

forEach

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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