FEWD - ARRAYS

NICO CASTRO

Web Developer at Red Badger

AGENDA

- Review Cash Register
- Arrays

ARRAYS ARE COLLECTIONS

ARRAYS

What if we had a collection of images that we wanted to display to the screen one at a time?

How could we store all the images?

ARRAYS

What is an array?

DECLARING ARRAYS

```
var myArr = new Array();
```

- declaring an empty array using the Array constructor

DECLARING ARRAYS

```
var myArr = [];
```

- declaring an empty array using literal notation
- preferred method of declaration

DECLARING ARRAYS

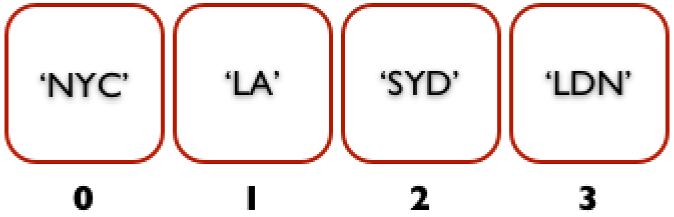
```
var myArr = ["Hello", 54.3, true];
```

- Arrays are filled with elements, i.e.: `myArr3 = [element, anotherElement];`
- Elements can contain strings, numbers, booleans, and more.

DECLARING ARRAYS

If you leave a blank spot in an array it creates a blank shelf space (undefined) placeholder.

ARRAYS INDEXING



‘NYC’	‘LA’	‘SYD’	‘LDN’
0	1	2	3

ARRAYS INDEXING

Array elements can be fetched by their index number (starts from 0).

```
var myArr = ["Hello", , 54.3, true];

console.log(myArr[0]); //prints Hello
console.log(myArr[1]); //prints undefined
console.log(myArr[2]); //prints 54.3
console.log(myArr[3]); //prints true
```

ARRAYS INDEXING

We can insert new values into any space in the array using the positions index.

```
var myArr = ["kiwi", "apple", "lime"];
myArr[1] = "stuff";
myArr; //prints ["kiwi", "stuff", "lime"]
```

ARRAYS INDEXING

We can overwrite all the elements of an array simply by giving the array new values or by setting an array equal to a different array.

```
var fruits = ["Apples", "Oranges", "Pears", "Bananas"];
var myArr = [1, 2, 3];
myArr = fruits;

console.log(myArr); //prints ["Apples", "Oranges", "Pears", "Bananas"
```

ARRAY LENGTH

What if I would like to know how long my array is (how many elements)?

```
var fruits = ["Apples", "Oranges", "Pears", "Bananas"];
console.log(fruits.length); //prints 4
```

CODE ALONG

ARRAYS

ITERATE OVER ARRAY

Allows you to run code using each element from the array as a value

`Array.map`

ITERATE OVER ARRAY

```
var fruits = ["Banana", "Apple", "Pear"];
function modifyFruit(element, index) {
  return element + " is in position: " + index;
}
var modifiedFruit = fruits.map(modifyFruit);
modifyFruit; //prints ["Banana is in position: 0", "Apple is in posit
```

- `element` is the item from the array
- `index` is the item’s position in the array

MORE ON ARRAYS

For many more Array methods see:https://developer.mozilla.org/en-US/docs/JavaScript/Reference/Global_Objects/Array

CAROUSEL

HOMEWORK

- Rock-Paper-Scissors
- Carousel