

JavaScript Lesson 1



JavaScript™

What Is JavaScript?

- JavaScript is a Scripting Language
- JavaScript is programming code that can be inserted into HTML pages.
- All modern HTML pages are using JavaScript.
- JavaScript code can be executed by all modern web browsers.

JavaScript in <head> or <body>

JavaScripts can be put in the <body> and in the <head> section of an HTML page.

```
<script>  
  alert("My First JavaScript");  
</script>
```

Scripts can also be placed in external files.

```
<!DOCTYPE html>  
<html>  
<body>  
  <script src="myScript.js"></script>  
</body>  
</html>
```

Manage Html with JavaScript

JavaScript is typically used to manipulate HTML elements.

```
<!DOCTYPE html>
<html>
<body>
  <h1>My First Web Page</h1>
  <p id="demo">My First Paragraph</p>
  <script>
document.getElementById("demo").innerHTML="My First JavaScript";
document.write("<p>THIS IS NEW PARAGRAPH</p>");
  </script>
</body>
</html>
```

JavaScript Comments

JavaScript comments can be used to make the code more readable.

```
<!DOCTYPE html>
<html>
<body>
<h1 id="page_title"></h1>
<p>Single line comments start with //.</p>
  <script>
    // Write to a heading:
    document.getElementById("page_title").innerHTML="Welcome";
  </script>
</body>
</html>
```

JavaScript Variables

- JavaScript variables are "containers" for storing information:
- Variable names must begin with a letter
- Variable names are case sensitive (x and X are different variables)

```
<script>
```

```
var x=5;
```

```
var y=6;
```

```
var z=x+y;
```

```
alert(z);
```

```
</script>
```

```
<script>
```

```
var subject= "Javascript";
```

```
document.getElementById("demo").innerHTML= subject;
```

```
</script>
```

```
<p id= "demo" > It will be changed</p>
```

```
<script>
```

```
var z= "CSS";
```

```
z= "Javascript ";
```

```
alert(z);
```

```
</script>
```

JavaScript Data Types

String, Number, Boolean, Array, Object, Null, Undefined.

```
<script>  
//String example  
var x= "optimum" ;  
</script>
```

```
<script>  
//Number example  
var x=75;  
</script>
```

```
<script>  
//Boolean example  
var x= true;  
var y= false ;  
</script>
```

```
<script>  
//Array example  
var x=new Array("Html", "Css", "Script");  
var y=["Html", "Css", "Script"];  
var z=new Array();  
    z[0]="Html";  
    z[1]="Css";  
    z[2]="Script";  
</script>
```

JavaScript Data Types

String, Number, Boolean, Array, Object, Null, Undefined.

```
<script>
//Object example
var person={name:"John", lastname:"Lennon",
            id:5566};
//Get object properties
name=person.name;
name=person["name"];
</script>
```

```
<script>
//Null example
var x=null;
</script>
```

```
<script>
//Undefined example
var x;
</script>
```

JavaScript Function Syntax

A function is a block of code that will be executed when "someone" calls it.

```
<!DOCTYPE html>
<html>
<head>
<script>
function myFunction()
{
  alert("Hello World!");
}
</script>
</head>
<body>
<button onclick="myFunction()">Try it</button>
</body>
</html>
```

JavaScript Functions

```
<script>
  function simple(x)
  {
    alert(x);
  }
  simple("Optimum.am!");
</script>
```

```
<script>
  function sum(x,y)
  {
    z=x+y;
    alert(z);
  }
  sum (5,6);
</script>
```

```
<script>
  function sum(x,y)
  {
    z=x+y;
    return z;
  }
  var result= sum(5,6);
  alert(result);
</script>
```

Task 1:

Ստեղծել կոճակ creator անունով, որի վրա սեղմելիս էջում ստեղծվի div էլեմենտ և իր մեջ պարունակի նկար: