

DWA_02.8 Knowledge Check_DWA2

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

- ES5, ES6 and ES2015 are versions of ECMAScript/JavaScript.
 - ES5 is the fifth version of ECMAScript
 - ES2015 or ES6 is the sixth version of ECMAScript (ES6 and ES2015 are the same, ECMAScript committee just decided to name the specifications according to annual updates).
 - ES5 introduced new features such as JSON support.
 - ES6 introduced new features such as the let and const keywords.
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2. What are JScript, ActionScript and ECMAScript - and how do they relate to JavaScript?

- A company called Netscape created JavaScript that was exclusively used by them.
 - Consequently, the Microsoft team who created internet explorer, created their own programming language called JScript
 - Later, JavaScript and JScript were unified into a single standardized language called ECMAScript.
 - ActionScript is an object-oriented programming language that has the same syntax and semantics as JavaScript and is used mainly for the development of websites on the Adobe Flash Player platform. (It is a JavaScript “knock-off” language).
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3. What is an example of a JavaScript specification - and where can you find it?

- An example of a JavaScript specification is ECMA-262. It contains the most detailed and formalized information about JavaScript.
 - This specification can be found on the ECMA International Website.
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4. What are v8, SpiderMonkey, Chakra and Tamarin? Do they run JavaScript differently?

- V8, SpiderMonkey, Chakra and Tamarin are JavaScript compilers
 - A JavaScript compiler is a program that translates JavaScript code into machine code that can be executed by a computer.
 - Yes they do run JavaScript differently and with different performance characteristics
 - Eg. V8 uses a JIT compiler to optimize JavaScript code at runtime, while SpiderMonkey uses both a JIT compiler and an interpreter
 - V8 powers Google Chrome and other Chromium-based web browsers
 - SpiderMonkey powers Firefox.
 - Chakra powers Microsoft Edge.
 - Tamarin is an open-source machine for the ActionScript and ECMAScript programming languages.
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5. Show a practical example using caniuse.com and the MDN compatibility table.

- `includes()` method determines whether an array includes a certain value among its entries. It returns either 'true' or 'false'.
 - According to the MDN compatibility table and caniuse, it is compatible on all web browsers
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