# forEach

Download Demo Code <../js-array-methods-forEach-demo.zip>

## **Goals**

- · Understand what for Each 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);
}</pre>
```

```
}
}
```

## **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 - for Each always returns undefined!

### When You Would Use for Each

- 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