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 for:

- Readability and Maintainability
- Debugging and troubleshooting
- Scalability
- Quality
- Performance and efficiency

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

- Requirements
- Technical debt
- Scaling
- Poor design and architecture

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

- Abstraction: extracting large code and simplifying it
- Encapsulation: restricting access to certain parts of the code
- Code comments and documentation
- Refactoring: improving code without creating new functionality that can transform a mess into clean code and simple design

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

Yes, there can be implications of not managing complexity on a small scale. While complexity is often unavoidable, failing to manage it can lead to various challenges and negative consequences.

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

References:

- Use const for all references. Avoid using var
- This ensures that you can't reassign your references, which can lead to bugs and difficult to comprehend code.

Objects:

- Use computed property names when creating objects with dynamic property names
- They allow you to define all the properties of an object in one place

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

It was a search engine function. It was an easy fix but it took me a while to figure out what the problem was. All I had to do was instead of "appendChild", I had to use "replaceChild".
