**Let’s Clear the Confusion: splice() vs slice() Array Methods in JavaScript**

A screenshot of a computer

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JavaScript has a lot of built-in methods, .splice() and slice() are one of the most useful array methods we have and It’s not always easy to remember which is which. So, that is why I think let’s clear the confusion between those.

.splice() and .slice() are almost identical but there are some differences between them, but before directly jumping to the differences, let us know what are .splice() and .slice() are.

**.splice()**

The .splice() method is used to alter the content of an array by removing the existing elements and/or adding new elements. This method modifies the original array and returns an array containing the deleted elements.

By using splice(), we can **remove**, **add** or**replace** elements of an array.  
This method has three arguments**,** first, one is required, second, and third are optional.

**Syntax**—  
Array.splice(startIndex, deleteCount(optional), items1, items2, ….(optional)

**How to remove array elements by using splice()?**

The .splice() methods need at least one parameter to remove an element from the array.  
When only one argument is provided, all the items after the provided starting index are removed from the array. You can pass in a negative value as well if you’d like to start at the end of the array.

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.splice() using one argument

The second argument **(optional)** is for the number of items to remove from the array. If it is set to 0 or negative, then no items will be removed.  
For example, to remove only one element, you can set the second argument to ‘1’ like this:-

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.splice() with two arguments

These are the two ways by which you can remove elements from an array. When you omit the second parameter, all elements beginning at the start index will be removed.

**How to remove and add array elements by using splice()?**

Here comes the third argument, an arbitrary amount of additional arguments can be passed in and will be added to the array. These elements will be inserted immediately before the starting index (again, this is the value passed as the first argument).

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.splice() with three arguments

The above example shows that, at index 2, one element will be removed which is ‘Delhi’ and‘Chennai’,‘Indore’ will be added before the starting index.  
This is how you can remove and add new elements in the array.

**How to add new array elements without removing any elements by using splice()?**

When you just want to add new elements without removing any, you have to set ‘0’ to the **deleteCount** parameter. When no elements are removed, the splice method will return an empty array.

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.splice() used to only add new element

In the above example, you see ‘Chennai’ will be added at index 2 without deleting any elements as the second argument(**deleteCount**) is 0.

**.slice()**

The .slice() method is used to slice an array from the original array, and unlike .splice() it doesn’t modify the original array and return the portion of the array based on the parameter.

By using slice() we can only remove elements from an array. This method has two parameters, start, and end(**excluded**), both are **optional.** If both parameters are not present then it returns an original array. (Copy of an original array)

**Syntax —**  
Array.slice(start, end)

Here are some examples of .slice() that is used to remove elements from the array:-

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Without argument, no element removed

With one argument, it will return the portion from the start index to the end of the array. You can pass in a negative value as well if you’d like to start at the end of the array.

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With one argument it behaves similar to .slice()

And finally, here’s an example with two arguments provided:

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.slice() with two arguments

**Conclusion:-**

Let’s summarize this article:-

Both these methods are used to remove elements from an array, but we can also add new elements in the array by using .splice(). And the choice between .slice() and .splice() will depend on your use case.

Table

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Major difference between .splice() vs .slice()

If you’re planning to add some elements to the original array, you can use .splice() them as it will **mutate** the original array. But if you do not want to touch your original array and want to remove some items, you can use .slice() method.

Apart from this, they both are similar.  
Note:- slice is **immutable** and splice **mutates** the array.

*That is all from this article, thanks for reading and please share*