DWA_02.8 Knowledge Check_DWA2

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

ES5 and ES6 and ES2015 are editions to ECMAsCRIPT Standards that defines Scripting languages.
- **ES5** edition was released in December 2009 introduced several significant features and improvements to JavaScript, including strict mode, JSON support, Array extras.
- **ES6** was released June 2015 introduced a vast array of new features and enhancements to JavaScript, including arrow functions, classes, modules, template literals, destructuring assignment, let and const declarations, and more.
- **ES2015** was introduced to avoid confusion about the versioning scheme.

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

- **JScript** is a scripting language developed by Microsoft. It was initially introduced as a dialect of ECMAScript 3 (ES3) but later diverged from the ECMAScript standard.
- **ActionScript** is an ECMAScript-based language, which means it shares its core syntax and features with JavaScript.
- **ECMAScript** is the standardized specification for scripting languages, and it serves as the foundation for JavaScript.

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

Array Grouping
- The ability to combine like data into groups allows developers to compute higher order datasets, like the average age of a cohort or daily LCP values for a webpage.
const array = [1, 2, 3, 4, 5]; then if you want even numbers you will use:
Object.groupBy(array, (num, index) => {
  return num % 2 === 0. const array = [1, 2, 3, 4, 5];

```
const array = [1, 2, 3, 4, 5];
con
st array = [1, 2, 3, 4,
```

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

- **V8** is a high-performance JavaScript engine developed by Google. It is primarily used in the Google Chrome web browser, but it has also been adopted by other projects, such as Node.js. V8 compiles JavaScript code into machine code directly.
- **SpiderMonkey** is the JavaScript engine developed by Mozilla, the organization behind Firefox. It was the first JavaScript engine ever created and has undergone significant improvements over the years. SpiderMonkey also utilizes JIT compilation techniques to optimize JavaScript execution.
- **Chakra**, also known as ChakraCore, is the JavaScript engine developed by Microsoft. It was initially used in Internet Explorer and later became the default engine in Microsoft Edge.
- **Tamarin** is a JavaScript engine developed by Adobe Systems. It was primarily designed to run ActionScript and ECMAScript-based languages, including JavaScript, within the Adobe Flash Player. Tamarin utilized a combination of a JIT compiler and an interpreter to execute bytecode generated from ActionScript or JavaScript.

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

- Web sites that provides information about browser support based on different technologies.

Fro example i prompt cAN I USE "flexbox" it show MDN browser compatible below showing which browser version is CSS flex box compatible and if you hover on in it will display preview with detailed information.

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