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# 7 ES6 Spread Operator Tricks And Tips Every Developer Should Know About

7 ES6 Tricks Make You Write Less And Do More.



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## Preface

ES6 provides a new operator called the spread operator, which is composed of three points (...).

The spread operator allows you to expand the elements of an iterable object, such as map, array, set, and object. That even allows us to write less and do more.

### Example:

```
1  const arr = [ 1, 2, 3, 4, 5 ]
2
3  console.log(arr) // [ 1, 2, 3, 4, 5 ]
4  console.log(...arr) // 1 2 3 4 5
5
6  const { name, ...other } = { name: 'fatfish', age: 100, luckyNumber: 6 }
7
8  console.log(name) // fatfish
9  console.log(other) // { age: 100, luckyNumber: 6 }
```

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In this article, I want to teach you 7 spread operator tricks.

## 1. A better way to use the array's push() method

We all know that the push() method supports passing multiple indeterminate parameters.

Usually, we use the apply() method to fill the array, but that is not convenient after all.

```
1  const arr = [ 'fatfish', 'medium' ]
2
3  arr.push.apply(arr, [ 'JavaScript', 'NodeJs' ])
4  console.log(arr) // ['fatfish', 'medium', 'JavaScript', 'NodeJs']
```

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In fact, it doesn't need to be so troublesome. The spread operator can help us do this easily.

```
1  const arr = [ 'fatfish', 'medium' ]
2
3  arr.push(...[ 'JavaScript', 'NodeJs' ])
4
5  console.log(arr) // ['fatfish', 'medium', 'JavaScript', 'NodeJs']
```

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## 2. Copy a new array

Copying an array is one of the most convenient functions of the spread operator.

```
1  const arr = [ 'fatfish', 'medium', 'JavaScript', 'NodeJs' ]
2  const copyArr1 = arr.slice(0) // [ 'fatfish', 'medium', 'JavaScript', 'NodeJs' ]
3  // A more convenient way
4  const copyArr2 = [ ...arr ] // [ 'fatfish', 'medium', 'JavaScript', 'NodeJs' ]
```

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**Tip** (Sourced from [here](#)): *The spread operator only copies the array itself to the new one, not the elements. This means that the copy is shallow, not deep.*

### Example:

```
1  const arr = [ 'fatfish', 'medium', [ 'JavaScript', 'NodeJs' ] ]
2  const copyArr = [ ...arr ]
3  // If we change the third element, the "arr" will also be change.
4  copyArr[ 2 ][ 0 ] = 'FrontEnd'
5  console.log(copyArr) // [ 'fatfish', 'medium', [ 'FrontEnd', 'NodeJs' ] ]
6  // The arr also changed
7  console.log(arr) // [ 'fatfish', 'medium', [ 'FrontEnd', 'NodeJs' ] ]
```

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## 3. Remove duplicate values from the array

Arrays of duplicate values can be removed through the set data structure and the spread operator.

```
1  const arr = [ 'fatfish', 'fatfish', 'medium', 'medium' ]
2  const uniqueArray = [ ...new Set(arr) ]
3
4  console.log(uniqueArray) // ['fatfish', 'medium']
```

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## 4. Connect multiple arrays

Yes, we can use the spread operator to chain multiple arrays to get brand-new data.

```
1  const arr1 = [ 'fatfish', 'medium' ]
2  const arr2 = [ 'JavaScript', 'NodeJs' ]
3  const arr = [ ...arr1, ...arr2 ]
4
5  console.log(arr) // ['fatfish', 'medium', 'JavaScript', 'NodeJs']
```

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## 5. Convert NodeList to a real array

Manipulating the DOM is what front-end developers do every day, such as using `document.querySelectorAll` to get a `NodeList`. We can convert it to an array with the spread operator. Then you can use `forEach`, `map`, etc.

**Example:**

```
1  // $divs is a NodeList
2  const $divs = document.querySelectorAll('div')
3  // $arrayDivs is An Array
4  const $arrayDivs = [ ...$divs ]
5  console.log(Array.isArray($divs), Array.isArray($arrayDivs)) // false true
```

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```
, ...]
> const $divs = document.querySelectorAll('div')
< undefined
> $divs
< NodeList(1295) [div#root, div.a.b.c, div.d.e.f.g.h.i.j.k, div, div.y.c, div.iu.iv.y, div.am.iw.ix.iy.iz.ja.jb,
  , div.jc.jd.je.jf.jg.jh.ji.jj.jk, div.ha.jl.jm.jn.d, div.jo.jp.jq.am.bq.jb.ag.ah.aj.ai.jr.c, div.am.bq,
  div.js.y.jt, div, div.kd.ke.hb, div.pl.y, div.jq.y, div.cx.h.k.j.i.hz, div.hs.am.cy.jb.hv.ah.kp.c,
  div.kl.km.kn.ko, div.y, div.kr.y, div.am.cu, div.ho.la.am.ks.kt.ku.kv, div.y.kw.kx, div, div.cp, div.ke.ky.kx
  , div.ke.ky.bv.b.ec.eb, div.kr.y, div.am.cu, div.ho.la.am.ks.kt.ku.kv, div.y.kw.kx, div, div.cp, div.ke.ky.kx
  , div.ke.ky.bv.b.ec.eb, div.bv.b.oq.hg.ca.mt.uf.ug.gm.uh.ui.uj.jt.cp, div.kr.y, div.am.cu,
  div.ho.la.am.ks.kt.ku.kv, div.y.kw.kx, div, div.cp, div.ke.ky.kx, div.ke.ky.bv.b.ec.eb, div.kr.y, div.am.cu,
  div.ho.la.am.ks.kt.ku.kv, div.y.kw.kx, div, div.cp, div.ke.ky.kx, div.ke.ky.bv.b.ec.eb, div.lb.lc.y, div.kr.y
  , div.am.cu, div.ho.la.am.ks.kt.ku.kv, div.y.kw.kx, div, div.cp, div.ke.ky.kx, div.ke.ky.bv.b.ec.eb, div.mc.y
  , div, div.y, div.am.bq, div.po.pp, div.y.cu, div.ps.pi.y.pt.pu.mt.ah, div.ke.pq.pr.ky, div.ha.jl.jm.jn.d,
  div.y.ag.aj.ig.ai.jr.c, div.lk.jq.cu.ll, div.cx.am.jb, div.y.cu, div.ps.pi.y.qc.lc.mt.ah, div.nt.am.cy.c,
  div.y, div.am.an, div.au.æ.ao.ap.lu.lv.lw.lx.ly.lz.ma, div.ng.vu.vv.vw.vx.vy.y,
  div.vz.wa.wb.wc.wd.we.wf.wg.wh.wi.wj.wk.wl.wm.wn.wo.wp.wq.wr.ws.am, div.wt.wu.wv.ww.wx.am.bq.wy.lt,
  div.ek.j.i.d, div.y.cu, div.ps.pi.y.rq.rr.mt.ah, div.y, div.y, div.j.i.d, div.xp.j.i, div.am, div.xq.y,
  div.xp.h.k.d, div.am, div.xq.y, div.am.bq.ni.nj.nk.nl.nm, div.mc.x.np.nq.y, div.y, div.mc.hx.np.nq.y, div.y
  , ...]
```

## 6. Destructuring

The spread operator is often used to destructure arrays and objects, check it out!

Destructure array:



66



**Deconstruct object:**

## **7. Convert string to array**

Isn't it amazing that a string can be turned into an array like this?

## Finally

Thanks for reading. I am looking forward to your following and reading more high-quality articles.

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