



find/findIndex

 js-array-methods-find-findindex-demo.zip 1.4KB

Goals

- Understand what find and findIndex do
- Write your own version of find and findIndex

Find

- Iterates through an array
- Runs a callback on each value in the array
- If the callback returns true at any point, return the value in the array that we're iterating over
- Otherwise, return undefined

An Example

```
let arr = [1,2,3]; arr.find(function(value, index, array){
return value === 2; }); // 2
let arr = [1,2,3];
arr.find(function(value, index, array){ return value < 1; });
// undefined
```

GoalsFind

An

ExampleHow Does
It Work?Using Find
In A
FunctionWhen You
Would Use
FindfindIndex

An

ExampleHow Does
It Work?Using
Findindex
In AFunctionWhen You
Would Use
FindindexRecap

How Does It Work?

- Iterates through an array
- Runs a callback on each value in the array
- If the callback returns true at any point, return the value we're iterating over
- Otherwise, return undefined

```
function find(array, callback){ for(let i = 0; i <
array.length; i++){ if(callback(array[i], i, array) === true){
return array[i] } } }
```

Using Find In A Function

```
function findOddNumber(arr){ return arr.find(function(value){
return value % 2 !== 0 }); } findOddNumber([2,3,4,5]) // 3
findOddNumber([4,6,8,10]) // undefined
```

```
function ensureNoSubArrays(arr){ return arr.find(Array.isArray)
=== undefined } ensureNoSubArrays([1, 2, [3,4]]); // false
ensureNoSubArrays([1,2,3,4]); // true
```

When You Would Use Find

- You need to determine if a value in an array exists and you have to determine this by using a callback
- A simple alternative to using filter and accessing the first element of the filtered array

findIndex

- Iterates through an array
- Runs a callback on each value in the array

- If the callback returns true for any single value, return the index at which that value is found
- Otherwise, return -1

An Example

```
let arr = [1,2,3]; arr.findIndex(function(value, index, array){  
  return value < 2; }); // 0  
let arr = [1,2,3];  
arr.findIndex(function(value, index, array){ return value > 3;  
}); // -1
```

How Does It Work?

- Iterates through an array
- Runs a callback on each value in the array
- If the callback returns true for any single value, return the index at which that value is found
- Otherwise, return -1

```
function findIndex(array, callback){ for(let i = 0; i <  
array.length; i++){ if(callback(array[i], i, array) === true){  
  return i; } } return -1; }
```

Using Findindex In A Function

```
function findPositionOfBoolean(list){ return  
list.findIndex(function(value, index, array){ return typeof  
value === "boolean" }); }  
findPositionOfBoolean([1,3,false,true]) // 2  
findPositionOfBoolean(["no booleans", "around", "these parts"])  
// -1
```

When You Would Use Findindex

- You need to determine the index of a value in an array if it exists and you have to determine this by using a callback
- A better version of indexOf to be used when a callback is necessary

Recap

- find and findIndex iterate through an array and runs a callback on each value
- if the callback at any time returns true, find returns the value or undefined if not found
- if the callback at any time returns true, findIndex returns the index or -1 if not found