

# forEach

[Download Demo Code <../js-array-methods-forEach-demo.zip>](#)

## Goals

- Understand what forEach does
- Write our own version of the forEach function

## Why Do I Need To Know This?

- Write cleaner and more declarative code
- Use built in higher order functions and callback functions
- Foundation for modern libraries and frameworks

## forEach

- Loops through an array
- Runs a callback function for each value in the array and then returns **undefined**
- forEach will always return undefined - **no matter what**

## An Example

```
let arr = [1,2,3];

arr.forEach(function(value, index, array){
  console.log(value);
});

// 1
// 2
// 3
// undefined
```

## Let's Build Our Own!

- Loops through an array
- Runs a callback function on each value in the array
- returns **undefined**

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

```
}  
}
```

## An Example

```
function countZeroes(arr){  
  let total = 0;  
  arr.forEach(function(val){  
    if(val === 0) {  
      total++;  
    }  
  });  
  return total;  
}  
  
countZeroes([2,4,6]); // 0  
countZeroes([0,1,2,0,1]); // 2
```

Remember - forEach always returns undefined!

## When You Would Use forEach

- You want to iterate over an array, but the return value of your callback is not important
- Almost all of the time there are better options...

## Recap

- forEach iterates over an array, runs a callback on each value and
- forEach returns undefined