



DEV ACADEMY
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Data Structures

Week 1, Day 3





Agenda

- Emoji version of Array Methods
- Nested objects
- Nested arrays
- Navigating nested data structures



Array Methods - Emoji Styles



`.map()`



`.map(circle => toBlue(circle))`



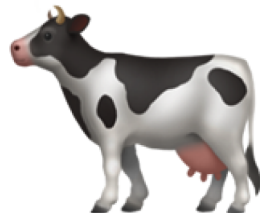
length: 3

length: 3

.map()



[



]

.map(animal => cook(animal / 🔥))

[



]



length: 2

length: 2





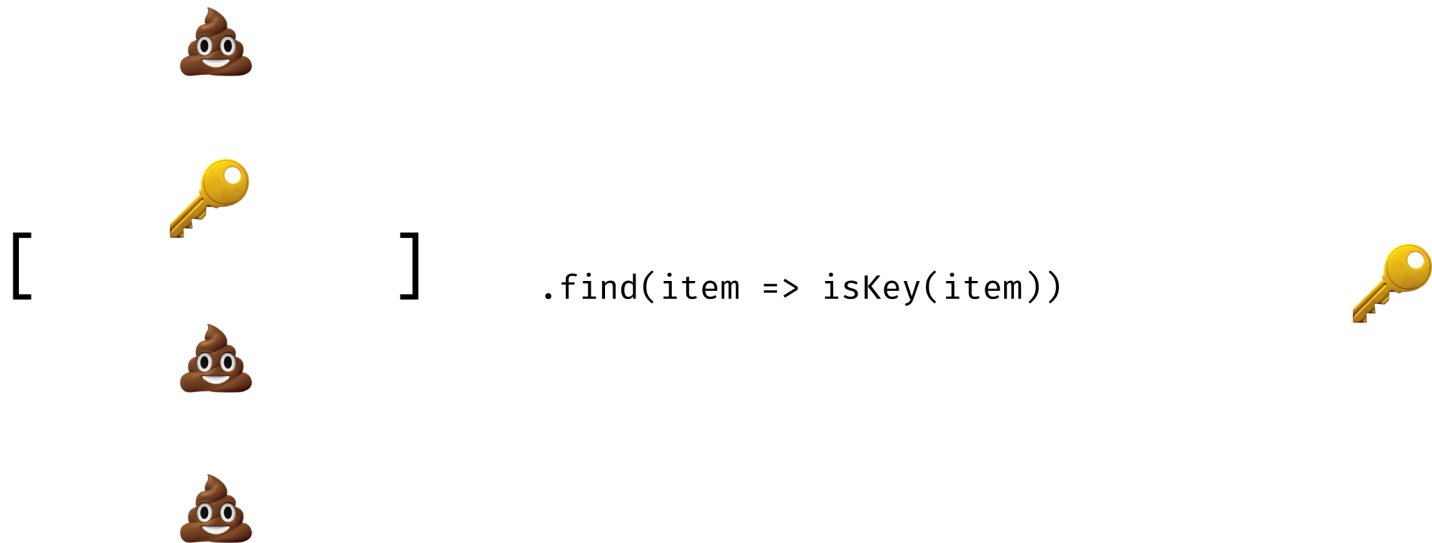
.forEach()

```
const numbers = [1, 2, 3, 4]

numbers.forEach(num => {
  console.log(num)
})

// 1
// 2
// 3
// 4
```

.find()



length: 4

.find()



[



]

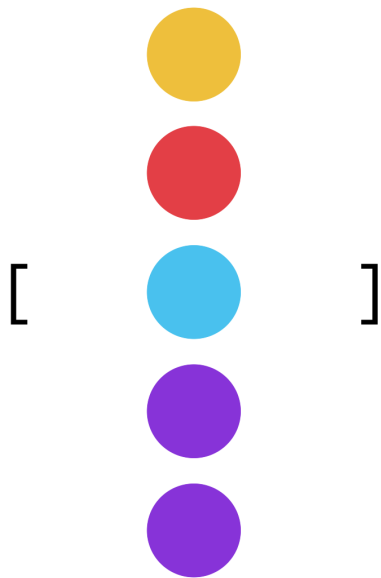
.find(item => isKey(item))

undefined



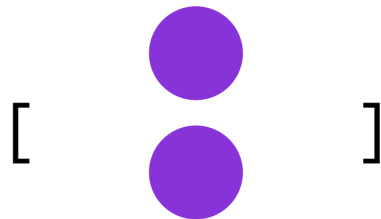
length: 3

`.filter()`



length: 5

`.filter(input => isViolet(input))`



length: 2



`.filter()`



[



]

`.filter(circle => isViolet(circle))`

[

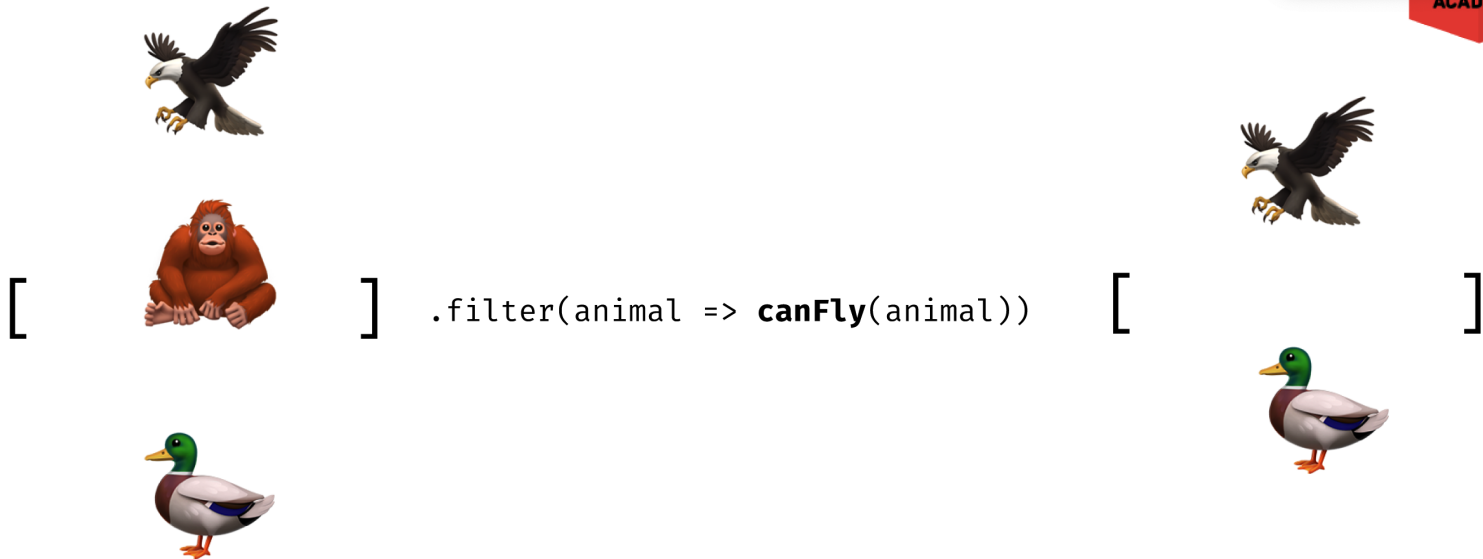
]

length: 5

length: 0

.filter()

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length: 3

length: 2

.reduce()



].reduce((dish, ingred) => dish + ingred)



length: 5

mystery chaining!



Nested data structures

- Objects inside objects
 - `{ a: { b: 'c' } }`
- Objects inside arrays
 - `[{ a: 'b' }, { a: 'c' }]`
- Arrays inside objects
 - `{ a: [1, 2, 3, 4] }`
- Arrays inside arrays (matrices)
 - `[[1, 2], [3, 4]]`

Model data: Cars

Demo



```
1  [  
2    {  
3      vehicle: 'Chevrolet Civic',  
4      vin: 'JCL5AWJB9PEY60889',  
5      fuel: 'Diesel',  
6      color: 'plum',  
7      price: 39772,  
8      owner: {  
9        name: 'Verner',  
10       phone: '96-574198-447145-0',  
11     },  
12   },  
13 ]
```

