

HOW JAVASCRIPT HAS EVOLVED SINCE 1995?

9 VERSIONS OF
JAVASCRIPT HAVE BEEN
PUBLISHED



LET'S TALK ABOUT SOME OF THE NEW ADDITIONS IN

ES6

CONST & LET

WHAT?

NEW KEYWORDS FOR DECLARING VARIABLE

WHY?

PROVIDE A SAFER ALTERNATIVE TO USING VAR

WHEN?

USE **CONST** TO DECLARE A CONSTANT VARIABLES AND
USE **LET** FOR OTHER VARIABLES

VAR

```
1 var fname = "bob";
2 var lname = "smith";
3 fname = "rob";
4
5 // prints rob
6 console.log(fname);
7
```

CONST

VS

```
1 const fname = "bob";
2 const lname = "smith";
3
4 // below will error
5 fname = "rob";
6 console.log(fname);
7
8
```

VAR

```
1 {
2   var fname = "bob";
3   var lname = "smith";
4 }
5 console.log(fname);
```

LET

VS

```
1 {
2   let fname = "bob";
3   let lname = "smith";
4 }
5
6 //prints Reference error - fname is not defined
7 console.log(fname)
8
```

TEMPLATE LITERAL

WHAT?

NEW SYNTAX FOR CREATING STRING

WHY?

REDUCE COMPLEXITY AROUND BUILDING
STRINGS (ESPECIALLY WITH MULTILINE STRINGS)

BEFORE ES6

```
1 var message =  
2   "Hi " +  
3   user.name +  
4   "\n" +  
5   "This is a reminder that your parcel will  
6   arrive between \n" +  
7   delivery.startTime +  
8   " - " +  
9   delivery.endTime +  
10  "\n To move please login to the app\n" +  
   "Thank you\n";
```

VS

```
1 let message = `Hi ${user.name}  
2 This is a reminder that your parcel will  
3 arrive between:  
4 ${delivery.startTime} - ${delivery.endTime}  
5 To move please login to the app  
6 Thank you `;  
7  
8  
9
```

```
"Hi bob  
This is a reminder that your parcel will arrive between:  
12:00 - 13:00  
To move please login to the app  
Thank you "
```

DESTRUCTURING

WHAT?

NEW SYNTAX FOR EXTRACTING VALUES
FROM ARRAYS AND OBJECTS

WHY?

TO MAKE IT EASIER TO UNPACK VALUES FROM
JAVASCRIPT ARRAYS AND OBJECTS

BEFORE ES6

```
1 var food = ["egg and salmon", "chicken  
pasta", "vegetable curry"];  
2 var breakfast = food[0];  
3 var lunch = food[1];  
4 var dinner = food[2];  
5 console.log(breakfast, lunch, dinner);  
6
```

VS

ES6

```
1 const food = ["egg and salmon", "chicken  
pasta", "vegetable curry"];  
2 const [breakfast, lunch, dinner] = food;  
3 console.log(breakfast, lunch, dinner);  
4
```

SPREAD

WHAT?

NEW SYNTAX FOR EXPANDING ITERABLE
OBJECTS

WHY?

NEW SYNTAX HAS A RANGE OF BENEFITS FOR
DIFFERENT USE CASES (E.G. MAKES COMBINING
ARRAYS EASIER)

BEFORE ES6

```
1 var sauce = ['tomato', 'oregano', 'mixed  
2 vegetables'];  
3 var rice = ['long grain rice', 'salt'];  
4 var shoppingList = sauce.concat(rice);  
5  
6
```

VS

ES6

```
1 const sauce = ['tomato', 'oregano', 'mixed  
2 vegetables'];  
3 const rice = ['long grain rice', 'salt'];  
4 const shoppingList = [...rice, ...sauce];  
5
```

ARROW FUNCTIONS

WHAT?

NEW SYNTAX FOR CREATING FUNCTIONS

WHY?

PROVIDE SIMPLER ALTERNATIVE TO WRITING
REGULAR FUNCTIONS

BEFORE ES6

```
1 var add = function (a, b) {  
2     return a + b;  
3 };  
4
```

ES6

```
1 const add = (a, b) => a + b;  
2  
3
```

VS

CLASSES

WHAT?

NEW SYNTAX FOR "CREATING CLASSES"

WHY?

CLEANER WAY TO CREATE CLASSES

BEFORE ES6

```
1 function ElectricKettle() {  
2   this.switchedOn = false;  
3 }  
4 ElectricKettle.prototype.switchOn =  
5   function() {  
6     console.log("kettle has been switched  
7       on...");  
8     this.switchedOn = true;  
9   };  
10 var bobsKettle = new ElectricKettle();  
11 bobsKettle.switchOn();
```

VS

ES6

```
1 class ElectricKettle {  
2   constructor() {  
3     this.switchedOn = false;  
4   }  
5   switchOn() {  
6     console.log('kettle has been switched on...');  
7     this.switchedOn = true;  
8   }  
9 }  
10 const bobsKettle = new ElectricKettle();  
11 bobsKettle.switchOn();
```

USEFUL LINKS

WHERE TO LOOK UP ALL ES6 FEATURES AND SYNTAX:

[HTTP://ES6-FEATURES.ORG](http://es6-features.org)