DWA_02.8 Knowledge Check_DWA2

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

ES5, ES6 and ES2015 are basically terms which are used to refer to different versions of the JavaScript Language specifications (ECMAScript).
ES5 was standardized in December 2009 and its significant features include strict mode, new array methods (forEach(), filter(), reduce(), map() and every()) and a number of other features.
ES6 and ES2015 basically refers to the same version of ECMAScript, 2015 just specifies the year in which the version was standardized. ES6 (ES2015) introduced important changes in terms of syntax, functionality and language features, some of its significant features include replacing "var" with the introduction of "const" and "let", arrow functions, classes, template literals, modules, etc.

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

For a much more clear explaination, let's start with ECMAScript, which is the standardized scripting language specification, it outlines the rules and features a scripting language must provide. JavaScript obeys the ECMAScript specification.
Jscript is a scripting language which was used for client-side web development in the Internet Explorer browser, and it was created by Microsoft. Both JScript and JavaScript conform to the ECMAScript specification.
ActionScript is also a scripting language used to create interactive animations and applications within Adobe Flash, and it was created by Macromedia. ActionScript embraces ECMAScript, making it compatible with JavaScript, but bare in mind, ActionScript is not a direct implementation of ECMAScript or Javascript, as it is used for flash-based applications.

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3. What is an example of a JavaScript specification - and where can you find it?

ECMA-262: as explained above, it defines the core features and syntax of a scripting language. You can find it on ECMA international website.

While ECMA-262 is popular JavaScript specification, here are two more JavaScript-related specifications:

a) Web API's specification, which provides JavaScript developers with standardized ways to interact with different web technologies and resources such as, DOM, fetch APIs and more. You can find it on the [World Wide Web Consortium (W3C) standards page.](#)

b) CommonJs (NodeJs) specification, which provides a way to organize code into reusable modules, and specifies how these modules can be imported and exported. You can find it on the official [CommonJs website.](#)

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

These are JavaScript engines which are designed to execute or run JavaScript code. They are developed by different organizations, have different techniques, and have unique features. While all these JavaScript engines share the common goal of executing JavaScript code efficiently and adhere to ECMAScript specification, they have different internal architectures and optimization techniques.

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5. Show a practical example using **caniuse.com** and the MDN compatibility table.

Can I use   arrow functions   ?   ⚙ Settings

**Arrow functions** 📄 - OTHER

Function shorthand using `=>` syntax and lexical `this` binding.

Usage % of all users   Global   94.45%

Current aligned Usage relative Date relative   Filtered All ⚙

Chrome	Edge	Safari	Firefox	Opera	IE	Chrome for Android	Safari on iOS	Samsung Internet	Opera Mini	Opera Mobile	UC Browser for Android	Android Browser	Firefox for Android	QQ Browser	B
4-44		3.1-9.1	2-21	10-31			3.2-9.3	4							
45-116	12-116	10-16.5	22-116	32-101	6-10		10-16.6	5-21		12-12.1		2.1-4.4.4			
117	117	16.6	117	102	11	117	17.0	22	all	73	15.5	117	117	13.1	
118-120		17.0-TP	118-120				17.1								