

Advanced Array Methods

map and reduce

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Advanced Array Methods

After this module the learner will...

- Understand and implement the `array.map` method
- Understand and implement the `array.reduce` method
- Implement both methods in a real world scenario

Resources

- https://github.com/garybuckle/array_methods/
- https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/map
- https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/reduce
- I will put these resources in the chat

Alternatively type in MDN web docs into your search engine. From there type in array.map and array.reduce into the search field on MDN to find the resources

**Array.map is not the same as the
Map object!**

The map method **iterates through an array** by **applying a function** to all of its elements and **building a new array** from the returned values.

The new array will have the same length as the input array, but its content will have been mapped to a new form by the function

map Method

squashPlayers[]



```
squashPlayers.map((player) => {
```

```
  console.log("Mapped from an array -> Player", player);
```

```
});
```

"Ali Farag: Egypt"

"Nour ElSherbini: Egypt"

"Hania El Hammamy: Egypt"

The reduce method

The reduce method **iterates through an array** by **applying a reduce function** to all of its elements, **accumulating** them into a single value. Each **iteration** takes a single element from the array, combining it with the **current** value

Advanced Array Functions

Quiz: **True** or **False**

- The map method modifies the array it operates on
- The reduce method modifies the array it operates on
- Both methods are iterative
- Both methods can be used on objects