# Throttle technique



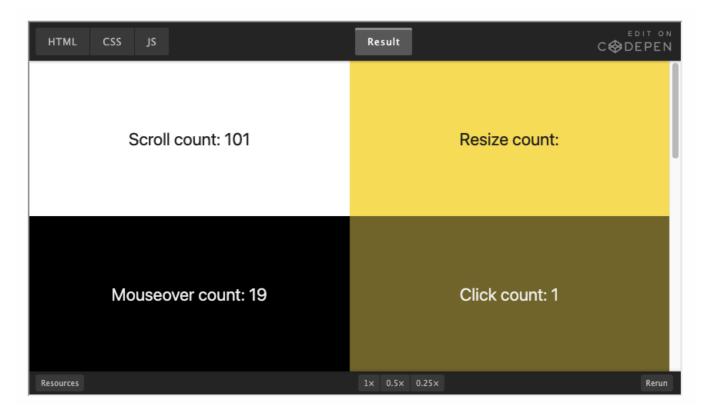
Source: https://blog.knoldus.com/how-to-optimize-web-app-with-debounce-and-throttle/

#### **AGENDA**

- 1. Throttle usages
- 2. How it works
- 3. Simple implementation

### 1. Throttle usages

• Usually throttle is applied to scroll to prevent calling function too many times.



Source: https://webdesign.tutsplus.com/tutorials/javascript-debounce-and-throttle--cms-36783

### 2. How it works

• throttle = trigger max 1 call every period of time

```
function throttle(callback, wait) {}

function log() {}

const throttleLog = throttle(log, 500);
 throttleLog();
 throttleLog();
 throttleLog();
```

## 3. Simple implementation

```
function throttle(callback, wait) {
  let isThrottling = false;
  return function () {
    if (isThrottling) return; // 2, 3, 4 come here
    isThrottling = true; // 1 come here
    setTimeout(() => {
      callback();
      isThrottling = false;
    }, wait);
  };
const throttledLog = throttle(log, 500);
// 0 -> 500
throttledLog(); // set timeout 500 --> call --> turn of flag throttle
throttledLog(); // check throttling --> ignore
throttledLog(); // check throttling --> ignore
throttledLog(); // check throttling --> ignore
// 600 --> 1100
setTimeout(throttledLog, 600); // start throttling
setTimeout(throttledLog, 600);
setTimeout(throttledLog, 600);
setTimeout(throttledLog, 600);
setTimeout(throttledLog, 700);
setTimeout(throttledLog, 700);
```

### debounce and throttle

	debounce	throttle
concept	call after a period of time receving no trigger	trigger max 1 call every period of time
reduce number of calls	YES	YES
common case	search when stop typing	do something on scroll

### Tham khảo

- https://css-tricks.com/debouncing-throttling-explained-examples/#debounce
- https://webdesign.tutsplus.com/tutorials/javascript-debounce-and-throttle--cms-36783

### Khoá học Javascript cho người mới bắt đầu 2021 🎉

- Tác giả: **Hậu Nguyễn** Founder Easy Frontend
- Khoá học chỉ được published trên Udemy, không thông qua trung gian.
- Khoá học không bán dạng videos upload trên Google Drive hay bất cứ hình thức nào tương tự.
- Khoá học có nhóm discord để hỗ trợ trong quá trình học tập.

#### Liên hệ tác giả để được hỗ trợ:

- Facebook: https://www.facebook.com/nvhauesmn/
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