

DWA_02.8 Knowledge

Check_DWA2

1. What do ES5, ES6 and ES2015 mean - and what are the differences between them?

They are all different editions of ECMAScript
However ES6 and 2015 are the same edition but they decided to release annually after 2015

A lot changed between ES5 and ES6:

Data types:

ES5- supports primitive data types string, number, boolean, null, undefined

ES6- introduces 'symbol'

Variables:

-ES5: uses var to declare variables

-ES6: introduced let and const

Object manipulation:

-ES6: destructuring and spread operators allows for more efficient object manipulation

Arrow functions:

ES6 introduced arrow functions

Loops:

ES6: introduced the for... of loop

2. What are JScript, ActionScript and ECMAScript - and how do they relate to JavaScript?

- Jscript and ActionScript are both scripting languages:
- JScript was created by microsoft in 1996 by reverse engineering JavaScript which was a proprietary property of SunMicrosystems (now Oracle) to run on internet explorer.

- Action script was created out of similar requirements for flash player by adobe corporation.
 - ECMAScript is the standardised scripting language specification to which all of these scripting languages adhere.
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3. What is an example of a JavaScript specification - and where can you find it?

ECMAScript specification documented by TC39 (technical committee 39)

You can find it at <https://tc39.es/ecma262/> as well as their Github repo <https://github.com/tc39/ecma262>

An example of a specification in ECMA is

6.1 ECMAScript Language Types

"An ECMAScript language type corresponds to values that are directly manipulated by an ECMAScript programmer using the ECMAScript language. The ECMAScript language types are Undefined, Null, Boolean, String, Symbol, Number, BigInt, and Object. An ECMAScript language value is a value that is characterized by an ECMAScript language type."

4. What are v8, SpiderMonkey, Chakra and Tamarin? Do they run JavaScript differently?

They are all compilers and they all run JS but for different browsers (they are just-in-time-compilers)

- V8: created by google and used in chrome
 - Spidermonkey: created by Mozilla and used in firefox
 - Chakra: created by Microsoft and used in explorer and older versions of edge
 - Tamarin: created by Adobe and used in FlashPlayer
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5. Show a practical example using caniuse.com and the MDN compatibility table.

	Desktop					Mobile						Other	
	Chrome	Edge	Firefox	Opera	Safari	Chrome Android	Firefox for Android	Opera Android	Safari on iOS	Samsung Internet	WebView Android	Deno	Node.js
<code>AbortController</code>	✓ 66	✓ 16	✓ 57	✓ 53	✓ 12.1 ...	✓ 66	✓ 57	✓ 47	✓ 12.2 ...	✓ 9.0	✓ 66	✓ 1.0	✓ 15.0.0
<code>AbortController().constructor</code>	✓ 66	✓ 16	✓ 57	✓ 53	✓ 12.1 ...	✓ 66	✓ 57	✓ 47	✓ 12.2 ...	✓ 9.0	✓ 66	✓ 1.0	✓ 15.0.0
<code>abort</code>	✓ 66	✓ 16	✓ 57	✓ 53	✓ 12.1 ...	✓ 66	✓ 57	✓ 47	✓ 12.2 ...	✓ 9.0	✓ 66	✓ 1.0	✓ 15.0.0
<code>signal</code>	✓ 66	✓ 16	✓ 57	✓ 53	✓ 12.1 ...	✓ 66	✓ 57	✓ 47	✓ 12.2 ...	✓ 9.0	✓ 66	✓ 1.0	✓ 15.0.0

HTML element: `html` 📄

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Chrome	Edge [*]	Safari	Firefox	Opera	IE [*] ⚠️
				10-11.5	
4-112	12-112	3.1-16.4	2-112	12.1-97	6-10
113	113	16.5	113	98	11
114-116		16.6-TP	114-115		

- I would suggest always checking the compatibility table on MDNdocs (at the bottom of each page), when using a function (especially one that you are unfamiliar with). This is easier than reading the whole compatibility table for JS as it will only pertain to the functions that you are interested in.
