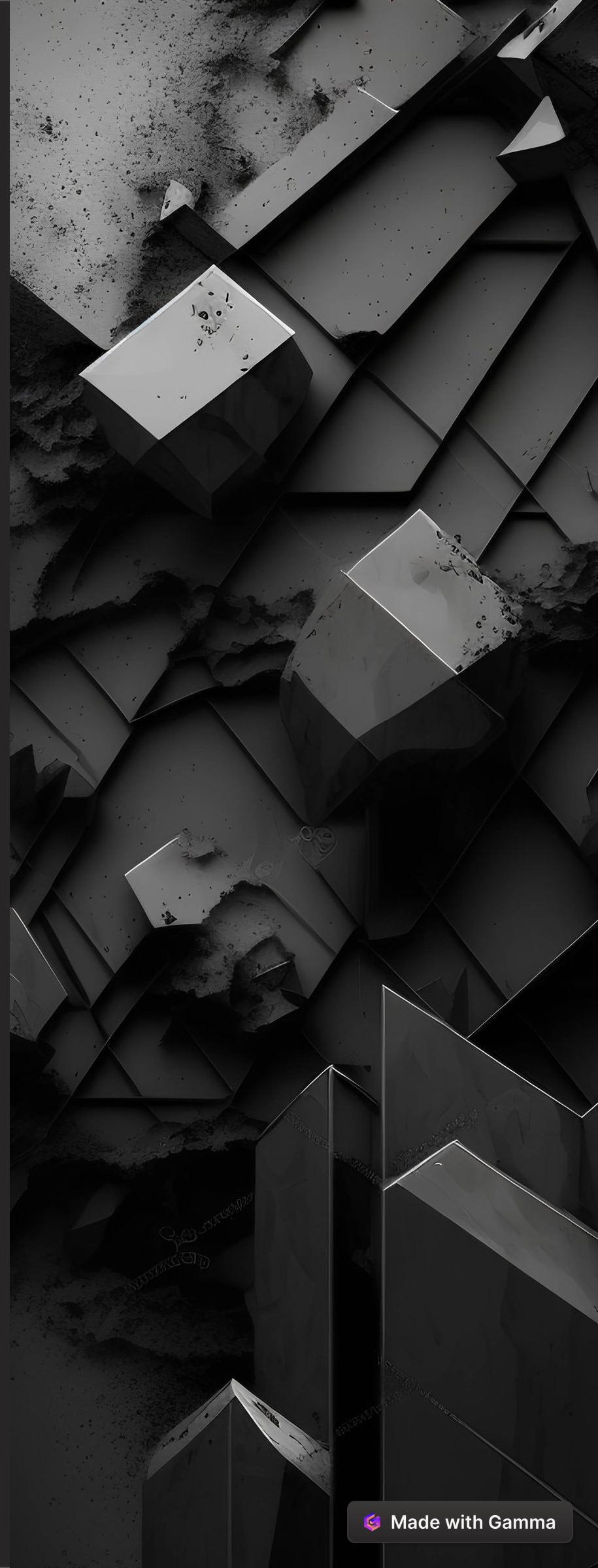
What is the purpose of the JavaScript Promise object ?

Promises are objects representing the eventual completion or failure of an asynchronous operation. They help in handling asynchronous code in a more readable and manageable way.



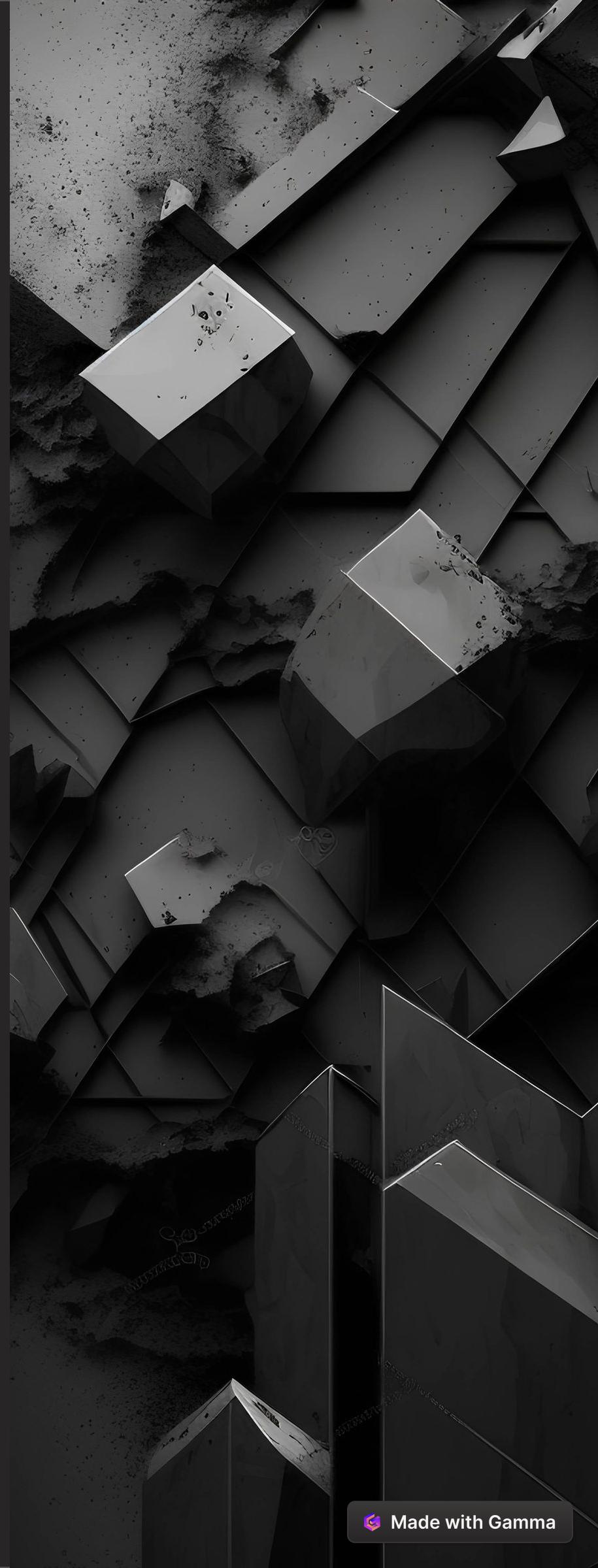
Explain the Same-Origin Policy .

The Same-Origin Policy is a security measure in browsers that restricts web pages from making requests to a different domain than the one that served the web page.



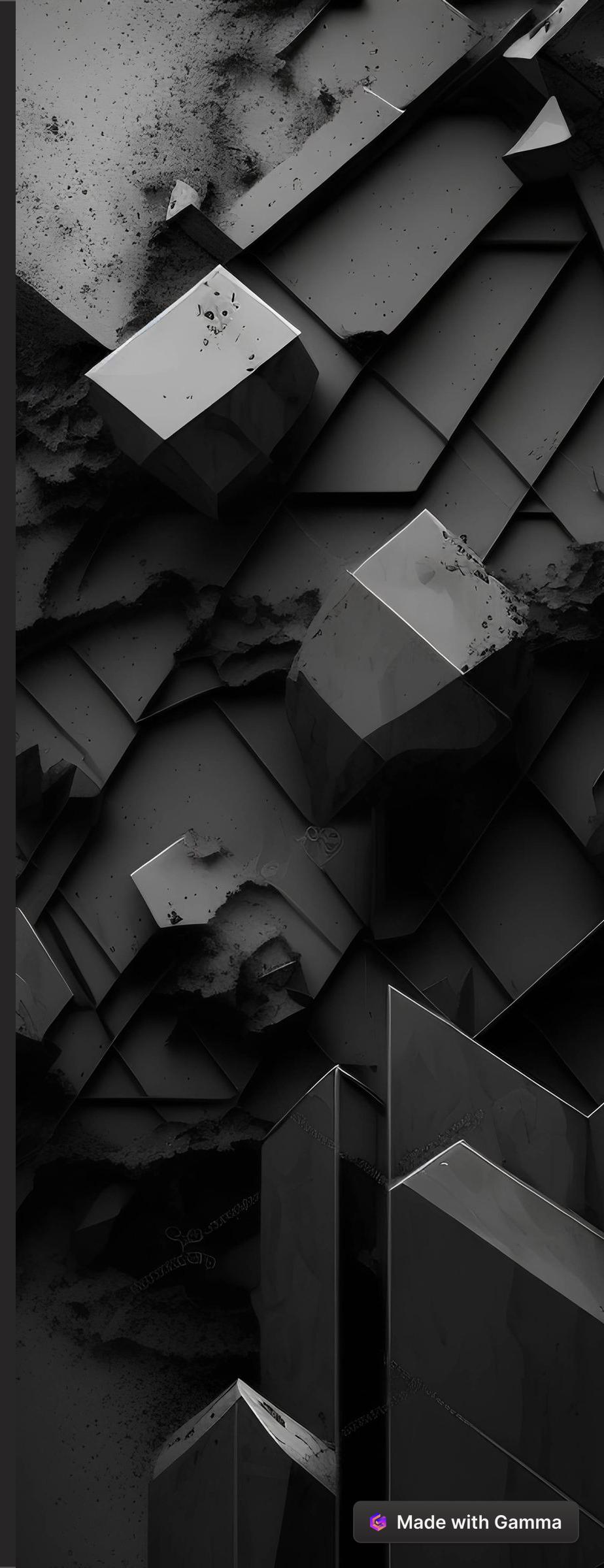
What is the purpose of the `fetch` API in JavaScript ?

The `fetch` API is used to make network requests. It returns a Promise that resolves to the `Response` to that request, allowing for more flexible and powerful HTTP requests compared to the older `XMLHttpRequest`.



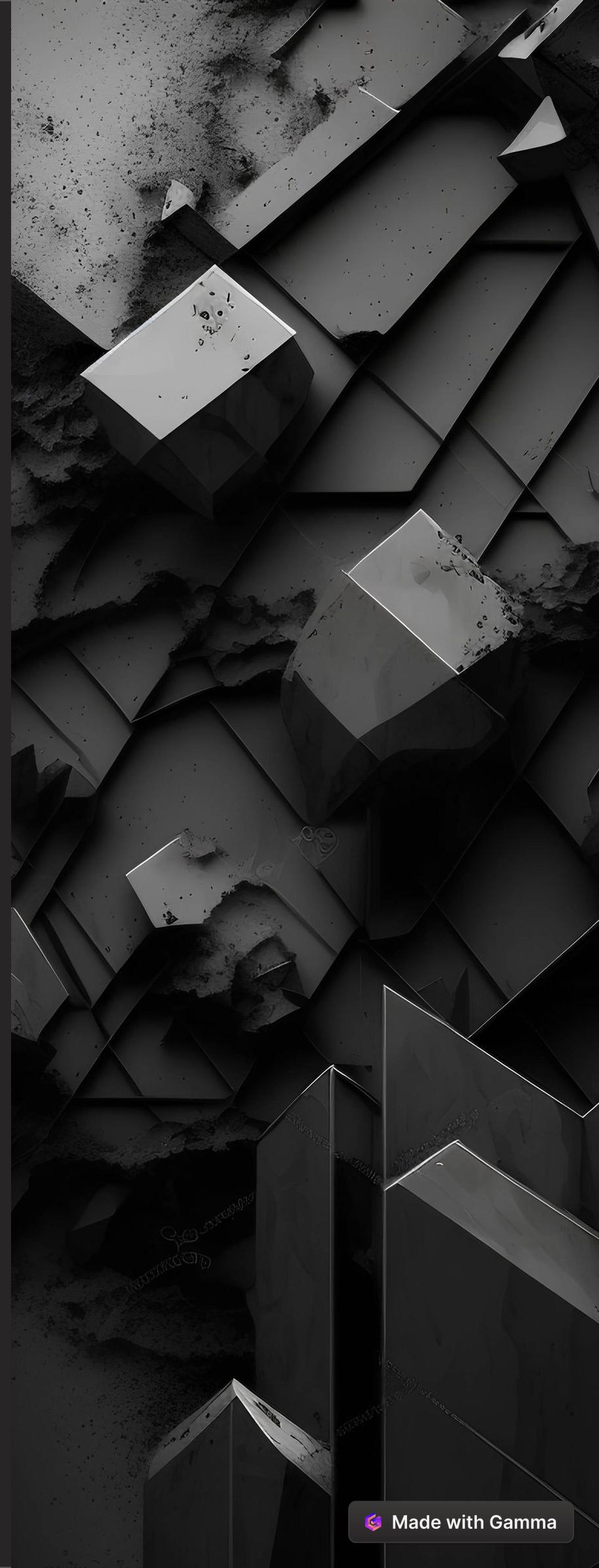
What is the JavaScript spread syntax ?

The spread syntax (...) allows an iterable, like an array or string, to be expanded in places where zero or more arguments or elements are expected.



Explain the concept of Debouncing in JavaScript .

Debouncing is a programming practice used to ensure that time-consuming tasks do not fire so often, making them more efficient by delaying the execution until after a specified time period has elapsed without further input.



How does the localStorage differ from cookies ?

localStorage is a form of web storage that persists even when the browser is closed, while cookies are small pieces of data sent from a website and stored on the user's computer by the browser, typically for session management.

Conclusion

JavaScript, with its ever-evolving ecosystem and vibrant community, continues to shape the digital landscape. As we navigate through its intricacies, let's embrace the dynamic nature of JavaScript and its role in building the future of the web.