

JS PERFORMANCE COURSE

APRIL 2022

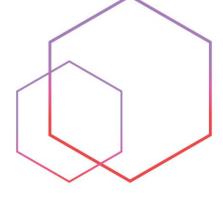
YONATAN BENEZRA

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performance.now()

The performance.now() method:



Syntax:

now()

Examples:

```
const t0 = performance.now();
doSomething();
const t1 = performance.now();
console.log(`Call to doSomething took ${t1 - t0}
milliseconds.`);
```

The timestamps returned by performance.now() represent times as floating-point numbers with up to microsecond precision.

The values returned by performance.now() always increase at a constant rate, independent of the system clock.

How can you speed up your JavaScript code?

Reduce Activity in Loops

Loops are often used in programming.

Each statement in a loop, including the for statement, is executed for each iteration of the loop. Statements or assignments that can be placed outside the loop will make the loop run faster.

Bad code:

```
for (let i = 0; i < arr.length; i++) {</pre>
```

Better Code:

```
let 1 = arr.length;
for (let i = 0; i < 1; i++) {</pre>
```

The bad code accesses the length property of an array each time the loop is iterated.

The better code accesses the length property outside the loop which will make the loop run faster.

Reduce DOM Access

Accessing the HTML DOM is a very slow process, compared to other JavaScript statements. If you expect to access a DOM element several times, access it once, and use it as a local variable.

Keep this last tip in mind.

We will learn how to do this in the React module.

Reduce DOM Size

Keep the number of elements in the HTML DOM small.

This will always improve page loading and speed up rendering (page display), especially on smaller devices.

Avoid Unnecessary Variables

Don't create new variables if you don't plan to save values.

You will often be able to replace the following code:

let fullName = firstName + " " + lastName;

by simply using the two variables Firstname and Lastname.

Avoid Using 'with'

Avoid using the "with" keyword. It has a negative effect on speed. It also clutters up JavaScript scopes.

The with keyword is not allowed in strict mode.