

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 all terms used to refer to different versions of the ECMAScript standard, which is a specification that defines the scripting language used by JavaScript.

ES5 introduced significant enhancements to JavaScript. Some notable features added in ES5 include strict mode, which enforces stricter rules for writing JavaScript code, as well as new array manipulation methods, JSON support, and improved error handling with try-catch statements. ES5 is widely supported by modern web browsers.

ES6 is the next major update to the ECMAScript standard and was released in 2015. ES6 introduced many new features and syntax enhancements to JavaScript, making it a more powerful and expressive language. Some notable features introduced in ES6 include block-scoped variables with "let" and "const", arrow functions, template literals, classes, modules, and enhanced object literals.

ES2015 is essentially another name for ES6. The term "ES2015" reflects the year in which the standard was finalized. After ES6, the ECMAScript committee decided to adopt a new naming convention based on the year of the release, so ES2015 is synonymous with ES6.

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

JScript, ActionScript are derivatives of ECMAScript, each with their own specific features and use cases.

JScript:

- JScript is a scripting language developed by Microsoft.
- It is based on the ECMAScript standard.
- JScript is designed to be compatible with JavaScript.
- JScript was commonly used in Internet Explorer.

Action Script:

- ActionScript is a programming language used to develop interactive content and applications with adobe flash.
- Developers used it to create buttons, animations, and interactive elements.
- It was based on ECMAScript, similar to JavaScript.

ECMAScript

- ECMAScript is a set of rules that define how JavaScript works.
- ECMAScript is a standardized scripting language specification.
- It forms the basis of JavaScript and other programming languages.
- ECMAScript is used to build interactive web applications, server-side applications, mobile apps, and more.

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

The specifications are a collection of documents describing how JavaScript and its variants should work in the context of JavaScript and its variants.

You can access the ECMAScript specification by visiting the following link:

<https://www.ecma-international.org/publications-and-standards/standards/ecma-262/>

In this specification, you will find detailed information about the ECMAScript 2021 language. It covers topics such as syntax, data types, control flow, functions, objects, modules, error handling, and more.

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

They are different JavaScript compiler engines that run JavaScript differently in terms of their implementation details, optimisation techniques and performance characteristics.

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