DWA_02.8 Knowledge Check_DWA2

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

ES5, ES6, and ES2015 all refer to different versions of the ECMAScript standard, which is the standard that JavaScript is based on. Listed below are the differences and meaning of each:

ES5 (ECMAScript 5):

Meaning: ES5 is the fifth edition of the ECMAScript standard. It was published in December 2009.

Key Features: ES5 introduced significant improvements to JavaScript, including strict mode, new array methods (forEach(), map(), filter(), etc.), and standardized support for JSON (JavaScript Object Notation).

ES6 (ECMAScript 2015):

Meaning: ES6 is the sixth edition of the ECMAScript standard, officially named ECMAScript 2015. It was published in June 2015.

Key Features: ES6 brought a substantial set of enhancements and additions to JavaScript. Notable features include the introduction of let and const for variable declarations, arrow functions, template literals, classes, and the "for" and "of" loop. ES6 aimed to make JavaScript more readable, maintainable, and feature-rich.

ES2015:

Meaning: ES2015 is another name for ECMAScript 6 (ES6). The change in naming from ES6 to ES2015 reflects a decision to move away from version numbers and use the year of release as the identifier for ECMAScript editions going forward.

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

ECMAScript (ES):

ECMAScript is the core scripting language specification upon which JavaScript is based. It defines the features and syntax that a scripting language should provide. JavaScript is the most well-known implementation of ECMAScript, but other languages may also implement the ECMAScript standard.

JScript:

Definition: JScript is a scripting language developed by Microsoft. It is their implementation of ECMAScript, with additional features and extensions specific to the Windows environment. JScript and JavaScript are similar in many aspects because both are based on the ECMAScript standard. However, JScript is primarily used in Microsoft environments, especially in conjunction with Internet Explorer.

ActionScript:

Definition: ActionScript is a scripting language developed by Macromedia (later acquired by Adobe). It is primarily associated with Adobe Flash, used for creating interactive content, animations, and applications within the Flash platform. ActionScript has its roots in ECMAScript, and particularly in its early versions, it was very similar to ECMAScript/JavaScript. However, ActionScript evolved with additional features specific to the Flash platform.

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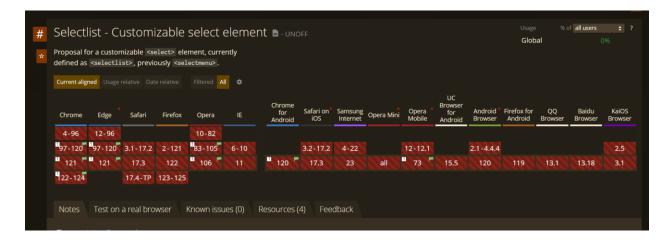3. What is an example of a JavaScript specification - and where can you find it?

ECMAScript® 2024 Language Specification and you can find this at:

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

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

V8, SpiderMonkey, Chakra, and Tamarin are all JavaScript engines, these components interpret and execute JavaScript code in web browsers or other environments. Each engine has its own design, optimizations, and characteristics, resulting in some differences in how they execute JavaScript.

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

This checks which browsers I will be able to use the <selectlist> element on.

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