DWA_02.8 Knowledge Check_DWA2

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

ES5 is an abbreviation of ECMAScript 5 and also known as ECMAScript 2009. The sixth of the ECMAScript standard is ES6 or ECMAScript 6. It is also known as ECMAScript 2015. ES6 is a major enhancement in the Javascript language that allows us to write programs for complex applications.

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

JScript is a scripting language developed by Microsoft. It is essentially a Microsoft Implementation of ECMAScript, which is the standard specification for scripting Languages like JavaScript. Jscript was mainly used in older versions of Miccrosoft's Internet Explorer web browser to add interactivity to web pages. However, modern web development has shifted away from using JScript in favor of Javascript, as it is more Widely supported and adheres to current standards.

Action Script is a scripting language developed by Adobe Systems (formerly Macromedia) and is primarily associated with Adobe Flash technology. It is used for Creating interactive elements and animations within Flash content. Action Script is an Object-oriented language and was influenced by ECMAScript.

ECMAScript is a standardized scripting language specification. It defines the syntax, semantics, and behavior of scripting languages. Both JScript and JavaScript are implementations of ECMAScript. JavaScript is the most popular and widely used implementation of ECMAScript, and it is commonly used for web development to make web pages interactive and dynamic.

- 3. What is an example of a JavaScript specification and where can you find it?
 - An example of a JavaScript specification is the ECMAScript Language Specification. It defines the language syntax, semantics, and standard library for JavaScript. ECMAScript is the official name for the standardized version of JavaScript.
 - You can find the ECMAScript Language Specification on the Ecma International website, the organization responsible for maintaining the ECMAScript standard. The official URL for the ECMAScript specification is:

https://www.ecma-international.org/publications/standards/Ecma-262.htm

- 4. What are v8, SpiderMonkey, Chakra and Tamarin? Do they run JavaScript differently?
 - V8: V8 is an open-source JavaScript engine developed by Google. It is mainly used in the Google Chrome web browser but has also been adopted in other projects like Node.js.
 - SpiderMonkey: SpiderMonkey is the original JavaScript engine developed by Brendan Eich for Netscape Navigator, making it the first-ever JavaScript engine. It is still in use and is the core engine of the Mozilla Firefox web browser.
 - Chakra: Chakra, also known as ChakraCore, was developed by Microsoft. It was
 the JavaScript engine used in the Microsoft Edge web browser. However, with the
 move to Chromium-based Edge, Microsoft replaced Chakra with V8 as the default
 engine.
 - Tamarin: Tamarin was a JavaScript engine developed by Adobe Systems. It was
 designed to be used with the Adobe Flash Player and supported both JavaScript
 and ActionScript (Flash's scripting language). However, Adobe discontinued
 development and support for Tamarin, and it is no longer actively used.

All these engines execute JavaScript, they do have differences in terms of performance,
optimization techniques, and feature support. They are all designed to interpret and run
JavaScript code efficiently, but each has its own unique strengths and weaknesses.
5. Show a practical example using caniuse.com and the MDN compatibility table.