Array.prototype.includes()

Summary: In this tutorial, you will learn how to use the JavaScript Array `includes()` method to check if an array includes an element.

Introduction to the JavaScript Array includes() method

The Array `includes()` method returns `true` if an array contains an element or `false` otherwise.

Here's the syntax of the `includes()` method:

```
array.includes(searchElement, fromIndex)
```

The `includes()` method accepts two arguments:

- `searchElement` is the array element you want to search.
- `fromIndex` is a zero-based index at which the method starts searching for `searchElement`. The default is zero.

The `fromIndex` can be positive or negative.

If `fromIndex >= array.length`, then the `includes()` will not search for the `searchElement` and returns `false`.

When `0 <= fromIndex < array.length`, then the `includes()` searches from the `fromIndex` to the end of the array.

In case `-array.length <= fromIndex < 0`, `fromIndex + array.length`, the `includes()` method searches entires array for `searchElement`.

JavaScript Array includes() method examples

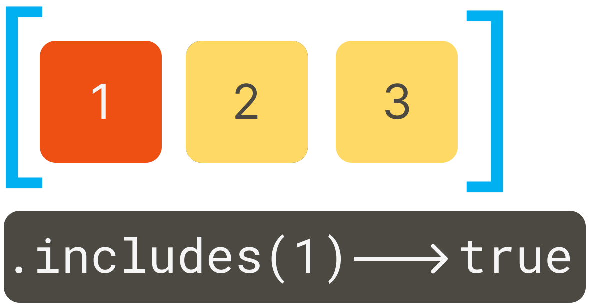
Let's take some examples of using the Array `includes()` method.

1) Basic Array includes() method examples

The following example uses the `includes()` method to check if a number is included in an array:

```
const numbers = [1, 2, 3];
const result = numbers.includes(1);

console.log({ result });
```



Output:

```
{ result: true }
```

How it works.

First, define an array of numbers:

```
const numbers = [1, 2, 3];
```

Second, check if the number `1` is included in the array using the `includes()` method:

```
const result = numbers.includes(1);
```

Third, display the result in the console:

```
console.log({ result });
```

Since the number `1` is included in the array, the `includes()` method returns `true`.

The following example uses the `includes()` method to check if the number `3` is included in the `numbers` array:

```
const numbers = [1, 2, 3];
const result = numbers.includes(4);

console.log({ result });
```

Output:

```
{ result: false }
```

The `includes()` method returns `false` because the `numbers` array does not contain the number `4`.

2) Using the fromIndex argument

The following example uses the `includes()` method with the `fromIndex` to check if an array contains the number `1` from the index `1`:

```
const numbers = [1, 2, 3];
const result = numbers.includes(1, 1);

console.log({ result });
```

Output:

```
{ result: false }
```

The `includes()` returns `false` because there is no number `1` starting from the index `1`.

3) Using Array includes() method with arrays of objects

The following example uses the `includes()` method to check if an object is in an array.

```
const bmw = { name: 'BMW' };
const toyota = { name: 'Toyota' };
const ford = { name: 'Ford' };

const cars = [ford, toyota];

console.log(cars.includes(ford));
console.log(cars.includes(bmw));
```

How it works.

First, create some objects that have the `name` property with different values:

```
const bmw = { name: 'BMW' };
const toyota = { name: 'Toyota' };
const ford = { name: 'Ford' };
```

Second, initialize the `cars` array with two objects `ford` and `toyota` :

```
const cars = [ford, toyota];
```

Third, check if the `cars` array contains the `ford` object using the `includes()` method and display the result to the console:

```
console.log(cars.includes(ford));
```

It returns `true` because the `cars` object contains the `ford` object.

Finally, check if `bmw` object is included in the `cars` array:

```
console.log(cars.includes(bmw));
```

It returns `false` .

includes vs. indexOf

In JavaScript, `NaN` is not equal to `NaN`, so both expressions below return `false`:

```
let result =  NaN == NaN;
console.log({result});

result =  NaN === NaN;
console.log({result});
```

The `indexOf()` method returns `-1` when you check if an array contains `NaN`, but the `include()` method returns `true`. For example:

```
const arr = [1, NaN, 2, 3];

let result = arr.indexOf(NaN);
console.log({ result }); // -1

result = arr.includes(NaN);
console.log({ result }); // true
```

Output:

```
{ result: -1 }
{ result: true }
```

Summary

- Use the JavaScript Array `includes()` method to check if an element is included in an array.