DWA_02.8 Knowledge Check_DWA2

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

ES5 (ECMAScript 5): It was released in 2009 and introduced enhancements to JavaScript, including strict mode, JSON support, array manipulation method and improved error handling. ES5 is widely supported by modern browsers and forms the foundation of someJavaScript applications.

ES6 (ECMAScript 2015): ES6, also known as ECMAScript 2015, was a major update released in 2015. It brought new features and syntax enhancements to JavaScript, such as arrow functions, classes, modules, template literals and the let and const keywords. ES6 aimed to improve developer productivity and code readability. It introduced significant changes to the language, marking a significant shift in JavaScript's evolution.

ES2015 (ECMAScript 2015): ES2015 is another name for ES6, reflecting the year it was standardized. It is the same as ES6 and is used interchangeably to refer to the ECMAScript version released in 2015.

---

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

JScript, ActionScript, and ECMAScript languages are related to JavaScript in the following ways:
Script: JScript is a scripting language developed by Microsoft and implemented in Internet Explorer. It is a dialect of ECMAScript, meaning it shares the core syntax and semantics of JavaScript. JScript was Microsoft's proprietary version of ECMAScript and was used primarily for client-side scripting in web development.

ActionScript: ActionScript is a scripting language primarily used for developing Adobe Flash applications. It is also derived from ECMAScript, specifically based on ECMAScript 4. ActionScript included additional features and functionality specific to the Flash platform but shared a fundamental resemblance to JavaScript.

ECMAScript: ECMAScript is the standardized language specification that JavaScript, JScript, and ActionScript are based on. It defines the syntax, features, and behavior of

the language. JavaScript is the most widely known implementation of ECMAScript, and its compatibility with ECMAScript standards is crucial for web development.

---

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 itself. The official specification provides a comprehensive and detailed documentation of the ECMAScript language. The current version of the specification is ECMAScript 2022 (ES12), but you can find specifications for previous versions as well.

---

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

V8, SpiderMonkey, Chakra, and Tamarin are JavaScript engines that power different web browsers and platforms. They are responsible for executing JavaScript code efficiently. While they all interpret and execute JavaScript, there are differences in their architectures, optimizations, and performance characteristics.

---

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