



JavaScript Arrays

Storing lots of data at once

- The variables I have used to this point store a single piece of information
 - Number, String, Boolean, or Object
- What do you do if you want multiple, *related* pieces of information?
- Store them in arrays

Declaring An Array

- Declaring an array

```
var grades= [80, 87, 94, 82, 62, 98, 81, 81, 74, 91]
```

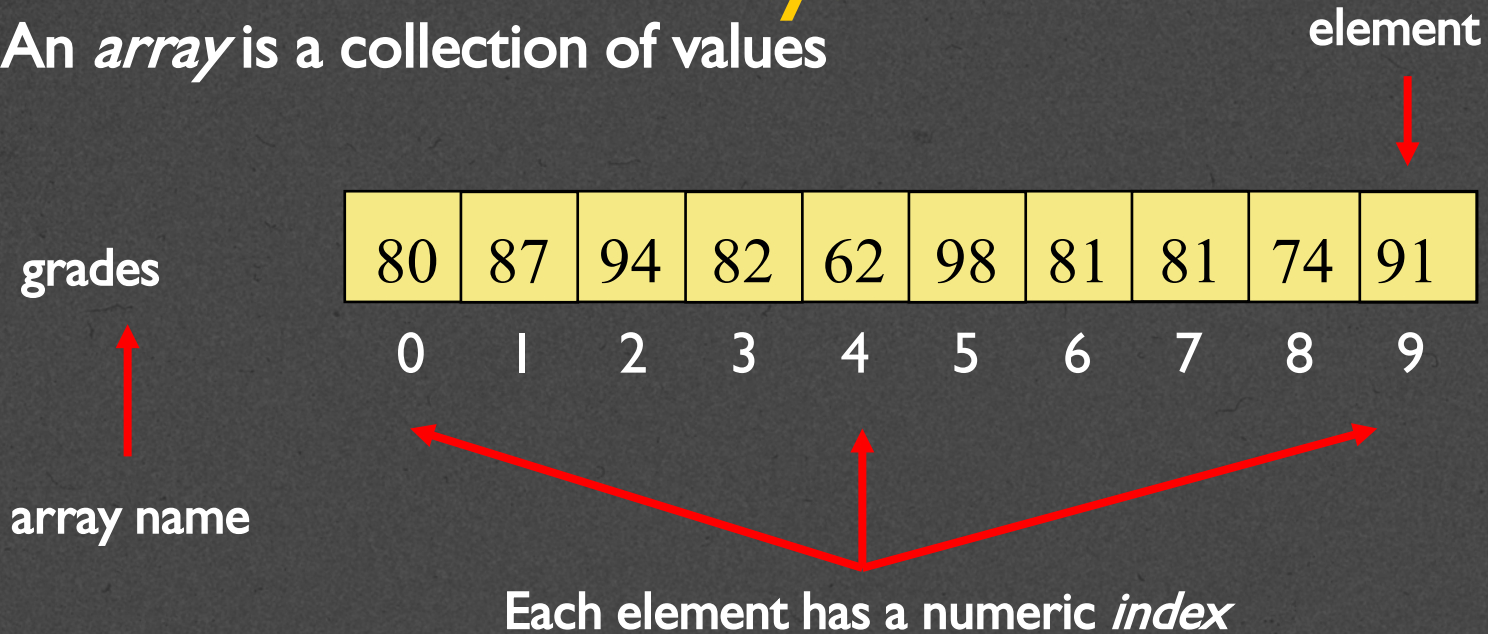
```
var foods = ['bananas', 'apples', 'pizza']
```

```
var images= document.getElementsByClassName['imgs']
```

```
var listItems = document.getElementsByTagName['li']
```


Arrays

- An *array* is a collection of values



Accessing An Array

- Each value is called an element
- Elements are referenced by index

`grades[0]` refers to the value 80 (1st value)

`grades[4]` refers to the value 62 (5th value)

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|
| 80 | 87 | 94 | 82 | 62 | 98 | 81 | 81 | 74 | 91 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Arrays

- The elements in the array DON'T have to be all the same type

```
var info= ["Colleen", 1715, "Walnut", 44004]
```


JavaScript Arrays are Objects

- They have attributes and methods
- `grades.length`
- `grades.sort()`
- `grades.push(element)`
 - `grades[grades.length] = element`

Review

- Learning to declare and manipulate arrays will make your code more powerful
- We can now play with new API methods:
 - `getElementsByTagName('t')`
 - `getElementsByClassName('c');`

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