

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 refer to the different versions of ECMAScript that was created before the more improved JavaScript. ES5 is the fifth version, while ES6, also known as ES2015, is the sixth.
- The main difference is that ES6 is much more advanced and includes more features
- Other differences:
 - ES5 was released in 2009, ES6 in 2015
 - ES6 has the additional let and const keywords, not just var
 - ES6 has higher performance and is less time-consuming
 - Less communities support ES6 than ES5
 - In ES6 there is no need to make use of function declaration since the arrow function were introduced

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

- JScript is a version of Javascript that was created by Microsoft and used in the company's Internet Explorer. It was named differently because the company had wanted to stay out of the way of copyrighting, as JavaScript is owned by Oracle.
- ActionScript is another JavaScript knockoff created by Macromedia. It is a language that focuses on object-oriented programming (OOP), which centers around objects rather than functions and logic.

- ECMAScript serves as a blueprint for how JavaScript should function, and ensures that web pages are able to exchange and process information across different browsers
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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 one identifiers (7.5 ECMA-262, 1st edition, June 1997). An identifier may be of an unlimited length, but:

- each character in the sequence must either be a letter, a decimal digit, an underscore character or a dollar sign
 - the first character may not be a decimal digit
 - since they are case-sensitive, if their characters differ in any way, the identifier is considered to be distinct
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4. What are v8, SpiderMonkey, Chakra and Tamarin? Do they run JavaScript differently?

- All of the above are JavaScript compilers:
 - v8 is an open-sourced JavaScript and WebAssembly engine owned by and run in Google, that is able to execute the language both within or outside of a browser.
 - SpiderMonkey, owned by Mozilla, is another JavaScript and WebAssembly engine, and is intended to be embedded in other applications that provide host environments for JavaScript.
 - Chakra belongs to Microsoft and is used in Internet Explorer. This compiler executes code while the web browser loads (just-in-time (JIT): a way of executing computer code that involves compilation during the execution of a program rather than before) instead of before.
 - Tamarin was intended to implement ES4 and had been developed by Adobe Systems

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



<https://caniuse.com/?search=arrow%20functions>