Console API



Source: https://www.freecodecamp.org/news/javascript-console-log-example-how-to-print-to-the-console-in-js/

AGENDA

- 1. Log variations
- 2. Multiple values
- 3. Assert
- 4. Counting
- 5. Track time
- 6. Groups
- 7. Stack trace
- 8. Tables
- 9. Styles
- 10. Clear

1. Log variations

```
console.log('LOG: You properly just need to use me and no need to care
others >.<');
console.info('INFO: Javascript is easy');
console.debug('DEBUG: Nice');
console.warn('WARN: Beautiful');
console.error('ERROR: Lovely');</pre>
```

```
> console.log('LOG: You properly just need to use me and no need to care others >.<');
console.info('INFO: Javascript is easy');
console.debug('DEBUG: Nice');
console.warn('WARN: Beautiful');
console.error('ERROR: Lovely');

LOG: You properly just need to use me and no need to care others >.< react devtools backend.js:4049

INFO: Javascript is easy

DEBUG: Nice

VM542:2

DEBUG: Nice

WARN: Beautiful

Peact devtools backend.js:4049

►ERROR: Lovely
```

2. Multiple values

Group multiple values into object for better readable

```
const student = {
   id: 1,
   name: 'Alice',
   age: 18,
};

const city = {
   id: 1,
   name: 'HCMC'
};

// NOT GOOD

console.log(student);
console.log(city);

// BETTER

console.log({ student, city });
```

```
▶ {id: 1, name: 'Alice', age: 18}

▶ {id: 1, name: 'HCMC'}
```

```
▼{student: {...}, city: {...}} 1
▼ city:
    id: 1
    name: "HCMC"
    ▶ [[Prototype]]: Object

▼ student:
    age: 18
    id: 1
    name: "Alice"
    ▶ [[Prototype]]: Object

▶ [[Prototype]]: Object
▶ [[Prototype]]: Object
```

Log with variables

```
const student = {
  id: 1,
  name: 'Alice',
  age: 18,
};

console.log(`My student: ${student} is lazy`);
// My student: [object Object] is lazy
```

```
const student = {
  id: 1,
  name: 'Alice',
  age: 18,
};
console.log('My student: %o is lazy', student);
```

```
My student: ▶{id: 1, name: 'Alice', age: 18} is lazy
```

```
// OK
console.log('Name: %s and Age: %i', student.name, student.age);
// Name: Alice and Age: 18

// GOOD
console.log(`Name: ${student.name} and Age: ${student.age}`);
// Name: Alice and Age: 18
```

3. Assert

```
console.assert(condition, message);
```

Only show message if condition is false.

```
console.assert(1 === 1, 'equal but not show in console');
console.assert(1 === 2, 'not equal and show in console');
```

```
> console.assert(1 === 1, 'equal but not show in console');
console.assert(1 === 2, 'not equal and show in console');
S > Assertion failed: not equal and show in console
```

4. Counting

# Name		Desc	
1 console.count(label = 'default')		count how many times that have been called	
2	console.countReset(label = 'default')	reset the counter	

```
console.count('easy'); // easy: 1
console.count('easy'); // easy: 2

console.count('intermediate'); // intermediate: 1
console.count('intermediate'); // intermediate: 2
console.countReset('intermediate');
console.count('intermediate'); // intermediate: 1

console.count('hard'); // hard: 1
console.count('hard'); // hard: 2
console.count('hard'); // hard: 3
```

5. Track time

	#	Name	Desc	
	1 console.time(name = 'default')		start timer	
	2	console.timeLog(name = 'default')	log time ellapsed from start	
3		console.timeEnd(name = 'default')	end timer	

```
console.time('loop'); // start timer

let count = 0;
for (let i = 0; i < 10000; i++) {
   count++;

   if (i % 1000 === 0) console.timeLog('loop')
}

console.timeEnd('loop'); // end timer</pre>
```

6. Groups

#	Name	Desc
1	console.group(name)	start a group with status = expanded
2	console.groupCollapsed(name)	start a group with status = collapsed
3	console.groupEnd()	end a group

```
console.group('TODO ADD');
console.log('Before', { title: 'easy'});
console.log('After', { id: 1, title: 'easy' });
console.groupEnd();
```

```
▼ TODO ADD

Before ▶ {title: 'easy'}

After ▶ {id: 1, title: 'easy'}
```

```
console.groupCollapsed('TODO ADD');
console.log('Before', { title: 'easy'});
console.log('After', { id: 1, title: 'easy' });
console.groupEnd();
```

▶ TODO ADD

7. Stack trace

```
function foo() {
  function bar() {
    console.trace();
  }
  bar();
}
```

```
▼console.trace
bar @ <u>VM734:3</u>
foo @ <u>VM734:5</u>
(anonymous) @ <u>VM734:8</u>
```

8. Tables

```
console.table({
  id: 1,
  name: 'Alice',
  age: 18,
  isHero: true,
});
```

	<u>VM1876:1</u>
(index)	Value
id	1
name	'Alice'
age	18
isHero	true

▶ Object

(index)	id	name	age		
0	1	'Alice'	18		
1	2	'Bob'	20		
► Array(2)					

9. Styles

• use %c to start a styled text.



10. Clear

- console.clear() to clear current console.
- or using Ctrl + L to quickly clear the console

Tham khảo

- https://developer.mozilla.org/en-US/docs/Web/API/console
- https://www.freecodecamp.org/news/javascript-console-log-example-how-to-print-to-the-console-in-js/

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.

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