

# JavaScript : Array.splice() vs Array.slice()

JAVASCRIPT/AJAX/JQUERY

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4 COMMENTS

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1. The **splice()** method returns the removed item(s) in an array and **slice()** method returns the selected element(s) in an array, as a new array object.

2. The **splice()** method changes the original array and **slice()** method doesn't change the original array.

3. The **splice()** method can take n number of arguments:

**Argument 1:** Index, Required. An integer that specifies at what position to add /remove items, Use negative values to specify the position from the end of the array.

**Argument 2:** Optional. The number of items to be removed. If set to 0(zero), no items will be removed. And if not passed, all item(s) from provided index will be removed.

**Argument 3...n:** Optional. The new item(s) to be added to the array.

```
1  var array=[1,2,3,4,5];
2  console.log(array.splice(2));
3  // shows [3, 4, 5], returned removed item(s)
4  a new array object.
5
6
7  console.log(array);
8  // shows [1, 2], original array altered.
9
10 var array2=[6,7,8,9,0];
11 console.log(array2.splice(2,1));
12 // shows [8]
13
14 console.log(array2.splice(2,0));
15 //shows [] , as no item(s) removed.
16
17 console.log(array2);
18 // shows [6,7,9,0]
```

```

20
21 var array3=[11,12,13,14,15];
22 console.log(array3.splice(2,1,"Hello","World"));
23 // shows [13]
24
25 console.log(array3);
26 // shows [11, 12, "Hello", "World", 14, 15]
27
28
29         -5 -4 -3 -2 -1
30         |  |  |  |  |
31 var array4=[16,17,18,19,20];
32         |  |  |  |  |
33         0  1  2  3  4
34
35 console.log(array4.splice(-2,1,"me"));
// shows [19]

console.log(array4);
// shows [16, 17, 18, "me", 20]

```

**If Argument(1) is NaN, it is treated as if it were 0.**

```

1 var array5=[21,22,23,24,25];
2 console.log(array5.splice(NaN,4,"NaN is
3 Treated as 0"));
4 // shows [21,22,23,24]
5
6 console.log(array5);
// shows ["NaN is Treated as 0",25]

```

**If Argument(2) is less than 0 or equal to NaN, it is treated as if it were 0.**

```

1 var array6=[26,27,28,29,30];
2 console.log(array6.splice(2,-5,"Hello"));
3 // shows []
4
5 console.log(array6);
6 // shows [26,27,"Hello",28,29,30]
7
8 console.log(array6.splice(3,NaN,"World"));
9 // shows []
10
11 console.log(array6);
12 // shows [26,27,"Hello","World",28,29,30]

```

**If Argument(1) or Argument(2) is greater than Array's length, either argument will use the Array's length.**

```
1  var array7=[31,32,33,34,35];
2  console.log(array7.splice(23,3,"Add
3  Me")) ;
4  // shows []
5
6  console.log(array7);
7  // shows [31,32,33,34,35,"Add Me"]
8
9
10 console.log(array7.splice(2,34,"Add Me
11 Too")) ;
12 // shows [33,34,35,"Add Me"]

    console.log(array7);
    // shows [31,32,"Add Me Too"]
```

4. The **slice()** method can take 2 arguments:

**Argument 1:** Required. An integer that specifies where to start the selection (The first element has an index of 0). Use negative numbers to select from the end of an array.

**Argument 2:** Optional. An integer that specifies where to end the selection. If omitted, all elements from the start position and to the end of the array will be selected. Use negative numbers to select from the end of an array.

```
1  var array=[1,2,3,4,5]
2  console.log(array.slice(2));
3  // shows [3, 4, 5], returned selected
4  element(s).
5
6
7  console.log(array.slice(-2));
8  // shows [4, 5], returned selected
9  element(s).
10 console.log(array);
11 // shows [1, 2, 3, 4, 5], original array
12 remains intact.
13
14 var array2=[6,7,8,9,0];
15 console.log(array2.slice(2,4));
16 // shows [8, 9]
17
18
19 console.log(array2.slice(-2,4));
```

```

20 | // shows [9]
21 |
    console.log(array2.slice(-3,-1));
    // shows [8, 9]

    console.log(array2);
    // shows [6, 7, 8, 9, 0]

```

**If either argument is NaN, it is treated as if it were 0.**

```

1 | var array3=[11,12,13,14,15];
2 | console.log(array3.slice(NaN,NaN));
3 | // shows []
4 |
5 | console.log(array3.slice(NaN,4));
6 | // shows [11,12,13,14]
7 |
8 |
9 | console.log(array3);
   // shows [11,12,13,14,15]

```

**If either argument is greater than the Array's length, either argument will use the Array's length**

```

1 | var array4=[16,17,18,19,20];
2 | console.log(array4.slice(23,24));
3 | // shows []
4 |
5 | console.log(array4.slice(23,2));
6 | // shows []
7 |
8 |
9 | console.log(array4.slice(2,23));
10 | // shows [18,19,20]
11 |
12 | console.log(array4);
    // shows [16,17,18,19,20]

```

I hope it helps, feel free to ask if you have any queries about this blog or our [JavaScript and front-end engineering](#) services.