



ERASMUS+

Enriching lives, opening minds

ES6

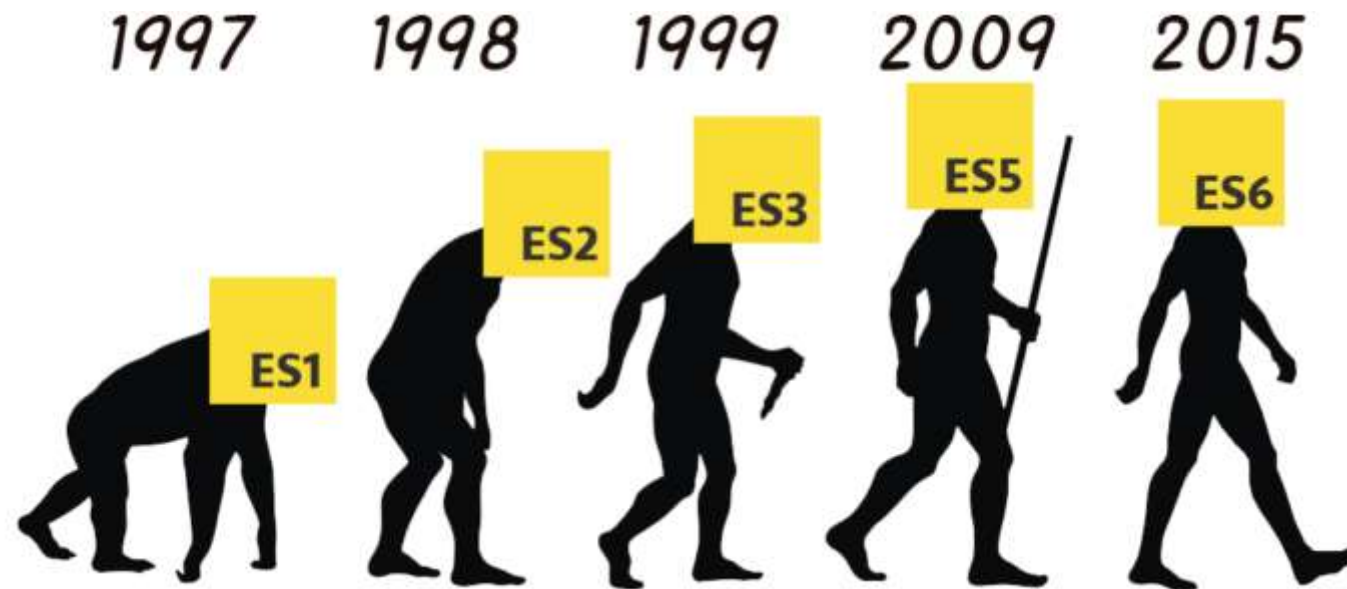
ECMASCRIPT 6



<http://www.ecma-international.org/ecma-262/6.0/ECMA-262.pdf>

ES6 stands for ECMAScript 6 or ECMAScript 2015

ECMAScript was created to standardize JavaScript



<http://asp.net.by/es6/01.htm>

```
<p id="demo"></p>
```

```
<script>
```

```
var x = "SB";
```

1st: SBMT

2nd: SB

```
{ //c 1996 до 2018 - was called SBMT
```

```
    let x = "SBMT";
```

```
    document.getElementById("demo").innerHTML= "1st: "+x  
    + "<br>";
```

```
}
```

```
document.getElementById("demo").innerHTML+="2nd: "+x;
```

```
</script>
```

<http://asp.net.by/es6/02.htm>

You are <p id="demo"></p>

```
<script>
```

```
var x = "Citizen";
```

```
var d = new Date()
```

```
n= d.getFullYear();
```

```
if ((n>2015)&(n<2020)) //for group 651 and 652
```

```
{
```

```
    const x = "Student";
```

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

```
}  
else  
{  
    document.getElementById("demo").innerHTML = x;  
}  
</script>
```

```
</body>
```

```
</html>
```

<http://asp.net.by/es6/03.htm>

<h2>Arrow Functions</h2>

<p>Not supported in IE11 and earlier versions of this great browser. </p>

<p id="demo"></p>

<script>

x = (x, y) => y + ":" + x;

Arrow Functions

Не поддерживаются в IE11 и более ранних версиях этого замечательного браузера

SBMT:sbmt.by

document.getElementById("demo").innerHTML=

x("sbmt.by", "SBMT");

</script>

<http://asp.net.by/es6/04.htm> – default setting

```
<p id="demo"></p>
```

```
<script>
```

```
function myExam(y = 4) {
```

```
  return y;
```

```
}
```

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

```
</script>
```

<http://asp.net.by/es6/05.htm> – Array.**find**()

```
<p id="demo"></p>
```

```
<script>
```

```
var fibo = [1, 1, 2, 3, 5, 8];
```

```
var first = fibo.find(myFunction);
```

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

```
    "The first digit is larger 4 - это " + first;
```

```
function my Function(value, index, array) {
```

```
    return value > 4;
```

```
}
```

<http://asp.net.by/es6/06.htm> – Array.**findIndex**()

```
<p id="demo"></p>
```

```
<script>
```

```
var fibo = [1, 1, 2, 3, 5, 8];
```

```
var first = fibo.findIndex(myFunction);
```

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

```
    "The first digit is larger 4 - это " + first;
```

```
function myFunction(value, index, array) {
```

```
    return value > 4;
```

```
}
```

<http://asp.net.by/ES6/07.htm>

<script>

```
class ACat {  
  constructor(n) {  
    this.name = n;    //property  
  }  
}
```



```
mycat = new ACat("Barsik");  
document.write("My cat's name" + mycat.name);  
</script>
```

<https://babeljs.io/> <https://babeljs.io/repl>

Babel is a JavaScript compiler.

Use next generation JavaScript, today.

Put in next-gen JavaScript

```
class ACat {  
  constructor(n) {  
    this.name = n; //свойство  
  }  
}
```

Get browser-compatible JavaScript out

```
function _instanceof(left, right) { if (right != null &&  
function _classCallCheck(instance, Constructor) {  
  
var ACat = function ACat(n) {  
  _classCallCheck(this, ACat);  
  
  this.name = n; //свойство  
}
```

<http://asp.net.by/ES6/08.htm>

```
<script>  
class ACat {
```

Меня зовут Барсик

```
  constructor(name) { this.name = name; }  
  Name() { return 'My name is' + this.name; }  
}
```

```
mycat = new ACat("Барсик");  
document.write(mycat.Name());  
</script>
```

<http://asp.net.by/es6/09.htm> – Array.**forEach**()

```
<p id="demo"></p>
```

0:red

1:green

2:blue

```
<script>
```

```
var colors = ["red", "green", "blue"];
```

```
colors.forEach(myFunction);
```

```
function myFunction(item, index) {
```

```
    document.getElementById("demo").innerHTML +=
```

```
    "<font color="+item+">"
```

```
    + index //0,1,2
```

```
    + ".</font>"
```

```
    + item
    + "</font><br>";
}
</script>
```

ES7: Exponentiation

```
<script>
document.write(5**6);
</script>
```

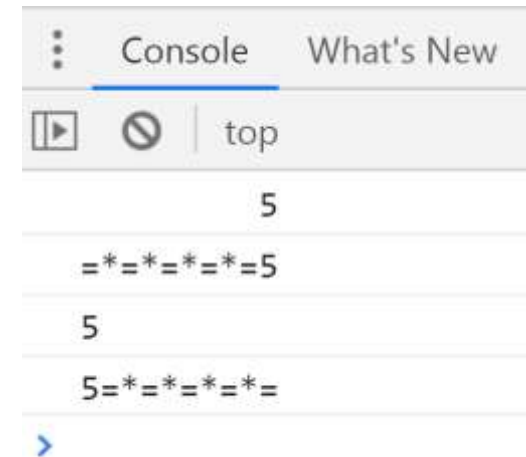
ES7: Adding lines to a given length

<http://asp.net.by/es6/10.htm>

```
<script>
console.log('5'.padStart(10)); // '      5'
console.log('5'.padStart(10, '='));
// '='*8+'5'

console.log('5'.padEnd(10)); // '5      '
console.log('5'.padEnd(10, '='));
// '5'+ '='*8

</script>
```



ES7: Synchronization (async- await)

<http://asp.net.by/es6/11.htm> - no synchronization

```
<p id="demo"></p>
```

```
<script>
```

```
function After5Seconds()
```

```
{
```

```
    setTimeout("alert('Hello')", 5000);
```

```
    return 0;
```

```
}
```

```
function cCall() {  
    var d = document.getElementById("demo");  
    d.innerHTML+='calling <br>';  
    var result = After5Seconds();  
    d.innerHTML+='calling2 <br>';  
    d.innerHTML+=result;  
}
```

```
cCall();
```

```
</script>
```

```
</body>
```

<http://asp.net.by/es6/12.htm>

<p id="demo"></p>

<script>

function **resolveAfter5Seconds()**

{

return new Promise(resolve => {

setTimeout(() => {

alert("Hello");

resolve('resolved'); }, 5000);

});

```
}
```

```
async function asyncCall() {  
  var d = document.getElementById("demo");  
  d.innerHTML+='calling <br>';  
  var result = await resolveAfter5Seconds();  
  d.innerHTML+='calling2 <br>';  
  d.innerHTML+=result;  
}  
asyncCall();  
</script>
```