DWA_01.3 Knowledge Check_DWA1

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1. Why is it important to manage complexity in Software?

Managing complexity in software is important to make code more maintainable, enhance code readability and improve debugging capabilities

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2. What are the factors that create complexity in Software?

- Poor code structuring
- Not using proper documentation and effective comments that will cause technical debt
- Evolving requirements

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3. What are ways in which complexity can be managed in JavaScript?

- Using proper documentation and effective comments that will enhance the readability of complex software.
- code style, consistency and implementation conventions
- Using abstraction and creating modular code for reusability
- polymorphism and inheritance
- create state machines

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4. Are there implications of not managing complexity on a small scale?

Yes, it's going to be more complex to manage on a bigger scale if not managed on a small scale. Not managing complexity on a small scale will lead to technical debt.

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5. List a couple of codified style guide rules, and explain them in detail.

- Avoid single-letter names. Be descriptive with your naming. It gives more explanation and definition to other developers viewing your code.
- Use single quotes `''` for strings.
- Use named function expressions instead of function declarations. Function declarations are hoisted, which means that it's easy to reference the function before it is defined in the file. This harms readability and maintainability
- Never name a parameter argument. This will take precedence over the arguments object that is given to every function scope.

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6. To date, what bug has taken you the longest to fix - why did it take so long?

A bug a had to fix was when I used a JavaScript keyword as a variable. It took a lot of my time because I haven't read through a javascript style guide that states that you shouldn't use javascript keywords as a variable.
