

Node ES6 Review

JS OOP

Why 'let' instead of 'var' ?

```
var word = 'I am global';
```

```
if(true) {
```

```
    var word = 'I am local';
```

```
}
```

```
console.log(word); // What do you expect here as result?
```

I am local will be printed

Why 'let' instead of 'var' ?

```
Let word = 'I am global';
```

```
if(true) {
```

```
    var word = 'I am local';
```

```
}
```

```
console.log(word); // What do you expect here as result?
```

I am global will be printed

Double Declaration

```
var number = 1;
```

```
var number = 2;
```

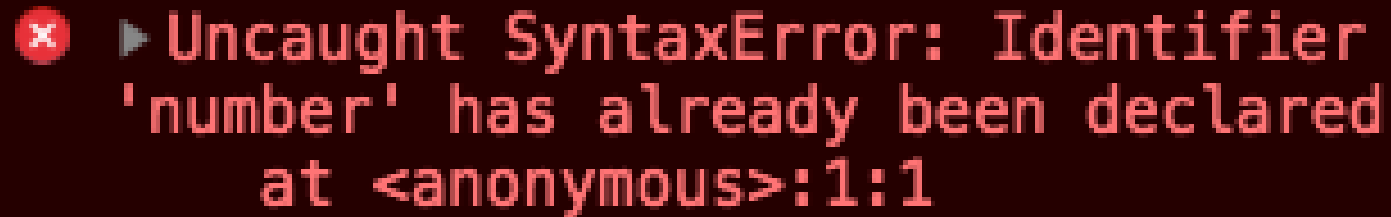
```
console.log(number); // No errors here, 2 gets printed
```

Double Declaration

```
let number = 1;
```

```
let number = 2;
```

```
console.log(number); // let doesn't allow redeclaration
```

A screenshot of a JavaScript error message in a dark-themed console. The message is displayed in red text and indicates a syntax error due to a duplicate variable declaration.

✖ ▶ Uncaught SyntaxError: Identifier 'number' has already been declared
at <anonymous>:1:1

Const keyword

```
const birthYear = 1990;
```

```
birthYear = 2000; // You cannot re-assign a constant variable
```

Template Literals

`let oldWay = 'A word'; // JS Way`

`let newWay = `A word`; // ES6 Way`

Old Way

```
let name = 'Cem';
```

```
let age = 28;
```

```
let profession = 'Software Developer';
```

```
console.log("Hello, my name is " + name + ", I'm " + age + "  
years old and I'm a " + profession);
```


The ES6 way

```
console.log(`Hello, my name is ${name}, I'm ${age} years old  
and I'm a ${profession}.`);
```

Arrow Functions

```
var sum = function addition (firstNum, secondNum) {  
    return firstNum + secondNum;  
}
```

```
let sum = (firstNum, secondNum) => { return firstNum +  
secondNum };
```

Spread Operator — Usage for Arrays

```
let numberArray = [1, 19, 21, 85, 42]
```

```
console.log(...numberArray);
```

```
let charArray = ['a','b','c'];
```

```
charArray.push(...numberArray);
```

```
console.log(charArray);
```

Import & Export

```
export let myFunction = () => { console.log('I am exported!');  
}
```

Then

```
import { myFunction } from './yourFolderPath/fileName';
```

$x \Rightarrow x * 2$

```
function(x){  
  Return x*2;  
}
```

Array.prototype.map()

```
const array1 = [1, 4, 9, 16]; // pass a function to map
const map1 = array1.map(x => x * 2);
console.log(map1);
// expected output: Array [2, 8, 18, 32]
```

concat

```
var hege = ["Cecilie", "Lone"];  
var stale = ["Emil", "Tobias", "Linus"];  
var children = hege.concat(stale);
```

filter

```
var ages = [32, 33, 16, 40];
```

```
function checkAdult(age) {  
    return age >= 18;  
}
```

```
ages.filter(checkAdult)
```

```
//Return an array of all the values in the ages array that are 18  
or over:
```


find

```
var ages = [32, 33, 16, 40];
```

```
function checkAdult(age) {  
    return age >= 18;  
}
```

```
ages.find(checkAdult)
```

```
//Get the value of the first element in the array that has a value  
of 18 or more:
```

findIndex

```
var ages = [32, 33, 16, 40];
```

```
function checkAdult(age) {  
    return age >= 18;  
}
```

```
ages.findIndex(checkAdult)
```

```
//Get the index of the first element in the array that has a value  
of 18 or more:
```

forEach

```
var fruits = ["apple", "orange", "cherry"];  
fruits.forEach(myFunction);
```

```
function myFunction(item, index) {  
    console.log(item);  
    console.log(index);  
}
```

includes

```
var fruits = ["Banana", "Orange", "Apple", "Mango"];  
var n = fruits.includes("Mango");
```

splice() // very important

```
var fruits = ["Banana", "Orange", "Apple", "Mango"];  
fruits.splice(2, 0, "Lemon", "Kiwi");
```

Inputs

- Index: // from which index to operate
- Howmany: items to remove
- New items // new items to add. this is optional