



Software  
Engineering  
Services

# JavaScript

as a development platform

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# JavaScript history



- Designed by Brendan Eich in 1995
- Originally called LiveScript
- Conceived as an auxiliary language  
(вспомогательный язык)

# JavaScript standards



Standardized ECMA in 1997 и ISO in 1998

ECMA-262

ISO/IEC 16262

ECMAScript - language specification

JavaScript, JScript, ActiveScript - specific  
language implementations

# JavaScript standards



**JavaScript** is born  
as LiveScript

1997

**ES3** comes out and  
IE5 is all the rage

2000



**ES5** comes out and  
standard JSON

2015

**ES7/ECMAScript2016**  
comes out

2017

1995 **ECMAScript** standard  
is established

1999

XMLHttpRequest,  
a.k.a. AJAX,  
gains popularity

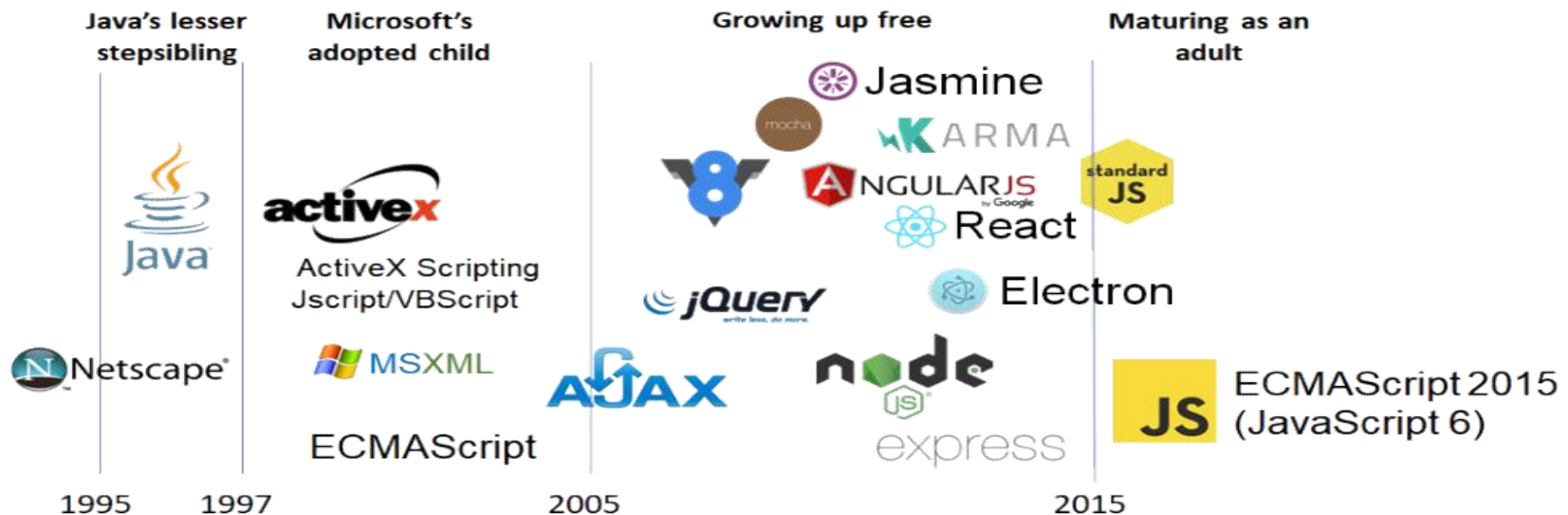
2009

**ES6/ECMAScript2015**  
comes out

2016

ES.Next

# Becoming JavaScript



NodeJS – 2009, Express JS - 2010

MongoDB – 2009

Electron – 2013

Babel - 2014

# **What is JavaScript?**

## **Что такое JavaScript**

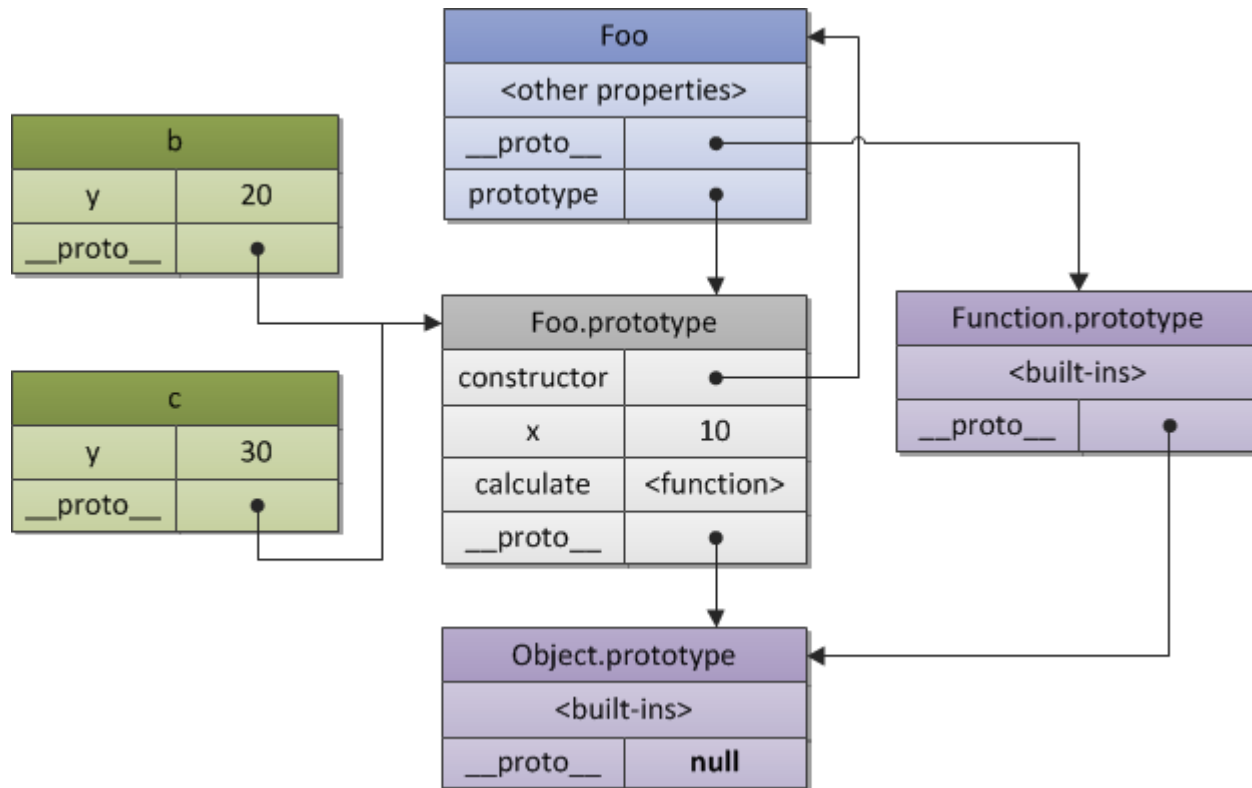
→ Quotation, additional text

# Classification

- Interpreted
- Imperative language
- Supports different programming paradigms: procedural, functional and object-oriented
- Dynamic (weak) typing
- Single-threaded
- And prototypal inheritance



# Prototypes







# Duck typing



# Runtime environments



# JavaScript engines

<b>Chrome</b>	V8	
<b>Firefox</b>	Spider monkey	
<b>Internet Explorer (Edge)</b>	Chakra	
<b>Safari</b>	<u>JavaScriptCore</u>	

# What does JavaScript include and work with?

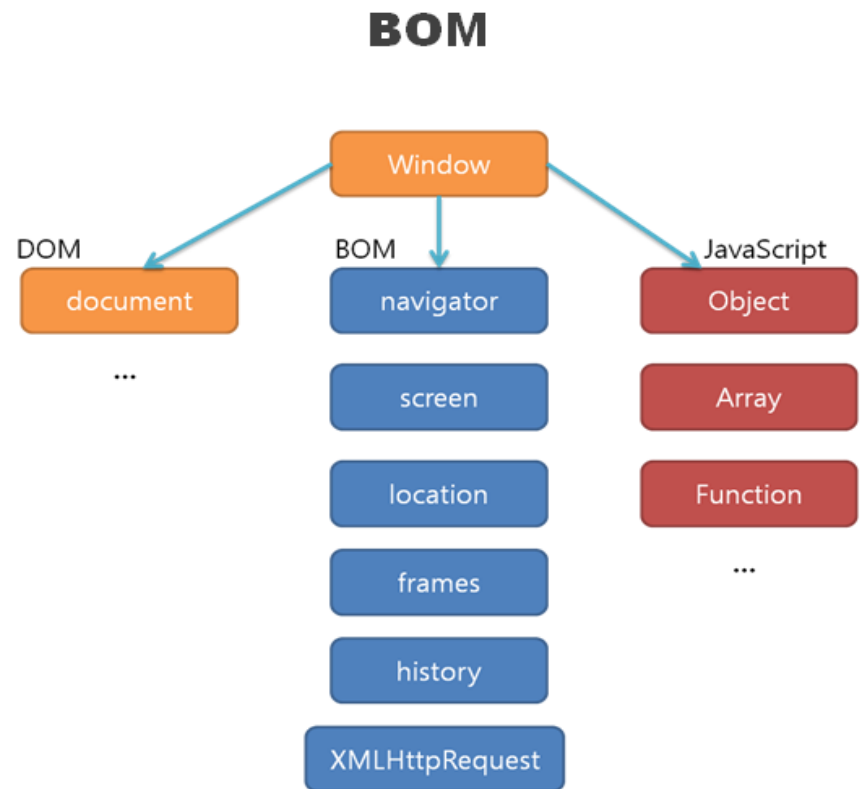
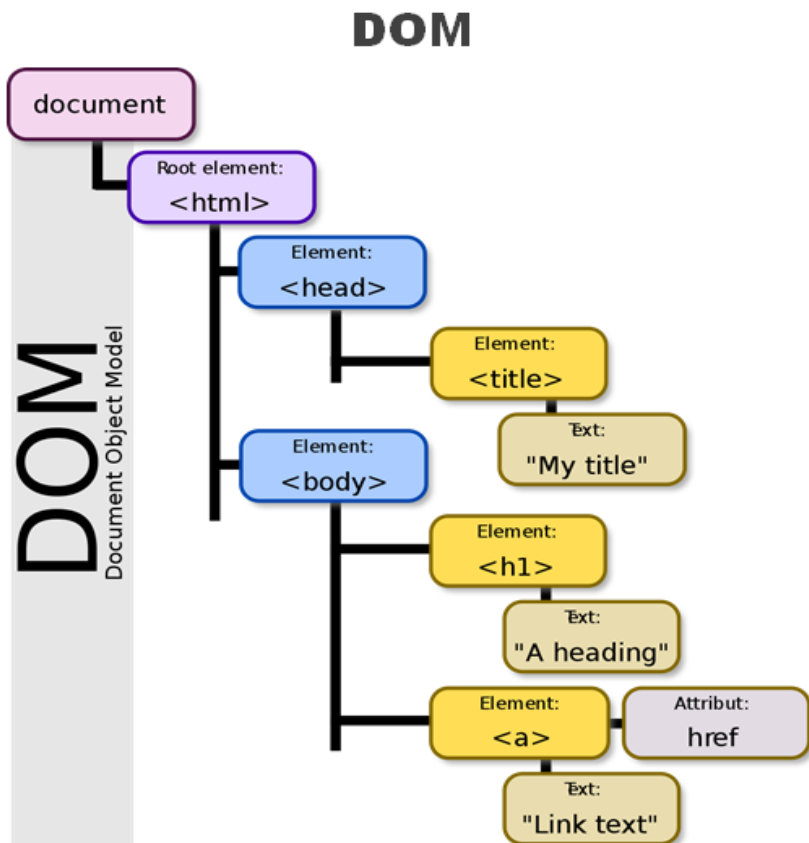
## ***Browsers***

- ❖ BOM
- ❖ DOM
- ❖ Animations, page rendering, styles, etc.
- ❖ Cache, cookies, localStorage, etc
- ❖ HTTP calls (fetch, XMLHttpRequest)

## **NodeJS (io.js)**

- ❖ File system
- ❖ Networking
- ❖ Working with memory (Buffer, Stream)
- ❖ Module system
- ❖ Environment variables
- ❖ Working with processes

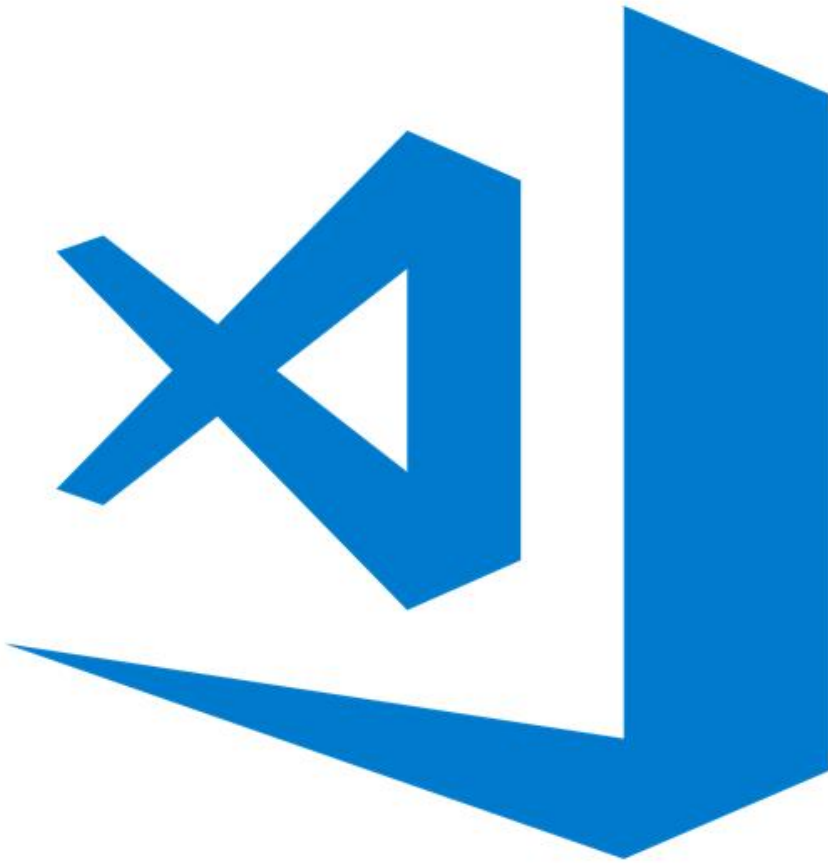
# BOM vs DOM



# DevTools, REPL

```
JavaScript Course — node — 80x24  
xanders-MacBook-Pro:Javascript Course underscorekadji$ node  
const add = (a, b) => a + b;  
undefined  
const multiply = (a, b) => a * b;  
undefined  
add(1, 2)  
multiply(_, 3)
```







**THANK YOU  
FOR YOUR  
ATTENTION!**