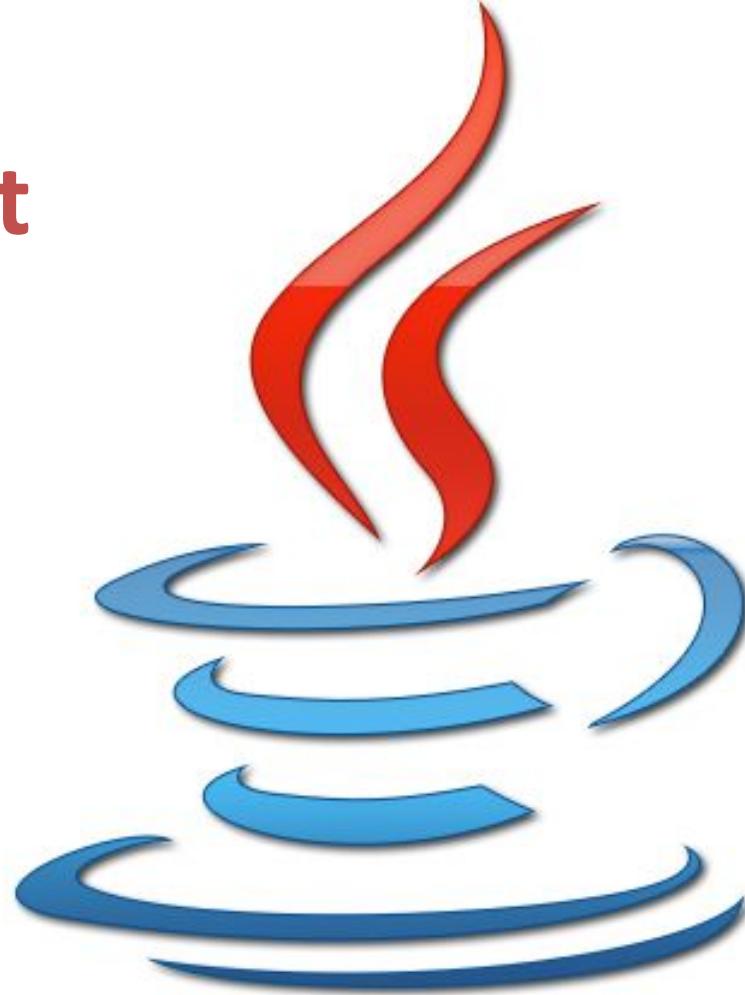


JavaScript

Lesson 4



JavaScript™

Objects

Almost everything in JavaScript can be an Object: Strings, Functions, Arrays, Dates....
Objects are just data, with properties and methods.

A Real Life Object. A Car:

Object	Properties	Methods
	car.name = Fiat car.model = 500 car.weight = 850kg car.color = white	car.start() car.drive() car.brake()

The **properties** of the car include name, model, weight, color, etc.

The **methods** of the car could be start(), drive(), brake(), etc.

Objects in JavaScript:

```
var txt = new String("Hello World");
```

Object	Property	Method
"Hello World"	txt.length	txt.indexOf("World")

This example creates an object called "person", and adds four properties to it:

```
person=new Object();
  person.firstname="John";
  person.lastname="Doe";
  person.age=50;
  person.eyecolor="blue";
```

```
var myFather=new person("Jack", "Brown", 45, "yellow ");
var myMother=new person("Sally", "Rally", 48, "green");
```

For ... in Loop

The JavaScript for...in statement loops through the properties of an object.

```
for (variable in object)
{
  code to be executed
}
```

```
var txt="";
var person={fname:"John",lname:"Doe",age:25};
for (var x in person)
{
  txt=txt + person[x];
}
alert(txt)
```

Strings(quotes, index)

A string can be any text inside quotes. You can use single or double quotes:

```
var carname="mercedes";  
var carname= 'mercedes';
```

You can access each character in a string with its position (index):

```
var character=carname[5]; //d
```

You can use quotes inside a string, as long as they don't match the quotes surrounding the string:

```
var answer="He is called 'Johnny"';  
var answer='He is called "Johnny"';
```

Strings(**length**, **indexof**)

The length of a string (a string object) is found in the built in property **length**:

```
var txt="Hello World!";
document.write(txt.length);
```

The **indexOf()** method returns the position (as a number) of the first found occurrence of a specified text inside a string:

```
var str="Hello world, welcome to the Armenia.";
var n=str.indexOf("welcome");
alert(n);
```

Strings(replace, upper/lower)

The **replace()** method replaces a specified value with another value in a string.

```
var message="Please visit Microsoft!";
var n= message.replace("Microsoft","W3Schools");
// n="Please visit W3Schools!";
```

A string is converted to upper/lower case with the methods **toUpperCase()** / **toLowerCase()**:

```
var norm="Hello World!";
var up_norm= norm.toUpperCase();    //HELLO WORLD!
var low_norm= norm.toLowerCase();   //hello world!
```

Strings(split,substr)

A string is converted to an array with the built in method `string.split()`:

```
var alph="a,b,c,d,e,f";
var n= alph.split(","); // ("a", "b", "c", "d", "f")
```

The `substr()` method extracts parts of a string, beginning at the character at the specified position, and returns the specified number of characters.

```
var x= "Hello world!";
var res = x.substr(1,4) ; // ello
var y= str.substr(2); // llo world!
```

Task 1:

“ProTag it center” սովոր գրված է տառերի
անհայտ հերթականությամբ:Անհրաժեշտ է
բոլոր տառերը փոխարինել
համապատասխան հայերեն տառով: