Introduction to the DOM

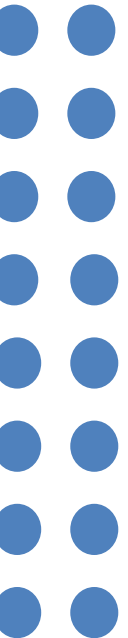# LESSON OBJECTIVES

> Understand the DOM (Document Object Model)

> Understand how to select and create different elements in Javascript

Document Object Model

- Javascript was designed to make websites interactive.

- The Document Object Model (DOM) is a programming interface for web documents.

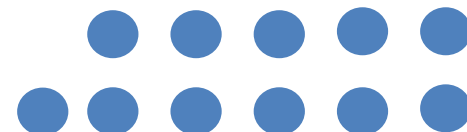- Using the DOM we can access elements within the HTML.

DOM methods

- document keyword
- getElementById()
- getElementsByTagName()
- getElementsByClassName()
- getElementsByName()

These methods allow us to target the html elements so we can use them in javascript.

```
document.getElementById('id-name')
document.getElementsByTagName('tag-name')
document.getElementsByClassName('id-name')
document.getElementsByName('id-name')
```
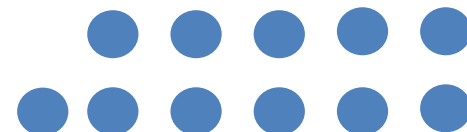
DOM methods

- querySelector()

- querySelectorAll()

```
document.querySelector('element')
document.querySelector('#id-name')
document.querySelector('.class-name')
document.querySelector('[attribute-name]')
```

```
document.querySelectorAll('element')
document.querySelectorAll('#id-name')
document.querySelectorAll('.class-name')
document.querySelectorAll('[attribute-name]')
```
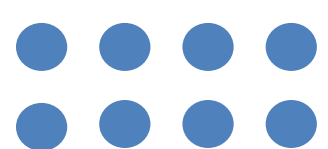
DOM Properties

Using these properties we can alter the content inside of an HTML element.

```
document.getElementById('id-name').innerText = 'Hello'
document.getElementsByTagName('tag-name').textContent = 7
document.getElementsByName('id-name').innerHTML =
'<p>GoodBye</p>'
```

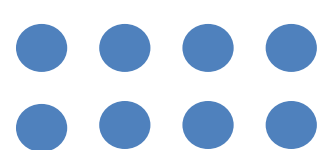- .innerText

- .textContent

- .innerHTML

Creating elements

The .createElement() method creates the element using javascript.

```
let div = document.createElement('div')
document.body.append(div)
```
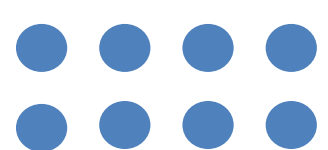
- .createElement()

- append()

- prepend()~~see code example

Removing elements

The .remove() method allows us to remove an element from the HTML document.

```
const element = document.getElementById("demo");
element.remove();
```

Events Listeners

Event listeners are methods that attach an event handler to the specified element without overwriting existing events.

```
let button = document.querySelector('button')
button.addEventListener('click',function(){
    // type code here
})
```

- .addEventListener

- 'click'

- function()