

# Crash Course



**Antonio Scapellato**

# Intro

JavaScript is one of the 3 languages all web developers must learn:

1. HTML to define the content of web pages.
  2. CSS to specify the layout of web pages.
  3. JavaScript to program the behavior of web pages
- Web pages are not the only place where JavaScript is used. Many desktop and server programs use JavaScript. Node.js is the best known. Some databases, like MongoDB and CouchDB, also use JavaScript as their programming language.

# Example

## Head or Body inclusion

```
<!DOCTYPE html>
<html>
<head>
<script>
  function myFunction({
    document.getElementById("demo").innerHTML = "Paragraph
    changed.";})
</script>
</head>
<body>
  <h1>A Web Page</h1>
  <pid="demo">AParagraph</p>
  <button type="button" onclick="myFunction()">Try it</button>
  </body >Body inclusion
</html>
```

## External inclusion

```
<script src="myScript.js"></script>
```

# Output

## Output methods

An output can be shown using the following methods:

- Writing into an HTML element, using `innerHTML`.

- Writing into the HTML output using `document.write()`.

- Writing into an alert box, using `window.alert()`.

- Writing into the browser console, using `console.log()`.

# Data Types

```
var length = 16;           // Numbervar
lastName = "Johnson";    // Stringvar
x = {firstName:"John", lastName:"Doe"}; // Object
```

# Functions

```
function myFunction(p1, p2) {
  return p1 * p2;
}
```

# Object

```
var person = {
  firstName: "John",
  lastName: "Doe",
  id      : 5566,
  fullName: function() {
    return this.firstName + " " + this.lastName;
  }
};
```

# Events

```
<button  
  onclick="document.getElementById('demo').innerHTML = Date()"  
  The time is?  
</button>
```

## Common events

onchange  
changedonclickThe  
elementonmouseover  
onmouseout  
onkeydown  
...

# Strings

```
var txt = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";  
//common methods  
var sln = txt.length;  
var sln = txt.toUpperCase();  
var sln = txt.toLowerCase();  
var sln = txt.search();  
var sln = txt.replace();  
var sln = txt.split();  
....
```

# Strings

```
var txt = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";  
//common methods  
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var sln = txt.replace();  
var sln = txt.split();  
....
```

# Arrays

```
var txt = "ABCDEFGHIJKLMNOPQRSTUVWXYZ";  
//common methods  
var sln = txt.length;  
var sln = txt.toUpperCase();  
var sln = txt.toLowerCase();  
var sln = txt.search();  
var sln = txt.replace();  
var sln = txt.split();  
....
```



# ECMA6

## let

The let statement allows you to declare a variable with block scope.

```
let x = 10;
```

## const

The const statement allows you to declare a constant (a JavaScript variable with a constant value). Constants are similar to let variables, except that the value cannot be changed.

```
const x = 10;
```

## Classes

```
class Car {  
  constructor(brand) {  
    this.carname = brand;  
  }  
}mycar = new Car("Ford");
```

## New number methods

```
isInteger();  
isSafeinteger();  
isFinite();  
isNaN();
```

# **Thank you!**

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