

Programming the BOM and DOM



Mark Zamoyta

markzamoyta@gmail.com

Overview

The window
Object

System Dialogs

The location
Object

Document
Basics

Query
Selectors

The window Object and Timers

```
console.log(window.screenLeft + ', ' + window.screenTop);
```

Q

What shows in the console?

A

1, 1

```
console.log(window.innerWidth + ', ' + window.outerWidth);
```

Q

What shows in the console?

A

1189, 1201

```
window.open('http://www.pluralsight.com', '_blank');
```

Q

Will a window open?

A

(popups must be enabled)

```
console.log(new Date().getSeconds());  
setTimeout(function () {  
    console.log(new Date().getSeconds());  
}, 1000);
```

Question

What shows in the console?

Answer

6

7

```
console.log(new Date().getSeconds());  
var id = setTimeout(function () {  
    console.log(new Date().getSeconds());  
}, 1000);  
clearTimeout(id);
```

Question

What shows in the console?

Answer

31


```
console.log(new Date().getSeconds());  
var id = setInterval(function () {  
    var secs = new Date().getSeconds();  
    console.log(secs);  
    if (secs === 10)  
        clearInterval(id);  
}, 1000);
```

Question

What shows in the console?

Answer

7

8

9

10

(stops)

System Dialogs

```
alert('Hello World!');
```

Question

What's the result in the browser?

Answer

A system dialog says "Hello World!".

```
if (confirm('Delete EVERYTHING?!')) {  
    console.log('You asked for it!')  
}  
else {  
    console.log('Maybe next time...');  
}
```

Question

What's the result in the browser and console?

Answer

A system dialog asks "Delete EVERYTHING?!".

```
var result = prompt('Your name?');  
console.log(result);
```

Question

What shows in the browser and console?

Answer

null, or whatever was entered in the prompt

The location Object

```
console.log(location.href);
```

Question

What shows in the console?

Answer

```
http://localhost:55138/  
M2-html.html
```

```
console.log(location.host);
```

Question

What shows in the console?

Answer

localhost:55138


```
console.log(location.port);
```

Question

What shows in the console?

Answer

55138

```
console.log(location.protocol);
```

Question

What shows in the console?

Answer

http:

Document Basics

```
// body of html page
<article id="article1">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p>Paragraph 2</p>
  <p>Paragraph 3</p>
</article>
```

```
// javascript
var element = document.getElementById('article1');
console.log(element);
```

Q

What shows in the console?

A

<article ... </article>

```
// body of html page
<article id="article1">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p>Paragraph 2</p>
  <p>Paragraph 3</p>
</article>
```

```
// javascript
var elements = document.getElementsByTagName('p');
console.log(elements);
```

Q

What shows in the console?

A

[p, p, p]

```
// body of html page
<article id="article1">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p class="special">Paragraph 2</p>
  <p class="special">Paragraph 3</p>
</article>
```

```
// javascript
var elements = document.getElementsByClassName('special');
console.log(elements);
```

Q

What shows in the console?

A

[p.special, p.special]

```
// body of html page
<article id="article1" class="my-custom-class">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p class="special">Paragraph 2</p>
  <p class="special">Paragraph 3</p>
</article>
```

```
// javascript
var a = document.getElementById('article1');
console.log(a.getAttribute('class'));
```

Q	What shows in the console?	A	my-custom-class
---	----------------------------	---	-----------------


```
// body of html page
<article id="article1" class="my-custom-class">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p class="special">Paragraph 2</p>
  <p class="special">Paragraph 3</p>
</article>
```

```
// javascript
var a = document.getElementById('article1');
a.setAttribute('class', 'dynamic-style');
console.log(a.getAttribute('class'));
```

Q

What shows in the console?

A

dynamic-style

```
// body of html page
<article id="article1" class="my-custom-class">
  <h4>Hello!</h4>
  <p>Paragraph 1</p>
</article>
```

```
// javascript
var a = document.getElementById('article1');
console.log(a.childNodes);
```

Q

What shows in the console?

A

[text, h4, text, p, text]

Query Selectors

```
// body of html page
<article id="article1" class="my-custom-class">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p class="special">Paragraph 2</p>
  <p class="special">Paragraph 3</p>
</article>
```

```
// javascript
var element = document.querySelector('article');
console.log(element);
```

Q

What shows in the console?

A

<article... </article>

```
// body of html page
<article id="article1" class="my-custom-class">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p class="special">Paragraph 2</p>
  <p class="special">Paragraph 3</p>
</article>

// javascript
var element = document.querySelector('#article1');
console.log(element);
```

Q

What shows in the console?

A

<article... </article>

```
// body of html page
<article id="article1" class="my-custom-class">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p class="special">Paragraph 2</p>
  <p class="special">Paragraph 3</p>
</article>

// javascript
var elements = document.querySelector('.special');
console.log(elements);
```

Q

What shows in the console?

A

```
<p class="special">Paragra
ph 2</p>
```

```
// body of html page
<article id="article1" class="my-custom-class">
  <h3>Title goes here</h3>
  <p>Paragraph 1</p>
  <p class="special">Paragraph 2</p>
  <p class="special">Paragraph 3</p>
</article>

// javascript
var elements = document.querySelectorAll('.special');
console.log(elements);
```

Q

What shows in the console?

A

[p.special, p.special]

Summary



- The window Object
- System Dialogs
- The Location Object
- Document Basics
- Query Selectors