01-arrays.md 4/24/2022

Arrays in JavaScript

• Arrays store multiple values in a single variable.

Syntax

```
var names = new Array("John", "Mark", "Jane");
```

• The syntax declared three person names in an array.

Accessing Elements

```
var names = new Array("John", "Mark", "Jane");
names[0]; // John
names[1]; // Mark
names[2]; // Jane
```

- The arrays are zero-based, so the first element is at index 0.
- If we want to access the second element, we would use the index 1.
- If we access some index out of the array's range, we will get undefined.

Other ways to create arrays

• We can declare an array with a specific length and then add values to it.

```
var names = new Array(3);
names[0] = "John";
names[1] = "Mark";
names[2] = "Jane";
```

- Arrays are special type of object, an array uses numbers to access its elements, an object uses names to access its elements.
- In js arrays are dynamic, so we can define an array and not pass any arguments with the Array() constructor, you can add dynamically.

Array Literal

• For improved readability, we can use array literals.

```
var names = ["John", "Mark", "Jane"];
```

01-arrays.md 4/24/2022

• You can access and modify the elements of the array using the index number, as you did before.

• The array literal syntax is the recommended way to declare arrays.